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INNOVATION IN A NON-FORMAL ADULT EDUCATION ORGANISATION – multi-case study in four adult education centres

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ABSTRACT

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More than ever, education organisations are experiencing the need to develop new services and processes to satisfy expanding and changing customer needs and to adapt to the environmental changes and continually tightening economic situation. Innovation has been found in many studies to have a crucial role in the success of an organisation, both in the private and public sectors, in formal education and in manufacturing and services alike. However, studies concerning innovation in non-formal adult education organisations, such as adult education centres (AECs) in Finland, are still lacking.

This study investigates innovation in the non-formal adult education organisation context from the perspective of organisational culture types and social networks. The objective is to determine the significant characteristics of an innovative non-formal adult education organisation. The analysis is based on data from interviews with the principals and full-time staff of four case AECs. Before the case study, a pre-study phase is accomplished in order to obtain a preliminary understanding of innovation at AECs.

The research found strong support for the need of innovation in AECs. Innovation is basically needed to accomplish the AEC system's primary mission mentioned in the ACT on Liberal Adult Education. In addition, innovation is regarded vital to institutes and may prevent their decline. It helps the institutes to be more attractive, to enter new market, to increase customer satisfaction and to be on the cutting edge. Innovation is also seen as a solution to the shortage of resources. Innovative AECs search actively for additional resources for development work through project funding and subsidies, cooperation networks and creating a conversational and joyful atmosphere in the institute.

The findings also suggest that the culture type that supports innovation at AECs is multidimensional, with an emphasis on the clan and adhocratic culture types and such values as: dynamism, future orientation, acquiring new resources, mistake tolerance, openness, flexibility, customer orientation, a risk-taking attitude, and community spirit. Active and creative internal and external cooperation also promote innovation at AECs. This study also suggests that the behaviour of a principal is crucial. The way he or she

shows appreciation the staff, encouragement and support to the staff and his or her approachability and concrete participation in innovation activities have a strong effect on innovation attitudes and activities in AECs.

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1 INTRODUCTION

1.1 Background

In most organisations, the need for innovations is inevitable and educational organisations are no exception (Jaskyte 2002). Organisations today are more and more knowledge-based and their success and survival depend greatly on creativity, innovation, discovery and inventiveness (Damanpour & Schneider 2006). The private sector agrees that innovation determines the organisation's potential to meet future demands, take advantage of opportunities and resources in the external environment, and to improve organisational performance (Jaskyte 2002). According to Grawe (2009), innovative organisations are flexible and better able to deal with market events than those that are not and are able to grow and expand their services. Organisations that are renowned as innovators also report that they find it easier to retain and attract staff because they provide a stimulating and challenging workplace environment (Grawe 2009). In the public sector, the profits of innovation activity are typically linked to productivity and quality. This refers to a more efficient way to produce and organise existing tasks and to the better quality of the existing services in the form of user effectiveness, for example (Valovirta & Hyvönen 2009).

Educational organisations can be regarded as service organisations (Venkataram 2007). These organisations support the learning processes of individual students in specific professional areas by offering customised programmes from a curriculum, which can be considered as a coherent framework of courses, resources and facilities, leading to professional qualifications. In education, the production and consumption phases are usually inseparable. Students are active participants in the educational act, as teaching is usually consumed as soon as it is produced. In educational systems, the service comprises a number of interacting elements, including often technology and interpersonal interaction with students, teachers and administrative staff.

Education faces many possibilities and challenges in the future. Dealing with the rapid changes in the world so that they are integrated into the curriculum is a challenge in every educational organisation. Educational institutes will also face in the future larger numbers of students with increasingly diverse needs (Schellekens 2010). In response to this, institutes try to improve the access to education for new categories of students, and to reduce the number of drop-outs. The use of information and communication technology (ICT) or educational technology has already given great possibilities to change education in many ways. Learning technologies have, from the pedagogical perspective, the potential to foster a paradigm shift from teaching to learning (Vanderlinde 2011). Zhang (2010) states that new learning technology may cause changes towards a more innovative, constructivist pedagogical practice or even classroom culture.

The need of educational institutions to innovate thus may originate from various factors: survival, more demanding customers, better atmosphere and improvement of both the organisation's systems and outputs. Venkataram (2007) has studied the opinions of researchers who compared industry with education. He states that although industry and education differ from business process perspectives, some of their outcomes, such as focusing on building flexibility and improving the customer base in a dynamic environment, are very similar. Also according to Drucker (1994), the innovator in education does very much the same things, applies the same tools and meets the same problems as the entrepreneur in business.

The desire to ensure that educational organisations are sites for innovation remains a global one (Perillo 2007). Zhang (2010) points out that researchers from around the world have been exploring new learning programmes—often supported by new technologies—to increase student capabilities of productive and collaborative knowledge work. These learning innovations involve new learning activities (e.g. inquiry, group work), curriculum resources, and technology tools. Common to many of them is a deeper pursuit of cultural change. The Centre for Educational Research and Innovation (CERI/OECD) conducts research which covers learning at all ages and beyond the formal education system. CERI's current activities deal, for example, with the innovation strategy for education and training, innovative learning environments and innovative teaching for effective learning (Centre for Educational Research and Innovation). In Finland, innovation in education is still mainly linked with the context of higher education. The Finnish Ministry of Education and Culture has defined and stipulated general outlines and objectives for higher education institutions for 2010-2012. One of the objectives is that higher education institutions should be the basis of the Finnish innovation system. In the strategy of the Finnish National Board of Education (FNBE) entitled "Learning and competence 2020", innovation is mentioned only twice. In the strategy of vocational training one goal is "to promote innovation, regional development and entrepreneurship". The other mention concerns the leadership of FNBE" supporting and motivating innovation, creativeness and competence development in education".

The characteristics of innovative companies have been studied by many reachers but the chracteristics of innovative educational organisations have been studied very little especially in Finland. In addition, most of the research concerning innovation in the education sector in Finland focuses on formal higher education and vocational education (e.g. Hokkanen 2001) and little on basic education (Tenhunen et al. 2009). Non-formal adult education institutions (adult education centres, AECs) in Finland are almost completely unresearched from the point of view of management and innovation, although there are roughly two hundred of them (2012) and a large amount of students yearly, the network of AECs covers the entire country and the sector has traditions in Finland dating back over 110 years. Because there are no former empirical results concerning the way these organisations innovate or the characteristics of innovative AECs, the focus of this research is on innovation in these organisations. In this

research, the charactiristics of an innovative non-formal adult education organisation are studied from the point of view of organisational culture and social networking. The importance for innovation of the elements chosen for this research has been recognised in many studies (e.g. Ahmed 1998, Martins & Terblanche 2003, Dobni 2008, Naranjo-Valencia et al. 2010). There may be other elements that have a greater effect on innovation in educational organisations, but the nature of Finnish AECs as non-formal, market-driven, public and loosely networked organisations with a very small number of full-time teachers and a great number of part-time teachers working independently is very different than the nature of formal educational organisations from the point of view of culture and networking. Thus the findings of formal higher and vocational education may not be used in developing innovation capabilities in non-formal adult education organisations.

1.2 Characteristics of adult education centres (AEC) in Finland

Adult education centres (AEC, *kansalaisopisto* in Finnish) are a part of the so-called liberal adult education system in Finland (Vapaan sivistystyön kehittämisohjelma 2009-2012). The term liberal adult education (or non-formal adult education) covers the general adult education opportunities provided by adult education institutes. There is a long tradition of lifelong learning in Finland and the first AEC (Workers' Institute) was established already over 110 years ago. Originally, the aim of the AECs was to enlighten and educate working people in order to create a more equal society. At present, the AECs are modern centres of education, culture and recreational activities. They are open to everybody regardless of age, gender, nationality or educational background (Kansalaisopistojen liitto).

Finland also has a system of vocational adult education centres (*aikuiskoulutuskeskus* in Finnish). These organisations differ from AECs in that they offer a wide range of vocational education programmes to meet the challenges of today's working world. The training programmes of these institutes include a variety of basic and vocational courses, courses preparing for a special vocational degree or training intended for maintaining and developing professional skills. Vocational adult education centres have their own law and funding system. Alhough these organisations offer different language courses and Finnish language courses for immigrants in the same way as AECs, they are rather partners in cooperation than competitors.

There are roughly two hundred adult education centres in Finland (2012) and the network covers the entire country. The total annual number of participants in all adult education and training in Finland is very high, 1.7 million, which amounts to half of the working-age population. Adult education centres compose the majority of the Finnish non-formal education system. The annual number of participants is approximately 630 000 (Vapaan sivistystyön kehittämisohjelma 2009-2012).

Most AECs (70%) are owned by the municipality and the rest are privately owned by an association or foundation, for example. The government subsidises AECs similarly to other liberal adult education organisations in order to keep student fees at a reasonable level. On average, 53% of AEC funding comes from the state, 28% from the municipality and 15% from student fees (Kansalaisopistojen liitto). The Ministry of Education and Culture annually confirms the maximum amount of teaching hours that are granted the state subsidy (approximately 2 030 000 hours per year overall). The AECs set up objectives independently and have independent responsibility over the usage of the state subsidy.

The Act on Liberal Adult Education (21.8.1998/632) provides both for operations and funding. The educational goals of liberal adult education are the enhancement of welfare, multiculturalism, internationalisation and sustainable development. The role of AECs is defined in the Act on Liberal Adult Education. According to it, AECs are local and regional educational needs-based institutions that provide opportunities for self-learning and civic capacity building. The act emphasises further that adult education centres should cooperate actively with other educational organisations. The mission of AECs is to provide students with new skills and knowledge, well-being and social contacts. The main values and operating principles are liberal adult education, humanism, personal fulfilment and social integration and cohesion. One of the basic principles of liberal adult education is empowering the individuals by giving them the opportunity to decide for themselves what they want to study, at what level and under what conditions (in residence or distance learning, full-time or part-time, individual courses or complete syllabuses). This is one of the reasons why liberal adult education in Finland, and throughout the Nordic countries, has been regarded as a prototype of active citizenship education (Szekely 2006).

AECs organise such activities as general education and training for all, training for marginalised groups, EU and other projects, open university studies, basic education in the arts for children and adults and in-service training and further education. They offer non-certificate oriented studies, which provide adults with opportunities to develop themselves without qualification or vocation-specific aims. Topics include practical crafts and creative arts, music, languages, social and community studies, e.g. personal development, civic skills, computer skills and physical education and health care. The essential features of AECs are the diversity of curricula, voluntary nature of participation and use of learner-based methods. The courses are held mainly in the evenings and at the weekends, but increasingly also in the daytime (Kansalaisopistojen liitto).

A typical character of AECs is the personnel structure. Only a few percent of the teachers are permanent or full-time teachers. Part-time teachers are responsible for roughly 80% of the total teaching hours (Kansalaisopistojen liitto). They may have a permanent job in some other organisation or they may have teaching hours at many local AECs. The AECs do not hire volunteers. Instead, part time teachers are paid by the hour according to the teacher's

professional qualifications. The teachers and the administrative staff define the content of the educational programme (curriculum) and individual teachers plan their own courses.

The first AECs in the late 1800s were founded to meet workers' needs for education which had vigorously increased in the society at that time. Although presently the effects of the AEC system or liberal education in general have been studied rather little, some investigations (for example Manninen & Luukannel 2008) suggest that current liberal adult education positively affects, for instance, one's enthusiasm to study, knowledge, well-being and active citizenship at a personal level. As the number of students is in the country is large, the individual benefits probably have repercussions in families and more broadly in the society in reduced social and health expenditure, for example.

AECs have experienced massive changes and turbulence within the past decade. There has been a great wave of mergers and the number of AECs has decreased by over one fifth between the years 2006-2012 mainly because of mergers of municipalities. AECs' staff are currently facing new pedagogical challenges; they have to design learning environments which respond to the changing needs of students and they have to integrate ICT into their courses to extend the flexibility of educational services at AECs. Further, the increased competition and decreased funding has forced AEC's to become more market-oriented. These are challenges that have increased the discussion on innovation in AECs, in addition to the need to search for new student groups, new markets and new products and the challenge to meet the needs of diverse customers, to respond to the ageing of the population and keeping people in good health and longer in the world of work, to respond to growing multiculturalism, to motivate adults to study, to improve the learning-to-learn skills among the poorly educated and trained, and especially to ensure equity and equality (Kansalaisopistojen liitto).

1.3 Research objectives and research questions

The main purpose of this study is to understand innovation in the context of a non-formal adult education organisation and to identify the characteristics of an innovative adult education centre. Innovation generally has a strong effect on organisations' success and survival especially in the private sector (e.g. Baumol 2002). Successful organisations have the capacity to absorb innovation into their organisational culture and management processes (Dobni 2008). The nature of innovation in an education organisation has been studied from different points of view especially in higher education and primary and secondary education. However, no studies have been carried out concerning innovation in non-formal adult education organisations in Finland. The purpose of this study is thus to increase understanding of this issue and to describe an innovative adult education centre.

The main research question of this study is defined as follows:

What are the characteristics of an innovative non-formal adult education organisation?

Characteristics of an innovative adult education organisation are studied here from two points of view: organisational culture and social networking. According to many researchers, the innovative behaviours, thinking and decision making of organisational members are guided by the culture of the organisation (e.g. Ahmed 1998, Martins & Terblanche 2003). Innovation also occurs typically in a social setting. Innovativeness relies on cooperation and communication between individuals, groups, organisations, and subsystems, because such interactions magnify information and knowledge sharing and learning (Ar & Baki 2011, Lin & Chen 2008). Despite the importance given to culture and networking as stimulants for innovation, empirical research remains limited especially in the non-formal adult education context.

Based on these elements of innovation and the purpose of this study, the main research question is further divided into the following three sub-questions:

1. *What are the benefits and drivers of innovation in AECs and what types of innovations are generated in these organizations and how?*
2. *What type of culture supports innovation in innovative AECs?*
3. *What cooperation practices and social networks support innovation in innovative AECs?*

The contribution of this study will be to identify significant factors that affect the innovativeness of a non-formal adult education organisation. The sub-objective of the research will be to give practical recommendations for developing such an organisation culture and cooperation practices that promote innovation in non-formal adult education organisations. Thus the study results may help the managers of educational organisations to find ways to improve the innovation capabilities of their organisations.

1.4 The scope and philosophical assumptions of the study

1.4.1 The scope of the study

This study mainly relates to innovation literature. Innovation is studied here from the perspective of a service innovation which probably best describes the nature of innovation in educational organisations. The main focus of innovation research was for a long time with innovations related to technological products. The reason for the limited interest towards service innovation has been the problems caused by the special characteristics of services as well as the fact that the development of services has been considered insignificant compared to research and development (R & D). However, current research has started to investigate

how innovation in services is managed, and the study of innovation in services has emerged as an important research field (Droege et al. 2009).

Four major schools of thought can be identified in service innovation literature in order to illuminate the differences in basic assumptions about service innovation (Droege et al. 2009). Droege et al. describe these approaches as technologist, assimilation, demarcation and synthesis. The researchers of the technologist perspective relate innovation in services to technological competence gains and information technology. Barras (1986, 1990), who was one of the first known researchers of service innovation, has presented a "reverse product cycle" and suggested that the life cycle in services begins with process innovations which lead to the development of completely new services. However, service innovations are still frequently non-technological. Scholars following the so-called assimilation approach propose that the theories and concepts developed in manufacturing contexts can easily be transferred to innovation in services (Drejer 2004, de Vries 2006). The taxonomy of product and process innovation is also part of an assimilationist approach. Criticism of this approach relates to the idea that this approach is too limited and does not take into account the idiosyncrasies of services. Demarcation studies constitute a parallel research stream in which scholars emphasise the distinctive features of services which, in turn, make it difficult to transfer knowledge from manufacturing to services. One study within the demarcation stream of literature is the work of den Hertog et al. (2010). This author takes a conceptual perspective of service innovation by presenting a taxonomy of service innovation patterns and a framework to better understand what parts of services are affected by innovation. This perspective is used to present the characteristics of service innovation in this study. In the synthesis stream, research has focused more on efforts to bring together innovation in services and manufacturing than on studying both fields separately (e.g. Drejer 2004).

The characteristics of an innovative adult education organisation are examined in this study using, on the one hand, the literature of innovative organisational culture, and on the other, the literature of networking and innovation, as is depicted in Figure 1. In the figure, the circles of culture research and social network theory are not combined because the link between organisation culture and social networks is not included in this study. In trying to understand better the content of organisational culture, several typologies have been developed. For example Schein (1992, 2010) and Hofstede (e.g. 1980, 1991, 2010) have been influential in studies of culture. One of the often used typologies developed by Cameron and Quinn (e.g. Quinn 1988, Cameron and Quinn 1999) is the Competing Values Framework (CVF). Cameron and Quinn categorised organisational culture into four main types based on two dimensions: 1) flexibility and discretion versus stability and control, and 2) external focus versus internal focus and integration. Using these dimensions, the framework describes four types of organisational culture: adhocracy culture, clan culture, market culture and hierarchy culture. This framework has been chosen for studying the type of organisation culture at innovative AECs in this study. There are studies of organisational culture in educational

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organisations that have used CVF to analyse the type of the culture in higher educational organisations, but not in Finland (e.g. Cameron and Freeman 1991, Trivellas and Dargenidou 2009, Ramanchandran et al. 2011). In addition, there seems to be no research on organisational culture that uses CVF in analysing the culture of a non-formal adult education organisation. This study attempts to full this gap.
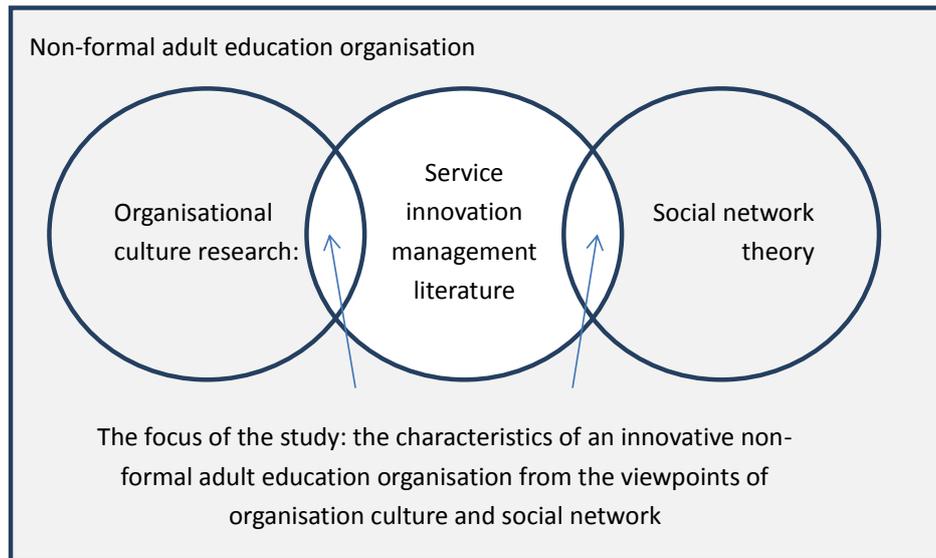
Figure 1. The positioning and the focus of the study

Innovation is also a social process. These social and cooperational aspects of innovation are studied in this research mainly from the viewpoint of the theory of social networks. Scholars more frequently acknowledge that external and internal relationships play a crucial role in the success of organisations (Eckenhofer 2011). Daly et al. (2009) state that social network theory posits that the structure of social relationships may support or constrain the direction, speed and depth of organisational change. In addition, according to many studies, cooperating with internal and external partners enhances the organisation's capability to innovate (e.g. Cavusgil 2003, Lin et al. 2010, Panayides 2006). The link between social networking/social capital and innovation has been studied in the context of firms and for example in the context of tourism (e.g. Martínez-Cañas et al. 2012, Mu et al. 2008, Petrou and Daskalopoulou 2013, Cantner et al. 2010). While also educational scholars (e.g. James et al. 2007, Carmichael et al. 2006) acknowledge the importance of interpersonal relationships and social interaction for school improvement, knowledge about the importance of social networking (both internal and external) for innovation in non-formal adult education is still missing. This point of view is studied in this research.

1.4.2 Philosophical assumptions

The most profound policy decisions relating to the research take place at a philosophical level of science, either consciously or unconsciously. Research, even when it is very practical, is based on several beliefs about the world and how it should be studied (Hirsijärvi et al. 2000, Guba and Lincoln 1994). These beliefs guide how the researcher creates new knowledge and selects the reality (ontology) and how knowledge is constructed (epistemology).

Ontological beliefs or commitments play an important role in terms of what the researcher assumes as the object of study. Ontology deals with the nature of reality: what the nature of the phenomenon is, what is real, and what can be considered as evidence (Hirsjärvi et al. 2004). Epistemology studies the nature of knowledge and the process by which knowledge is acquired and validated (Hirsjärvi et al. 2004, Huglin 2003). It is a way of understanding and explaining how we know what we know (Crotty 1998) and what the relation is between the researcher and the object of the study and what the effect of values is in understanding the phenomenon (Hirsjärvi et al. 2004). Although there are many different epistemological terms, in general, epistemological beliefs are seen as ranging on a continuum from objectivism to subjectivism. Objectivism espouses the belief that knowledge of the world is relatively fixed, exists outside the knower, and that learners can come to know the world as it really is. Whereas objectivism is based on the logic of discovery, subjectivism is based on the logic of interpretation. Subjectivists discard the notion that reality is "out there" and instead endorse the idea that reality is what each person interprets it to be (Huglin 2003). In this study, the ontological and epistemological beliefs are that the reality is complex and seen constructed on the basis of subjectivistic interpretations. The assumption is that the world is subjective and only a result of human activities.

There are two main scientific traditions of opposing perspectives: positivism and hermeneutics. Hermeneutics attempts to reach a comprehensive, holistic understanding of the phenomenon under study (Gadamer 1975) while positivistivism attempts to explain it. In the positivistic research tradition, the research question is derived from the literature and is modified as hypotheses that are then tested with empirical evidence (Koskinen et al. 2005).

This study aims to interpret the views of the principals, full-time teachers and designers on the studied phenomena – innovation, organisational culture and networking. In order to describe the characteristics of an innovative non-formal adult education organisation based on these interpretations, a hermeneutic paradigm is chosen. Hermeneutic research studies the meaning and purpose of phenomena and a hermenetutic paradigm is appropriate when the objective is e.g. to explain history, interpret art or understand human behaviour. Ehnrooth (1990) states that the method of interpretive sciences is hermeneutic because the researcher has a dialogue with the data. In a qualitative study, interpretation takes place in every phase of analysis.

A hermeneutic circle can be described as an iterative process where the researcher's pre-understanding adapts as a result of new information (Niskanen 1994). Gadamer (1976) states

that the idea of a hermeneutic circle refers to the dialectic between the understanding of the text as a whole and the interpretation of its parts, in which descriptions are guided by anticipated explanations. The movement of understanding is constantly from the whole to the part and back to the whole. One important meaning of a hermeneutic circle is that a process has no absolute start. Bollnow (1981) points out that this is the prerequisite for all knowledge because new understanding is always based on former understanding. When the process of interpretation goes on, the pre-understanding changes.

The researcher's pre-understanding for this study was first built in practical work as a principal of a Finnish AEC and when exploring the scientific literature on innovation management. The pre-understanding was increased also by studying the use of subsidies provided by the National Board of Education to AECs and final reports on the use by the AECs. In order to acquire a general understanding of innovation in AECs, a comprehensive pre-study survey, which was sent to all full-time principals of AECs, was conducted. This new information served as pre-understanding for the actual multi-case study.

Another feature of the hermeneutic circle is that interpretations are temporary. A hermeneutic circle is not closed (Siljander 1988). Thus, one contribution of this study could be that this study would provide pre-understanding for a more comprehensive research process of innovation in adult education.

1.5 Key concepts and definitions

The key concepts of the study are discussed and defined in this chapter.

1.5.1 Innovation

Innovation is a widely studied subject and there are many different approaches and definitions to describe the phenomenon. Some definitions are general and broad while others focus on specific innovations. Innovation may refer to an outcome of an innovative process or to the innovative process itself (Drucker 1985). An idea is a necessary condition for an innovation, but should not be called an innovation in itself (de Jong & Vermeulen 2003). Tidd et al. (2005) define innovation as a process of turning opportunity into new ideas and putting these into practice more widely to lead to new or improved products, processes and business models. Initially, innovation was understood as a very technology and private sector oriented phenomenon. Today, the need for innovation is almost taken for granted also in the service sector, public sector and third sector.

Although there are numerous different definitions of innovation, some aspects of those definitions are common in literature. *Newness* is a property of definitions of innovation in all disciplines (Johannessen et al. 2001). The output of the innovation process can be a new product or process, service, market or marketing method, material or administration system, for example. It can be technological/managerial, market pull/technology push, or competence-

enhancing/competence-destroying. The output can be new to the adopting organisation, to an industry or the wider society. The innovation literature recognises two distinct main categories of innovation outcomes depending on their novelty: incremental and radical/discontinous innovations. Incremental innovation implies minor changes to the current products or processes and radical innovation refers to a novel combination of different fields of expertise resulting often in new technological patterns (Alguezaui & Filieri 2010). Innovation is also characterised by its uniqueness. De Jong and Vermeulen (2003) point out that innovation involves an application component and just developing something new cannot be regarded as an innovation unless it is used.

Change and innovation are often linked with each other. While some scholars use the terms interchangeably, others regard innovation as the cause and change as the impact (Martins & Terblanche 2003). For example, Wong and Cheung (2009) present innovation as a planned or intended change. According to Damanpour (1996), innovation "is conceived as a means of changing an organisation, either as a response to changes in the external environment, or as a pre-emptive action to influence the environment". Also Drucker (1985) has described innovation as "the purposeful and organised search for changes". Radical innovations usually change the society or organisation significantly, are competence-destroying, need a vast amount of resources and may contain large financial risks (Cromer et al. 2011). Incremental innovations do not significantly change customers' activity (Olsen & Sallis 2006). However, they can form a series of continuous small changes and improvements, each of which separately is incremental, but which together cumulatively may bring about great change. The implementation of incremental innovations does not usually include enormous financial risks (Cromer et al. 2011). Olsen and Sallis (2006) state that incremental innovations are associated with the short-term viability of the organisation because through fine-tuning the products or services they directly address short-term performance. In contrast, radical/discontinuous innovations are associated with long-term viability.

In the 1960s and 1970s, innovation was thought more of as a process, as the introduction of change or as the generation of a new idea. Latterly, these definitions have been refined to include the concepts of *success and usefulness*. Cumming (1998) defines innovation as "the first successful application of a product or process" and Assink (2006) as "the process of successfully creating something new that has significant value to the relevant unit of adoption". Taatila et al. (2006) state, however, that defining when an idea has been successfully implemented and creates new value is difficult. Männistö (2002) points out that innovation is characterised by proportionality; in other words, what is innovation to one organisation is not necessarily innovation to another.

It is also obvious that the innovation process is related to *creativity* (e.g. Ar & Baki 2011). Also this term is used interchangeably with innovation or, creativity is regarded as a starting point of idea generation for innovation. As Amabile (1998) points out: "Creativity can be understood as the ability to generate new and valuable ideas." In 1988, Badawy wrote that

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"creativity brings something new into being" and that "innovation brings something new into use".

Cooperation and networking are also currently linked with innovation. The concept of open innovation has been widely promoted in recent years, although cooperation between firms and firms and universities has been taking place for a long time, as in the case of joint ventures. Chesbrough (2003), who has significantly contributed to the emergence of this concept, defines open innovation as "a paradigm that assumes that firms can and should use external as well as internal ideas, and internal and external paths to markets" (Chesbrough 2006). He distinguishes between outside-in and inside-out open innovation. Whereas the focus of outside-in open innovation is on the search for and adoption of ideas and technologies from outside of the firm's boundaries, inside-out open innovation deals with the many ways in which innovations can be commercialised and markets can be entered.

In this study, innovation is understood broadly both as a process and as a result. The nature of innovation is studied in the context of AECs, which are characterised here as service organisations. Although in services it is not always easy to make a distinction between product and process innovations (Nährlinder 2005) mainly because the production and consumption of services take place simultaneously, in this study innovation is defined as "successfully creating new or significally improved existing products and processes that have value to the customers and/or the organization itself". Product innovation here is defined as a new educational service or activity developed for the customers, and process innovation is defined as creating new or improving existing processes, methods or procedures to manage, produce, market and deliver the educational services.

Innovation can only occur if capabilities to innovate exist in an organisation. Wang and Ahmed (2004) have defined organisational innovativeness as "an organization's overall innovative capability of introducing new products to the market, or opening up new markets, through combining strategic orientation with innovative behaviour and process". The innovation capability of an organisation is also defined as its ability to mobilise and use internal and external knowledge and combine it to create new knowledge in developing and introducing new products, services or processes (Cakar et al. 2010, Gressgård 2011). Panayides (2006) has defined it simply as cultural readiness and appreciation for innovation and Peng et al. (2011) as "the strength or proficiency of a bundle of organisational practices for developing new products/processes". Kumar et al. (2010) suggest that innovation capability refers to the implementation or creation of technology as applied to systems, policies, programmes, products, processes, devices, or services that are new to an organisation (Chang and Lee 2007). Innovation capability influences employee behaviour, and may lead them to accept innovation as a fundamental value of the organisation and can foster commitment to it. Kumar et al. (2010) define innovation capability especially in the public sector as the degree of belief that the public sector is actually producing novel or useful ideas to enhance the provision of public services or the creation of new products.

In this research, innovation capability is defined broadly as the "innovativeness of an organisation". It means here the organisation's overall innovation capability of developing innovative processes and introducing new products to the market, or opening up new markets. It consists of the culture, management, competencies and knowhow, openness to new ideas, cooperation practices, and the degree of motivation to work with a view to change and develop new products, structures, processes, practices and cooperation in the organisation.

1.5.2 Organisational culture

There is an extensive body of knowledge in the literature that deals with organisational culture. Despite different definitions of culture, there is a consensus among researchers that it refers to deeply seated and often subconscious shared values, norms, beliefs and assumptions that organisational members have in common and that guide the behaviour, thinking and decision making of organisational members (e.g. Dobni 2008, Naranjo-Valencia 2010). The values have been described e.g. as broad, nonspecific feelings of good and evil, beautiful and ugly, normal and abnormal, rational and irrational (Hofstede et al. 1990). Values in this study are defined as taken-for-granted beliefs about the proper functioning of an organisation. They mean 'the way we do things here', and 'the way an organisation is operated'.

One of the most commonly used definitions of organisational culture is Schein's definition (Schein 1992), which states that the organisational culture of a group is "a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid, and therefore to be taught to new members as the correct way to perceive, think, and feel in relation to those problems". Cameron and Quinn (1999) define that organisational culture "is reflected by what is valued, the dominant leadership styles, the language and symbols, the procedures and routines, and the definitions of success that make an organisation unique". Organisational culture determines what people pay attention to, how they respond to different situations, and how they socialise with new members and exclude those who do not fit in.

Martins and Terblanche (2003) point out that playing an indirect role in influencing behaviour, organisational culture complements rational managerial tools. Managerial tools are designed to do things, but culture is more a reflection of a way of saying things. Organisational culture thus fills the gap between what is formally announced (mission, vision, goal statements) and what actually takes place, and it can be considered the direction indicator that keeps the strategy on track (Martins & Terblanche 2003). Organisational culture has also been described as being the personality or glue that holds an organisation together. Jaskyte (2002) states that the norms prescribing and sanctioning behaviours act as an additional cohesive element of an organisation.

As the culture is a learned product of group experience (Schein 1996), it can be found wherever there is a definable group with a significant history. It is initially formed as a result of early experiences and the influence of early leaders. Over time, work practices become so

implicitly embedded in the underlying assumptions of action that they often become impossible to articulate (Kaarst-Brown et al. 2004). Ahmed (1998) presents that the culture stems from the interpretations that employees give to their experience of organisational reality; why things are the way they are and the hows and whys of organisational priorities. Ahmed divides the culture into two components: explicit or implicit. He states that explicit culture represents the typical patterns of behaviour and the distinctive artifacts that people produce and live within. The implicit component of culture refers, according to Ahmed, to values, beliefs, norms and premises which underline and determine the observed patterns of behaviour. Ahmed points out that it is easier to manipulate explicit aspects than implicit ones when trying to fashion organisational change.

Literature on organisational culture commonly focuses on two major and important aspects of culture: content, which refers to the meaning of basic assumptions, norms, values and cultural artifacts shared by the staff, and strength as the depth and breadth of behaviours embedded among the members (Prajogo and McDermott 2011). The culture strength is a function of several factors, including the degree of consensus among unit members regarding what the culture emphasises and the strength of the connections among expectations, reward and behaviours (Cooke & Rousseau 1988). Ahmed (1998) defines the strength of culture depending primarily on two things: 1) pervasiveness of the norms, beliefs and behaviours in the explicit culture (the proportion of members strongly holding on to specific beliefs and standards of behaviours) and 2) the match between the implicit and explicit aspects of culture. The length of the common history of the group has an effect on the depth and breadth of culture. Both aspects are important for achieving a high level of performance. Cultures that vary in content support different behavioural norms and thinking styles. Cultures varying in strength have different degrees of influence on organisational members (Maslowski 2006).

The role that organisational culture plays in an organisation can also be divided into 1) the functions of organisational culture and 2) the influence that organisational culture has on the different processes in the organisation. So, the culture content is a product and a process, the shaper of human interaction and the outcome of it (Obenchain & Johnson 2004).

Organisational culture distinguishes one organisation from another. It is affected by the nature of the organisation's business – for example, the culture of a large, manufacturing organisation will be quite different from the culture of a service organisation or public sector organisation such as a hospital, school, or library (Balog 2009). It is also affected by various factors such as organisational history, as mentioned before, its location, leadership style, qualifications and characteristics, national culture, type of activities, organisational structure and system of control, type of tasks, ownership, strategy, organisational size, goals, environment, and relationship within working units (e.g. Hofstede et al. 1990).

Referring to these definitions, organisation culture in this research has been defined as shared values, beliefs and assumptions that organisational members have in common and that guide their behaviours, thinking and decision making.

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1.5.3 Cooperation and social networking

Cooperation indicates the willingness of persons to work together toward mutually dependent objectives (Easton & Araujo 1986). Argyle (1991) defines cooperation as "acting together in a coordinated way at work, leisure or in social relationships in the pursuit of shared goals, the enjoyment of the joint activity or simply furthering the relationship." According to Easton and Araujo (1986), there is a variety of modes of cooperation in networks such as the distinction between formal and informal cooperation. Formal cooperation is or can be planned and managed, whereas informal cooperation is more likely to be individual, random and unplanned. Organisational actors use both formal and informal structures in parallel in order to achieve their goals (Henttonen 2009).

A network consists of "nodes" or positions and "links" manifested by interaction between positions. Nodes are the individuals, such as persons or stakeholders, companies or institutes (Eskenhofer and Ershova 2011). The links are usually called relationships. Thus, a cooperation network in its most basic form represents a set of actors linked by a set of social relationships, whereby relationship contents vary in scope and depth (Chiu 2008). The relationships can be individual or organisational relationships and can be horizontal or vertical and internal or external. Organisational relationships can connect the organisation to its suppliers, customers, competitors, or other entities (Gulati et al. 2000). A network can also be approached in terms of its activities, resources, and actors. The activities and resources in two different relationships can complement each other, or they may be in competition. Similarly, actors can use the existence of complementarity or competitiveness in their relationships in different ways when interacting with each other (Ojasalo 2002). Networks also differ in aim and duration (Eskenhofer and Ershova 2011).

Social network relationships fall into two broad and overlapping types of relationships: expressive and instrumental. Instrumental relationships such as work-related advice relationships include those through which individuals share work-related resources such as information, knowledge, assistance and guidance. They indicate for example how the work is being carried out in the teams. Expressive social support networks, on the other hand, consist of relationships that reflect affection, camaraderie and emotional support (Ibarra & Andrews 1993, Podolny & Baron 1997).

A concept which is closely linked with social networks is social capital. It is gaining considerable interest among academics in different areas. There are three key authors who laid out the foundations of the concept: Bourdieu (1986), Coleman (1988, 1990), and Putnam (1995, 2000). Additionally, the literature on social capital refers to other major contributors such as Granovetter (1973, 1985), Burt (1992, 1997, 2000), Lin (1999) and Portes (1998). This literature defines social capital in different modes such as structure (Coleman 1988), resources (Bourdieu 1986, Putnam 1995), culture of confidence and capacity (Portes 1998), or an asset within a network (Lin 1999). Adler and Kwon (2002) have provided a systematic analysis of the literature on social capital and introduced a definition that reconciles the

different forms of definitions advanced so far in the literature. According to them, social capital is ''the goodwill available to individuals or groups. Its source lies in the structure and content of the actor's social relations. Its effects flow from the information, influence, and solidarity it makes available to other actors'' (Adler & Kwon 2002). Also Alguezaui and Filieri (2010) have analysed various definitions and they suggest that there are two different topologies of social capital that were treated throughout the literature. Social capital was perceived as either a public or private good. Public social capital refers to assets that flow to and benefit all individuals making part of a community, whereas the private one refers to the potential goods that a focal individual may derive from its social network as an exclusive private property. Also two main perspectives have been widely discussed in the literature: a sparse network based on Burt's (1992) structural holes theory, and a cohesive network based on Coleman's (1988) approach.

In this study cooperation means working together toward shared objectives or objectives that are mutually dependent. A social network is seen here as a set of individuals connected to each other informally or formally and by a set of social-network relationships within an organization and externally. Social capital is defined here in terms of the resources derived from the relational network that an individual or organization maintains over the course of time (Casanueva & Gallego 2010). A stakeholder is viewed as any individual or group of individuals who can be or is affected by an organization.

1.6 Process and structure of the thesis

In order to answer the research question of this study, a literature review, and two empirical phases of a pre-study and a multicase study will be carried out. Figure 2 describes how the answer to the research question is sought through these empirical phases. The objective of the pre-study phase is to reach a comprehensive preunderstanding of innovation at AECs: the benefits, drivers and barriers of innovation, what types of innovations are generated in these organisations and how (sub-question one). The data is collected using an e-mail survey to full-time principals of Finnish AECs. A survey was chosen in the pre-study phase because it is an effective way to collect data when there are many informants. Another objective of the pre-study is to find the case institutes for phase two.

The objective of the empirical phase two is to study the nature of innovation more specifically in AECs that regard themselves as innovative and to find an answer to the main research question: What are the characteristics of an innovative non-formal adult education organisation? In addition, answers to all sub-questions are sought. In the second phase, data is collected using a multicase study of the four case institutes. The selected case institutes are studied form the perspectives of innovation practices, organisation culture and social networking. The research process of this study is presented in more detail in the third chapter.
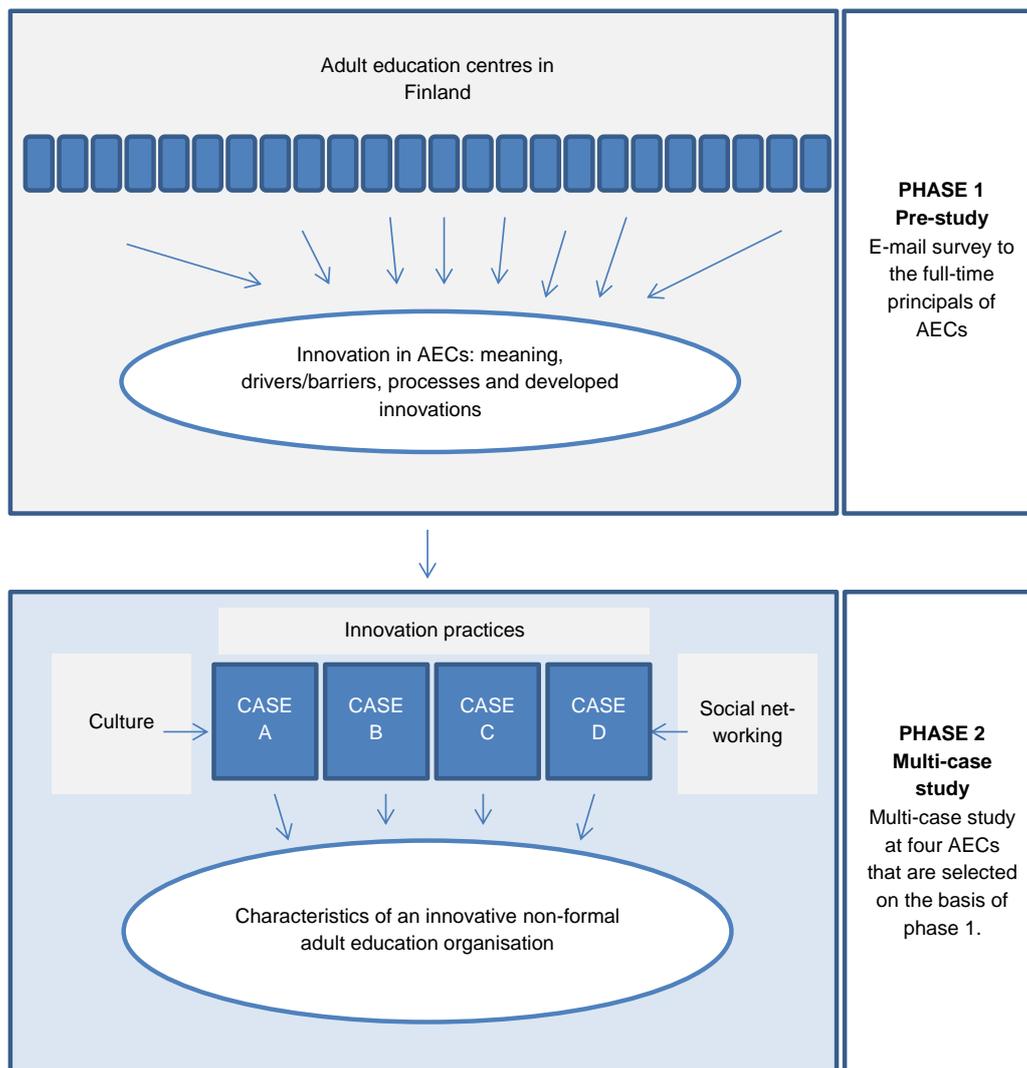
Figure 2. The two empirical phases of the study

The research proceeds as depicted in Figure 3. Chapter one describes the background, objectives and research questions of the study and key concepts and definitions related to the study. Also the scope and philosophical asumptions of the research are presented. In addition, the characteristics of the Finnish adult education system are described in chapter one. The relevant literature related to this study is discussed in chapter two. First, chapter two focuses on the nature of innovation in service and educational organisations. Then, a review of the relationship of innovation with organisational culture and cooperation networks is presented. The methodological considerations are discussed in chapter three. First, the methodological issues associated with this study are described. Then, a qualitative case study approach is adopted as the research strategy. After that, the ways how the research data were collected, produced and analysed are presented.

INTRODUC-TION	THEORY	RESEARCH METHOLOGY	FINDINGS	DISCUSSION	CONCLUSIONS
Chapter 1 Researh objectives Research questions Philosophical assumptions Key concepts	Chapter 2 Innovation in educational context Organisational culture and innovation Cooperation and social networks and innovation	Chapter 3 Methods for data collection and analysis	Chapter 4 Data analysis and findings: 1. Findings of the pre-study 2. Findings of the multicase study	Chapter 5 Discussion of the findings Theoretical contributions Answers to the research questions Evaluation of the study	Chapter 6 Practical implications Suggestions for the further research

Figure 3. The structure of the thesis

In chapter four, the findings of both phases of the study are presented. In chapter five, the findings of the research are discussed, the research questions are answered and the study is evaluated. Finally, the conclusions are provided and the opportunities for further research are identified (chapter six).

2 LITERATURE REVIEW

This section is a review of earlier research which relates to the area of this research. This section first investigates the nature of innovation in the non-formal adult education context. Then, the characteristics and drivers of innovation culture in an organisation are described. The third part deals with cooperation and social networks and their effect on innovation.

2.1 The nature and management of innovation in an educational organisation

The aim of this section is to understand the nature of innovation and innovation management at AECs. As the products of an educational organisation have characteristics of services, innovation is examined here from the perspective of a service organisation and service innovation. In order to create or discuss a service innovation, first the nature of services should be understood (Chen et al. 2009). That is why this section begins by describing the typical characteristics of services. The characteristics of service innovation, service innovation processes and management and success factors form the next part of this section. Finally some results of innovation research on educational organisations are presented. Adult education centres in Finland are non-profit public entities which receive funding from both the state and often also from the municipality. Therefore, also the nature of innovation in the public sector is briefly presented.

2.1.1 The nature of services

A service product is typically a service function or a set of functions marketed as a commodity or public service (Miles 2008). A service concept is the description of customers' needs and how these should be satisfied. The service system represents the static resources required for the service. They consist of the service organization's staff, the physical and technical environment, the organisation in terms of its structure and administrative support systems, and also the customers themselves, who can be considered as "co-producers". The service process is the chain of activities which must occur for the service to function (Agarval 2011).

One common way to define service products has been to list the characteristics of services that goods do not have, although services are as different from each other as they are from products (Edvardsson et al. 2005). One of these typical characteristics of services is intangibility. It means that service products typically involve transformations in such entities as the state of material products (e.g. logistics), of people (e.g. education and health care), and in data. Some services are delivered through physical artifacts as in education e.g. using CD-

ROMs and written material and some are associated with them. Because of their intangibility, services are more difficult to assess prior to experiencing them and customers often cannot specify exactly what they want (Chesbrough 2011, Junarsin 2010). It is also much more difficult to model or establish a prototype of a service concept or perceive the quality of service than in the case of a physical product. The perception of service quality (in education, the quality of teaching) is hence much more subjective than that of physical products. In addition, in the decision-making process, customers may judge the service quality based on the physical evidence configured by the service provider (Junarsin 2010).

Interactivity means that many service processes require the presence and participation of a customer (in education a student). Physical presence may be required for some transformations to a customer's state. Education transforms the state of people through training, skill formation, and enhancing understanding. Service personnel (in education, e.g. teachers) are a critical factor in producing and delivering the service, and the interaction between the service producer and a customer is crucial. Sometimes customers are essentially passive and sometimes they are actively involved in the production of the service. Junarsin (2010) divides the customer contact ranked according to the closeness between the service provider and the customer into three levels: 1) interpersonal service, 2) remote service, and 3) self-service. In managing service innovation, the service provider has to recognise and understand which level of contact must be delivered (Goffin & Mitchell 2005). Different customers consuming the same services may have different preferences for the level of contact. In adult education, distance or on-line learning may be preferred by some groups, such as those in full-time work or shift work, people who are unable to commute, parents of little children or young students.

Even though there is a wide range of services from fully standardised to customised (Hurmelinna-Laukkanen and Ritala 2010), services generally are less standardized compared to goods. It is common that different providers deliver services of varying levels even if they come from the same organisation (Junarsin 2010). To some extent, this difference results from the distinct personalities of people. For example in education, some teachers are regarded as more capable, courteous and interactive than the others. This service inhomogeneity may bring both positive and negative consequences. In some situations, variation in the quality of service may be considered unreliable. Consequently, in managing service innovation, an organisation needs to train their "front-office" staff to deliver the accepted level of services (Junarsin 2010). Inhomogeneity gives, however, also possibilities to tailor the service according to the customers. Also customers play an important role in making the services inhomogeneous. Different customers might experience the same service differently. Some customers may need more contact than others. Therefore, besides training the front-office staff to maintain the minimum accepted level of services, the organisation has to train the staff to serve customers appropriately. The capability of the staff to balance between the minimum accepted level of services and the level of contact tailored to specific

customers will enhance the perceived quality overall. This is obvious also in education. Educational organisations organise and reproduce knowledge, and train students of various levels. The possibility to tailor the education according to the groups or individuals is crucial in modern society.

Services are perishable such that they cannot be stored and transformed. A service product, process, and service consumption is produced and consumed at the same time and place, as traditionally in classroom education. Consequently, it is imperative that the service provider pay attention to the location and timing of delivering services. However, in education modern technology gives new possibilities to store the lessons using the Internet, for example. The students are then able to study when it is suitable for them and they can also repeat the lessons as many times as they want or need.

In services, information flows between a service supplier and a customer. Especially in data related services, it flows to and from information processing, leading to, for instance, high levels of information technology (IT) use in services. In adult education, IT is currently widely used to deliver and store teaching services for students.

Table 1. Implications of service characteristics on education. Adapted from Junarsin (2011), examples added by the author.

Characteristic	Meaning	Example in non-formal adult education
Intangibility	Services normally do not have components that can be perceived by touch	Teaching in a classroom
Customer contact	The level of contact can be divided into: (1) interpersonal service, (2) remote service, and (3) self-service	Face to face learning, distance learning and e-learning
Inhomogeneity	The service output is frequently variable, depending on the employees and customers engaged in the services	The expertise and personality of the teacher and the knowledge and motivation of the student
Perishability	Services cannot be stored	Face to face education is a unique event which can partly be stored using modern information technology
Multifaceted nature	Tangible aspect of services and employees delivering them may define the overall perceived quality of the services	Apart from the quality of education, a customer's evaluation of the school's services is also affected by the premises and layout of the room, equipment, office services, information and other facilities of the institute.

In summary, Table 1 shows the implications of service characteristics on educational services. In the first and second column of Table 1, service characteristics and their descriptions are presented as Junarsin has depicted them. In the third column, these characteristics are applied to non-formal adult education. Traditional teaching in a classroom is intangible. It is consumed at the same time as it is produced. Customer contact in education today has many forms. Interpersonal face-to-face learning has been joined by distance learning and e-learning, which enable studying without any contact between a teacher and a student, or the contact takes place online. In education, it is typical that the personality, expertise and motivation of both the teacher and the student have an effect on learning. In addition, currently, it is possible to store the lessons in the web in many ways. The multifaceted nature of service can easily be identified also in education. A customer's evaluation of the school's services may also be affected by the premises and layout of the room, equipment and technology, office services, information and other facilities of the institute.

2.1.2 Characteristics of service innovation

Studying service innovations has become popular only during the past three decades. Service sector growth and its rise into a major role in the economy have increased the interest towards service innovation (Cardellino & Finch 2006) and in recent years the study of innovation in services has emerged as an important research field. In public sector reform and research, the innovation perspective, innovation debate, innovation know-how and innovation systems are still relatively new topics in Finland. The public sector has, however, played a significant role in the generation of several key innovations, such as the Internet, and many medical advances (Valovirta & Hyvönen 2009). Innovation leadership in the public sector is an entirely new knowledge-based requirement.

A service innovation is a new or significantly improved service product or service process. Toivonen & Tuominen (2009) define service innovation as "a new service or such a renewal of an existing service which is put into practice and which provides benefit to the organization that has developed it; the benefit usually derives from the added value that the renewal provides to the customers. In addition, to be an innovation the renewal must be new not only to its developer, but in a broader context, and it must involve some element that can be repeated in new situations, i.e. it must show some generalizable feature(s)." Most service innovations are answers to perceived unmet needs of actual or potential customers or translating a technological option into a service proposition. Service innovation can also be a technology-based reform of the service product or service process.

Service innovations usually have some common characteristics of services. They are in the first place intangible new ideas or combinations of existing ideas or services (sometimes in combination with physical objects) or changes made to the service delivery process that together constitute a new value proposition to a client (den Hertog et al. 2010, Agarwal & Selen 2011, Oke 2007). Service innovations are also often viewed as informal or ad hoc by

nature (Junarsin 2010). A service innovation should be produced in close interaction with a customer and not mainly as a result of the organisation's own development work. Hyunsoo (2009) points out that people do not expect the service as a product but as a solution to their problems or wishes. In spite of its immaterial nature, a service innovation should be repeatable and replicable. Because of its intangible and interactive quality, a service innovation cannot be developed, prototyped and tested in a similar way as physical goods. Its predominantly conceptual nature makes it difficult for the service producer to describe and demonstrate beforehand the benefits of the service innovation that will only exist when the customer buys and utilises it and difficult for a customer to assess beforehand what will be experienced and what will be delivered (Hurmelinna-Laukkanen & Ritala 2010). Thus a service innovation has to strive for "tangiblelising" the intangible services (Junarsin 2010).

Innovation in services is multidimensional (Agarval & Selen 2011). Focusing on the dimensions of service innovation, den Hertog et al. (2010) have presented a comprehensive definition for a service innovation as a new service experience or service solution that consists of one or several of the following six dimensions of novelty: 1) new service concept, 2) new customer interaction, 3) new value system/business partners, 4) new revenue model, 5) new organisational or 6) technological service delivery system. A service organisation can innovate every single dimension, or a combination of several dimensions.

Innovation in the service concept (the first dimension) includes changes in the characteristics of the service itself (de Jong & Verlaulen 2003). De Jong and Vermeulen state that this dimension is most widely recognized. A new service concept describes the value that is created by the service provider in cooperation with the customer. An innovation is often a new idea of how to create a solution to a problem or a need of a customer. Den Hertog et al. state that many new service concepts combine elements of services that do exist individually or as part of other services in a new combination or configuration.

The second dimension, a new client interface, means changes in the way clients are involved in service design, production, and consumption. The interaction process between the provider and the client is an important source of innovation (Päällysaho & Kuusisto 2008). Den Hertog et al. state that the majority of innovations here are variations on the introduction of "self service". This dimension of innovation can even entail clients acting as co-producers of the service offering (de Jong & Vermaulen 2003). A customer's ability to participate in the innovation process of a service product is based on the customer's experience of the product. The third dimension is the new value system or set of new business partners, i.e. actors involved in jointly co-producing a service innovation. New services are increasingly realised through combinations of service functions provided by a coalition of providers, both parties in the value chain and actors in the wider value network. The fourth dimension is related to new revenue models. According to den Hertog et al., many new service ideas fail as the distribution of costs and revenues do not match. Developing the right revenue model to fit a new service concept may require considerable ingenuity (Päällysaho & Kuusisto 2008,

Chesbrough 2006). The fifth dimension concerns a new service delivery system: the personnel, organisation and culture. A new service delivery system contains changes in the ways in which service workers perform their duties delivering critical services. It refers to the organisational structure of the service organisation itself. Appropriate management and organisation are needed to allow service workers to perform new duties properly, and to develop and offer innovative services. This type of change is often the direct result by the linkage between the service provider and its client, and/or the service concept (de Jong & Vermeulen 2003). Den Hertog et al. suggest that new services may require new organisational structures, (inter)personal capabilities or team skills. He refers with this dimension to innovations that typically start at the human resources and/or organisation side of the firm. The sixth dimension is also a new service delivery system, but the viewpoint is technological. New information technology is important to services because it allows for greater efficiency and effectiveness in information processing. This dimension pinpoints the observation that information technology (predominantly, but not exclusively) has enabled numerous service innovations ranging from electronic government and e-health to advanced multi-channel management, customisation of services, introduction of self-service concepts, virtual project teams and so on. The role of a customer will change when e-service replaces personal service.

The first dimension of den Hertog et al. model relates especially to the characteristic intangibility of many service products, while dimensions two and five relate more to the client intensity or interactivity of service processes and products. Dimension six has more in common with traditional manufacturing innovation and also stresses new information technology innovation. Innovations in any of these dimensions may be to some extent incremental or radical, requiring more or less input of new knowledge and the reorganisation of processes and procedures.

Many service innovations in education involve some combination of these six dimensions. For example, a new IT system (technology dimension) may be used to enable distance learning (customer self-service). A new service will often also require a new service delivery system and changes to the customer interface. A service innovation mainly involving one dimension may trigger the need for changes in other dimensions.

Agarwal and Selen (2011) regard service innovation as interplay of different dimensions according to den Hertog et al. 2010. However, they state further that innovations in services are increasingly brought to the market by networks of organisations. Avlontis et al. (2001) have distinguished six types of innovations especially in financial services that, however, appear to capture varying levels of service innovativeness and an organisation's new service strategy fairly well (Alam 2006): entirely new services (to the market or to the world), new services to an organisation, new delivery processes to an organisation, existing service improvements and modifications, service line additions, and re-positioning of existing services.

Figure 4 illustrates the dimensions of service innovation according to den Hertog et al. combined with the types of service innovations distinquished by Avlontis. In the figure the fifth and sixth dimensions of den Hertog's definition (new organisational service delivery system and new technological service delivery system) are combined. The types of service innovations presented by Avlontis that are linked to the new service concept are: entirely new services to the organisation, the market or the world, existing service improvements and modifications, service line additions and repositioning of existing services. The sixth type of service innovation presented by Avlontis, new delivery processes to an organisation, is combined with the dimension of a new service delivery system presented by den Hertog et al.

	1. New service concept	(1) Completely new services, (2) new services to a company and to the market, (3) new distribution processes of a company, (4) service modifications, major improvements or existing service modifications, (5) service line additions, (6) re-positioning of existing services
SERVICE INNOVATION	2. New customer interaction	Changes in the way clients are involved in service design, production, and consumption (self service)
	3. New value system/business partners	New partners and methods of networking
	4. New revenue model	Developing the right revenue model to fit a new service concept
	5. New service delivery system	Changes in the ways in which service workers perform their duties delivering services or use information technology

Figure 4. The nature of service innovation according to den Hertog et al. (2010) and Avlontis (2001)

Chen et al. (2009) point out that despite the evolutionary nature of service innovation, many of the significant features are common to a variety of innovations. First, a service innovation is a market-oriented strategy and operation. The content of the service will change according to the market need. Second, the service innovation process helps an organisation to create knowledge and to accumulate experiences through learning. The need for service innovation comes from the lack of necessary competencies and capabilities to serve a customer. Third, the service innovation is an integrated concept of a comprehensive process. Innovative

solutions must integrate seamlessly with the new service processes and the current business. Fourth, service innovations are continuous thinking and practices. Although a service innovation is easier to implement than a technological innovation, it is also easier for competitors to imitate. This situation may be avoided by extending the capabilities of the organisation and creating a sustainable innovation process (de Jong and Vermeulen 2003).

The existing literature does not provide a more detailed breakdown of the commonly used public-sector innovation types. There are numerous outlines, many of which involve many different types of innovation from incremental improvements to extensive social management system-level changes. Looking at the nature of innovation in the public sector has often led to the adoption of a very wide definition of innovation. Innovation in the public sector has been defined for example as follows: "Innovations are the new ideas and practices that have been implemented" (Moore and Hartley 2008). The concept of social innovation opens up perhaps the most comprehensive perspective on the reform of public services – even innovation in the public sector increasingly involves technological elements. Hämäläinen and Heiskala (2004) define social innovation as a change that improves the performance of society. In this case, it means broad social and economic structural changes. Hämäläinen (2005) limits social innovation more strongly to the welfare of society. He says that social innovation is a new idea which stems from the creative activity of an individual, group or community, leading to value-added performance in the well-being, health, or service system of an individual or community. The public sector is also increasingly interested in citizens' views on the development of services, but their genuine participation is difficult to achieve (Valovirta & Hytönen 2009).

2.1.3 Development of service innovation

The development of innovation includes in general a process of generating, selecting and transforming ideas into commercially viable products and services or processes that give added value to the organisation. The development of service innovation includes surprises and unexpected changes, but it can still be controlled to a certain extent. Quinn (1985) calls the management of innovation controlled chaos. Ojasalo (2008) states also that innovation is likely to be individually motivated, opportunistic, customer responsive, tumultuous, nonlinear, and interactive in its development. Managers can plan overall directions and goals, but surprises are likely to abound (Biemans 1990). Cheng (2008) finds innovation management a process in which organisational managers create a creative environment, motivate members to break through the status quo and accept challenges in the face of possible future problems.

In service firms, the use of formal processes does not appear to be common and service innovations are seldom born in a firm laboratory as a result of isolated research activity (Junarsin 2010, den Hertog et al. 2010). This is in contrast with the product innovation process whereby new products undergo a development process and general stages. However,

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according to Junarsin (2010), the succeeding service organisations have a formal strategic plan for innovation. Junarsin defines a service innovation plan as a strategy based on the analysis of the situation, which includes the parameters of innovation, new product development objectives, and a programme to achieve the objectives. He also criticises the idea that the persons who are not in contact with customers are often responsible for the service product innovation.

Service innovation processes

The diversity of service activities means that service innovations and innovation processes take various forms (Miles 2008). This may be one reason why researchers disagree on the ease and simplicity of the service innovation process. Päällysaho and Kuusisto (2008) find that due to the immateriality of the new service product, the development of a new service is easier and faster than a physical product since its launch does not necessarily require large investments in materials and devices (Päällysaho 2008). Edvardsson et al. (1995), in turn, justify the complexity of the process because of the different phases overlap with each other and cannot be clearly identified. Nevertheless, three to five somewhat overlapping stages from a rough idea for a new service to a viable service offering may be distinguished in the service innovation process: an idea generation phase, a project evolving and design phase, and a piloting and implementation phase (e.g. Lightfoot & Gebauer 2011, Apilo and Taskinen 2007, Toivonen and Tuominen 2009) in the same way as in the product innovation process.

However, the durations and stresses of different stages of the innovation process vary in service and product innovations (Apilo and Taskinen 2007, Drejer 2004). The service innovation process emphasises the starting phase. Also the implementation and in particular the dissemination phase can be regarded as the most difficult steps, as after the first enthusiastic users the followers can easily surprise with their critical requirements. Because a new service product cannot be tested in a laboratory, it should be tested with customers. Piloting is, therefore, one important phase in the service innovation process.

Apilo and Taskinen (2007) have compared in more detail the service innovation process with the process of product innovation, as illustrated in Figure 5. The figure shows that in the service innovation process the focus is on the idea generation and piloting phases, whereas in the product innovation process the focus is on the designing (engineering) phase. The figure also depicts the different roles of a customer and partners. The role of a customer and partners is emphasised at every stage of the service innovation process. Junarsin (2010) states that the higher the level of customer information used in the service innovation process, the higher the possibility of success of the service innovation (Martin & Horne 1993).

PROCESS OF SERVICE INNOVATION

| Idea generation | Concept creation | Designing | Piloting | Implementation and distribution |

PROCESS OF PRODUCT INNOVATION

| Customer | Partner | Service | Product |
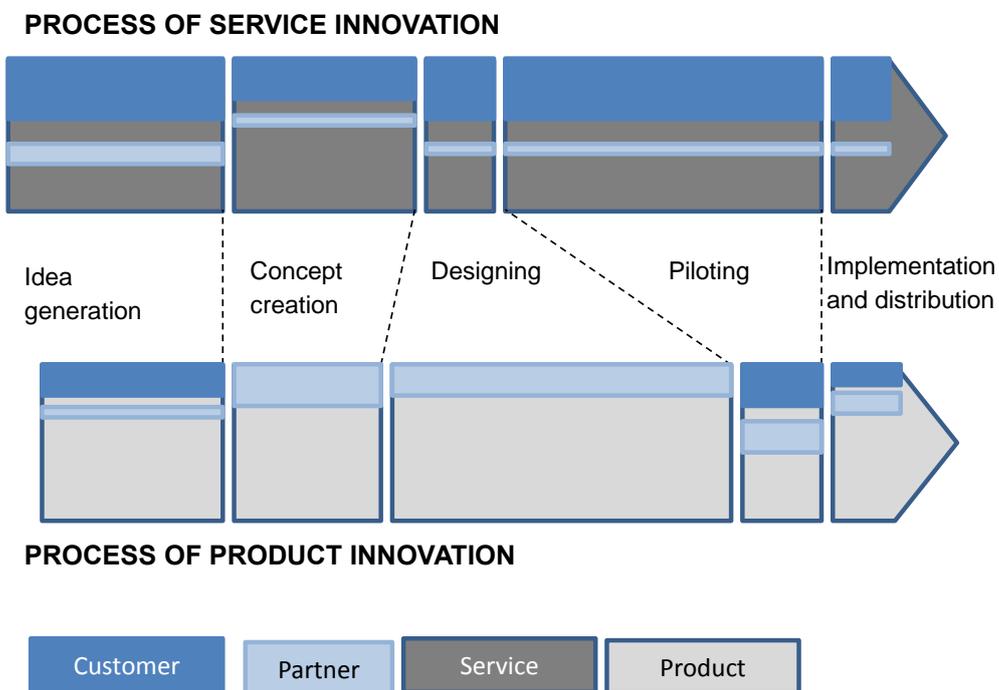
Figure 5. The processes of product and service innovation according to Apilo et al. (2007) (adapted by the author)

Toivonen and Tuominen (2009) have defined three different models leading to innovation: the R&D model, the model of rapid application, and the practice-driving model (Figure 6). Each model consists of the same three steps: emergence of an idea, development of an idea, and market applications, but their order varies across models. The R&D model is typical for product development and proceeds systematically. The two other models describe more the process of service innovation. The model of rapid application takes the idea quickly into practice where its development continues. In the practice-driven model, a service is developed together with the customer. In this model, a significant renewal is noticed afterwards and the systematic development starts after that (Toivonen & Tuominen 2009).

Chesbrough (2011) has expanded his open innovation concept also to service innovation. He states that for services, the value chain must be replaced by a different kind of graphic — one with creating customer experience as its focus. He points out that in services, no simple linear process of material inputs is being transformed into outputs and then shipped off to the customer. Instead, there is an iterative process that involves the customer and results in a customer experience. The process begins by engaging the customer, either with an open-ended inquiry about his or her needs or by extending a particular service offering. Engagement needs not mean a take-it-or-leave-it proposition to the customer; instead, the customer is often invited to co-create the service.

The R&D model

```
┌─────────────────┐     ┌─────────────────┐     ┌─────────────────┐
│  The emergence of │ ──▶ │  The development │ ──▶ │     Market      │
│     an idea      │     │    of an idea    │     │  applications   │
└─────────────────┘     └─────────────────┘     └─────────────────┘
```

The model of rapid application

```
┌─────────────────┐     ┌─────────────────┐     ┌─────────────────┐
│  The emergence of │ ──▶ │  Applying the idea │ ──▶ │     Further     │
│     an idea      │     │   on the markets   │     │   development   │
└─────────────────┘     └─────────────────┘     └─────────────────┘
```

The practise driven model

```
┌─────────────────┐     ┌─────────────────┐     ┌─────────────────┐
│   A change in a  │ ──▶ │  Finding the idea │ ──▶ │     Further     │
│  service practice │     │                  │     │   development   │
└─────────────────┘     └─────────────────┘     └─────────────────┘
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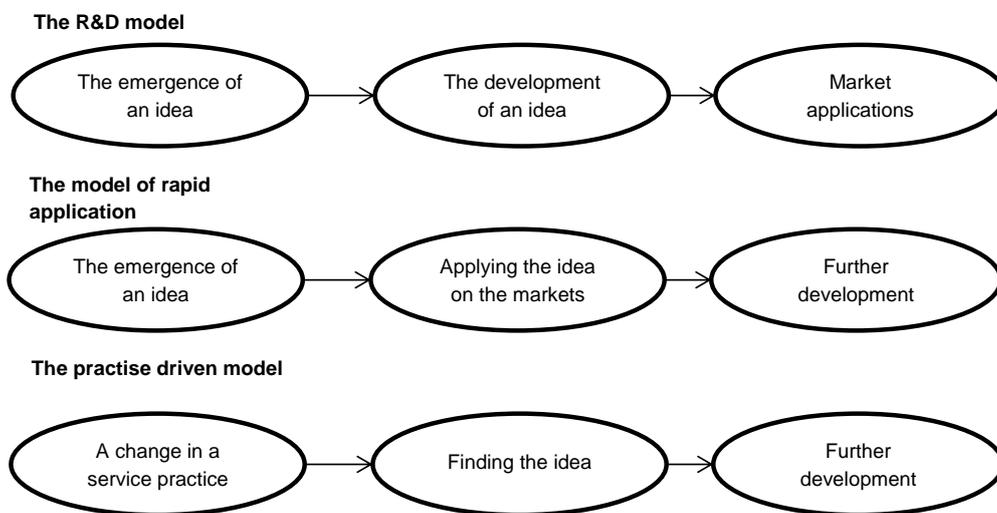
Figure 6. Different processes leading to service innovation (Toivonen & Tuominen 2009)

According to Valovirta and Hyvönen (2009) the innovation process in the public sector includes phases such as idea generation, concept development, piloting, dissemination and rooting. They point out that the key is not how they are proceeding. More important is to note that phases include different challenges for the development and management of the process. The management of interaction and taking into account and coordinating various considerations are important. Valovirta and Hyvönen state that in the Finnish public sector, innovations appear to be coincidences and generated by dedicated employees.

Success factors in the service innovation process

Although service organisations do not usually have very formal processes to introduce new service innovations, they should be able to introduce and exploit service innovations repeatedly – not just once. This is why den Hertog et al. (2010) has presented a set of six dynamic service innovation capabilities which refer to specific capabilities, i.e. organisational competencies, routines and processes that organisations already have or are developing to manage the process of service innovation. The aim is to successfully offer customers a new service experience or service solution and market them successfully. The capabilities den Hertog et al. have presented are: 1) signaling user needs and technological options, 2) conceptualising, 3) (un)bundling capability, 4) co-producing and orchestrating, 5) scaling and stretching and 6) learning and adapting. These dynamic service innovation capabilities are aligned with firm strategy, market dynamics and firm history.

By signaling user needs and technological options, den Hertog et al. refer to the capability to see dominant trends, unmet needs and promising technological options for new service configurations. Understanding (actual and potential) users and their needs and the latest technological options is a first priority. Once the first ideas for new services and service combinations have been collected, a creative process of reworking them for a service offering

or service concept starts. According to den Hertog et al., conceptualising, designing, and testing (piloting) service innovations is a specific capability that is less tangible and codified and is often an ongoing process between service provider (or a group of service providers) and client. Den Hertog et al. suggest that the actual conceptualisation and design of a service innovation may involve, for example, detailing and visualising the service offering, deciding on how the new service offer relates to the firm strategy, the target audience, the intensity and forms of customer interaction, the organisation of the delivery system, partners needed to bring about the service, the pricing and revenue model to be applied. Also support from senior management should be organised. As there are hardly ever ways in which new services can be prototyped in a laboratory-like setting, new concepts and related business processes are simply tried out in practice in the form of piloting, prototypes and experiments. An organisation should have trusted and well known customers that can operate as co-innovators. Den Hertog et al. point out that this requires a capability within the organisation to think outside the box, to question current service practices and processes, and to be prepared to test prototypes and run service experiments. This preparedness, in turn, requires that ideas and suggestions for new services and service processes can pop up in diverse settings and parts of the organisation, including in relation to customers and suppliers. The capability to nurture corporate entrepreneurship and create an open service innovation culture that values experimentation, prototyping and thinking outside the box is expected to be essential when managing service innovation in a sustained way.

The third dynamic service innovation capability according to den Hertog et al. is the (un)bundling capability. This is needed because one of the key characteristics of service innovations is that they are often new configurations of existing elements supplied in a novel way. Den Hertog et al. state that it means that in practice, many new services are newly bundled, enriched and blended or the opposite of newly unbundled – stripped down to the bare essential service offerings. Here, den Hertog et al. recognise two basic varieties: first, making smart service combinations with a "one stop shop" character, yet including the possibility to customize the service offer, and second, unbundling services and stripping them down to their bare essentials, creating highly specialised services that are very similar and can therefore be standardised to a certain extent.

Co-producing and orchestrating is the capability to engage in and manage the networks in developing service innovation. Many service propositions are combinations of service elements (and sometimes physical products, as well) of different services providers that together fulfil a service need. This implies that the core service provider has to co-design and co-produce a service innovation with other suppliers and manage the partnership and often customers. Den Hertog et al. suggest that this dynamic service innovation capability is actually the capability to organise and act in open service innovation systems. That would mean the capability to co-produce and co-design with customers and other trusted partners and stakeholders. This capability includes an understanding of the value of networking.

The scaling and stretching capability is important for large-scale (semi-)standardissed service operations. It is linked to a key process characteristic of service innovation, namely the observation that service innovations are relatively difficult to introduce on a large scale in a uniform way due to their intangible character, a human component which is difficult to standardise, and also the cultural dependency of the innovation. At the same time, customers do expect to receive service in a similar fashion at the various outlets and through various channels of the service provider. Scaling is mostly about diffusion. Launching an innovative service successfully in an experimental setting in one location is different to introducing such an innovation organisation-wide. To be able to diffuse a service product innovation in a uniform way means that it should be described (or codified) and the essential elements transplanted to other parts of the organisation (den Hertog et al. 2010). The last capability, learning and adapting, means a deliberate reflection and learning of the way service innovation is managed.

Public sector staff and management do not usually have training for innovation or experience in R&D activities in companies, which could help to generate and implement innovation in the public sector. Public sector organisations also lack infrastructure, know-how and actors, which could act as a basis for innovation (Valovirta & Hyvönen 2009).

Organisations that are most successful in providing new services prevent their innovation process from being ad hoc (de Brentani 2001). De Brentani has investigated innovative and incremental new business services and their investigation includes several success factors for service innovation: service-related factors (frontline expertise, service complexity/cost, service quality evidence, improved service experience, and standardised service), market-related factors (client need/fit, market competitiveness, market potential), organisation-related factors (strategy and resource fit, and innovation culture and management), and new service development factors (formal evaluation and design, and formal testing and launch).

Dörner et al. (2011) list five factors that have an effect on the success of service innovation: protection against imitation, there should be a clear organisational anchoring, the innovation process should proceed systematically, the customer must have much say, and bad ideas should be consistently eliminated. Dörner et al. (2011) claim that the managers of service organisations lack faith in generating sustainable or difficult-to-imitate competitive advantages with service innovation. Enterprises can compensate for such lack of protection against imitation by making it as difficult as possible for the competition to catch up. The more one's own innovative services succeed in the market, the more formidable the hurdle for competitors. Dörner et al. suggest that as a way to protect their services, organisations should deliver the whole customer experience. Dörner et al. also claim that the responsibilities for developing new services are frequently unclear. The organisational anchoring can only be regulated if there is a systematic innovation process for services. Dörner et al. point out that often the main sources of new ideas are not the customers or employees, but competitors. Competitive advantages cannot be achieved in such a situation. The needs of customers are

decisive, but Dörner et al. claim that everyone seems to "know" what the customers want but nobody has actually asked them. Service innovators all too often allow themselves to be led by supposed general knowledge, and instead of that, he suggests the use of independent market research. The higher the level of customer information used in the service innovation process, the higher the possibility of success of the service innovation (Junarsin 2010). Junarsin also states that successful firms in service innovation utilise customers in more stages of the process.

According to Dörner et al., many managers assess proposals only once, in the early stage of development, throughout the entire innovation process. As a consequence, the range of services quickly becomes confusing and the costs rise rapidly. Management must be clear about its strategic goals and about the most important needs of the customer in order to select the most promising ideas. Also many of the newly created services do not yield the expected results because the customer is not prepared to pay enough for them. The problem is the ability to charge for newly created services.

SERVICE INNOVATION
CAPABILITIES
(Den Hertog)

1. Signalling user needs and technological options

2 Conceptualising

3. (Un)-bundling capability

4. Co-producing and orchestrating

5. Scaling and stretching

6. Learning and adapting

SUCCESSFUL SERVICE INNOVATION

SUCCESS FACTORS OF SERVICE INNOVATION
(de Brentani 2001 and Dörner 2011)

Service-related factors: added value/cost, frontline expertise, service complexity/cost, service quality evidence, improved service experience, and standardised service

Market-related factors: customer need/fit, market competitiveness, market potential, protection against imitation

Organisation-related factors: resource fit, innovation strategy, culture and management, clear organisational anchoring

New service development factors: formality and content of an innovation process, customer participation, elimination of bad ideas, use of champions

Figure 7. Service innovation success factors and innovation capabilities according to den Hertog et al., de Brentani and Dörner

Figure 7 is a summary of the service innovation success factors (de Brentani 2001, Dörner et al. 2011) and service innovation capabilities (den Hertog et al. 2010) needed for success. The left-hand side of the figure displays the six dynamic service innovation capabilities, presented by den Hertog et al. that help organisations to successfully offer and market a new service innovation. The right-hand side shows the four groups of success factors for service innovation presented by de Brentani, including the factors listed by Dörner et al. The factor of Dörner et al. 'protection against imitation' is included in the box of market-related factors, 'clear organisational anchoring' is included in organisation-related factors, 'systematically proceeding innovation process', 'elimination of bad ideas' and 'customer's participation' are included in new service development factor.

Strategies used to enhance service innovation management

Levitt (2002) states that because creativity and innovation tend to disturb the organisation's order, the organisations need some discipline in innovation management. It has also been empirically found that more successful and innovative firms are inclined to have a greater commitment to some form of innovation strategic plan (Junarsin 2010). Junarsin maintains that strategies that can be used to enhance service innovation management are formalising the process of innovation, creating a new service charter, increasing customer inputs to the overall process, emphasising internal idea generation and concept development, enhancing quasi-search quality, and hiring and maintaining innovation champions (Figure 8). The relationship between product and service innovativeness and innovation management practices reveals, however, that formal practices tend to be biased toward the development of radical innovations. This result may be due to the belief that innovation is mainly about radical products. Junarsin suggests that service companies should also recognise the pursuit of incremental innovations formally in their innovation strategies and define formal practices for implementing these types of innovations.
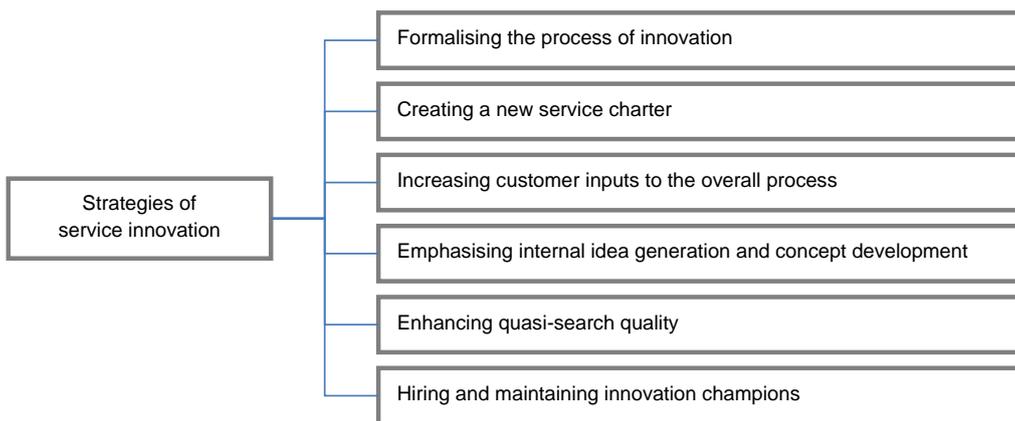
Figure 8. The strategies of service innovation according to Junarsin (2010)

Junarsin (2010) cites Crawford (1980) who defined the service innovation charter as "the strategy statement which flows from a situation analysis", consisting of the strategic arena or definition of parameters of innovation activity, the goals of new service activity, and the programme to achieve the goals. One of the pivotal factors in the services innovation according to the literature is the employment of champions (Shane 1994, de Jong & Vermeulen 2003, Junarsin 2010). A product champion is someone in an informal role that pushes a new product or service beyond roadblocks within the organization helping organisations overcome the sources of inertia to innovation in organisational routines (Shane 1994). Junarsin defines a "service champion" as someone charged with nurturing and protecting a new service from idea generation to commercialisation. He presents that successful firms allow champions the opportunity to stay and manage a service offering into the launch phase of the process more frequently than less successful ones. Shane presents different champion roles identiefied by Howell and Higgins (1990): new product champions, user champions, technical champions, business innovators, project champions, gatekeepers, organisational change agents, idea champions, senior management sponsors, and executive champions. In his own research, Shane studied four particular organisational champion roles in multinational corporations: 1) a network facilitator (the champion defends the innovators against interference by the organisational hierarchy through the development of cross-functional coalitions between managers in different functional areas of the organisation who support the innovation), 2) a transformational leader (the champion persuades other members of the organisation to provide support for the innovation), 3) an organisational maverick (the champion provides the innovators with autonomy from the rules, procedures and systems of the organisation so that the innovators can establish creative solutions to existing problems) and 4) an organisational buffer (the champion creates a loose monitoring system to insure that the innovators make proper use of organisational resources while allowing the innovators to act creatively). According to this and his earlier study (1993), Shane argues that uncertainty-accepting societies are more innovative because championing roles which overcome organisational inertia to innovation are more likely to be accepted in those societies.

Although the existence of a champion is beneficial for an organisation in managing service innovation, the champion can also create trouble in the organisation (Junarsin 2010). Most of the champions have sheer spirit to change and break the rules, considering them sufficiently adept to lead the innovation process. To the appropriate extent, the champion and his or her courage can lead the organisation to be ahead of other companies in innovating. However, if the champion by his or her actions ruins the relationships and mechanisms of producing current products and services, the champion may even threaten the survival of the organisation. There are also other unintended outcomes of innovation than a champion's exaggeratedly active behaviour. Laforet (2011) has found different unintended outcomes of innovation that are essential in studies of organisational innovation. The negative consequences include, according to him, unprofitable innovations, operating beyond a firm's core competency, unnecessary risks, allowing followers to copy an idea, promoting negative

employee attitudes leading to job stress, dissatisfaction, increased turnover, and costs. It is important that managers take advantage of potential synergies between the innovation and the organisation's existing skills, capabilities, and resources. Thus, an organisation needs to be ambidextrous, advancing whilst maintaining current success (Junarsin 2010).

Miles (2008) presents three ways in which service industries vary with high significance for their innovative activities: fundamental processes, knowledge intensity and market relations. By fundamental processes, Miles means the types of transformations the service has an effect on, which objects determine the types of knowledge brought to bear in the service operations and the new knowledge required for innovation. Knowledge intensity means a reflection of the extent to which a service activity requires highly skilled service operatives who exercise professional or technical capabilities to produce situation-specific results. Market relations mean the extent to which services are serving (and are funded by) consumers, businesses, or the public sector and the extent to which the service is tailored to a specific client or service situation. The professional knowledge of highly skilled workers and the new service approaches they develop may be sources of innovative ideas (Miles 2008). Miles states, however, that such highly skilled workers and experts may resist management efforts to rationalise or reorganise their work because it may threaten their expert status. This may be true also in educational organisations.

Junarsin (2010) has also presented a table that lists the characteristics of service and their effect on innovation management (Table 2). The left column presents the typical characteristics of services and the right column their effects on innovation management. According to Junarsin, the intangibility of services has an effect on the design of production and delivery mechanisms of service innovation, on the formality of the innovation process and on conducting an effective market research. Because of its intangibility, the perception of service innovation quality is much more subjective than that of physical products. Moreover, in the decision-making process, customers frequently judge the service quality based on the physical evidence configured by the service provider. Thus, service innovation has to strive to make the intangible services more tangible and both intangible and intangible aspects of the service concept must be identified and managed properly. Junarsin also states that an appropriate degree of customer contact should be decided when managing service innovation. Customers are usually needed to test a service innovation, but a new innovation may also change the nature of customer contact and thus change also the skills of the staff.

In managing service innovation, the service provider has to recognise and understand which level of customer contact they must deliver (second characteristic). Different customers consuming the same services may have different preferences for the level of contact. Both employees and customers may make the services inhomogeneous (the third characteristic). Enhancing the perceived quality of service innovation may require training the front-office staff to balance between the minimum accepted level of services and the level of contact tailored to specific customers.

Table 2. The effects of service characteristics on innovation management according to Junarsin (2010)

Characteristics	Implications for innovation management
Intangibility	The design of the production and delivery mechanisms must be carefully planned at the same time as the service product
	Tangible and intangible aspects of the service concept must be both identified and managed appropriately
	Intangible products can easily lead to informal processes
	The intangible nature of services can make it more difficult to conduct effective market research than for physical products
Customer contact	Deciding on the appropriate degree of customer contact is essential
	New service products may change the nature of customer contacts, and therefore, staff retraining may be necessary
	Innovations in the way the customer contact is managed can give opportunities to improve the perceived quality of the service product
	New service prototypes can only be tested with customers
Inhomogeneity	Service innovation must take account of the dependency of the service offering on both the consumer and the main persons in the delivery chain
	Different customer segments can require changes to both the service product and the service augmentation
Perishability	The production and delivery mechanisms must ensure easy access for consumers
	Capacity issues need to be considered at the design stage
	To achieve high customer satisfaction, the quality of the augmented service must be high
Multifaceted nature	Expectations and perceptions need to be managed
	Managing service quality requires good cross-functional interaction between the front- and back-office staff

Perishability, (the fourth characteristic), must be considered when designing a production and delivery mechanism in order to ensure easy access for consumers. Attention should be paid to the location and timing of delivering services. The multifaceted nature of service, (the fifth characteristic), has an effect on designing a new service innovation. Services are complicated on the account of service characteristics such as intangibility, differing levels of customer contact, inhomogeneity, and perishability and assesments made by customers are not as obvious as in physical product. Services also hinge on a complex network of relationships between different stakeholders, such as customers, providers, third parties, employees, and technology. Junarsin states that in managing the services innovation, each element should be analysed in relation to other elements and is finally integrated to determine a new package of services to be delivered.

2.1.4 Innovation in an educational organisation

The nature of innovation in education has been addressed in many aspects especially within the literature on general higher education and primary and secondary education. Different studies have examined the general concept of innovation, the process of developing and implementing innovative methods and the curriculum, faculty reactions to innovative initiatives, student responses to innovation, and the many factors that may moderate or facilitate innovation (e.g. Cheng 2008, Davis et al. 2010, DeFillippi & Levesque 2011). There are small-scale and large-scale innovations and definitions of innovations in education. Wong and Cheung (2009) cite Duke (2004) who defines educational change (large-scale) as a change intended to alter the goals of education and/or to improve what students are expected to learn, how students are instructed and assessed, and how educational functions are organised, regulated, governed and financed. Perillo (2007) describes educational innovation as a complex process in which non-linear change processes, collegiality, cooperation, participation, empowerment and situational specificities are relevant factors. According to Mourad (2010) in general, innovation in higher educational institutions comprise the new application methods and tools that enhance the education system.

Miles defined innovation in education already in 1964 as a deliberate (i.e. planful), novel, specific change which is thought to be more efficacious in accomplishing the goals (e.g. textbooks, curriculum) or other aspects of the system (e.g. team teaching as a shift in role definition; flexible seating as a new use of space). Hargreaves (2011), in turn, defines innovation (small-scale) in teaching and learning simply as doing things differently in order to do them better. According to Ng (2011), learning innovations involve new learning activities (e.g. inquiry, group work), curriculum resources, and technology tools. Tella and Tirri (1999) have defined educational innovation as a) a change in the curriculum, b) knowledge, learning, or a change in the conception of humanity, and c) new information and communication technology application in education.

Albert-Miller (2001) identified six dimensions of education innovation especially in marketing education in universities: innovation within the traditional classroom, innovations used outside of the traditional classroom but within the university environment, innovative activities performed off campus or with off-campus organisations, innovative new course development, innovative use of technology and innovative development of research education.

Davies (1997) divides innovation in adult education into six broad categories: involving student-centered learning, flexible curricula, assessment methodologies, learning processes, resource allocations and accessibility and openness. Davies emphasises the importance of flexibility available for adult students. By that he means how innovative systems meet the specific needs of individuals. Davies claims that the flexibility needs of students are often met without any innovation in institutes' management, finance, personnel, quality and curricular systems and practices. He states further that the flexibility available to students should allow

the students to choose the level and pace of study and to negotiate significant parts of the curriculum individually. By this Davies does not mean "modular" or "unit-based" courses, which allow a choice of module, but instead that students have a choice in the content or learning objectives. Also Schellekens et al. (2010) state that innovation in education can be influenced by increasing the operational flexibility of educational programmes. He defines operational flexibility in four constructs which characterise educational programmes: environment, curriculum, activities, and facilities. According to Schellekens et al. (2010), operational flexibility is a prerequisite for innovations especially in higher education because of the operational structure which restricts their flexibility.

Clair (2008) has studied innovation especially in higher education in the USA. He points out that in contrast to business, in higher education the various markets are more readily identifiable, and while technology is a significant factor in the delivery of modern education, it may not be fundamental to the nature of education. Clair describes innovation in higher education with several characteristics: innovation is incremental, improvements in products and quality are cumulative, products are mostly undifferentiated and standard, production processes are efficient, capital intensive and rigid, the cost of change is high, research and development efforts focus on incremental product technologies with an emphasis on process technology, plants are large-scale and highly specific to particular products, competitors are few, the market is a classic oligopoly with stable market shares, price is the basis of competition and organisational control is based upon structure, rules and goals.

Hokkanen (2001) in his doctoral thesis of innovation in Finnish polytechnics looked for factors associated with an innovative learning community. He describes this type of community with the following features: the entity has a clear vision and a well-controlled management system, the core technology and the strategy and action focus on core competences, the community is a network-based, the culture is entrepreneurial-friendly, the management culture and the atmosphere are characterised by openness, enthusiasm and appreciation, an energetic and innovative culture is realised throughout the organisation, the organisation is low and smooth, the community is well-known and has a good image, the organisation has experience in developing successful innovations and working together with the client, and activity is flexible, fast and timely.

According to Clair's (2008) study on higher education, the management considers innovation very important. However, Clair found no innovations in learning or teaching processes or in the curriculum, but in other processes, instead. Ideas for innovation were generated within the faculties, not with students or outside the faculty. In addition, the innovation generation was not found to be systematic. This was seen in Clair's study as positive because a systematic approach would be uninspiring for most innovative people. Innovations were coincidental. The organisation wanted to build an innovative culture but not systematic innovation processes. The greatest obstacles for innovation were management, culture and a lack of resources. The motivation for innovation came almost entirely from the faculty members

themselves because there was a dearth of outside incentive. An intolerance of risk was identified as an obstacle. Subjects conveyed that failure was not easily digested in their organisations, and the institutional memory of failure was long. The longevity of the faculty was also identified as an obstacle for innovation because the longer one is in an organisation the more difficult it may be to see that the organisation is evolving.

The use of information technology is often associated with educational innovation. ICT offers new models for teaching and learning. It has enabled studies independent of location and time, for example. What is essential is how ICT will increase and facilitate learning and learning opportunities. The use of ICT in teaching and learning requires, however, the willingness and capacity of both teachers and students. Nevertheless, change is slow (Virkus and Woods 2004).

Perillo (2007) states that factors impacting innovation success in schools include financing, time availability, initial training, leadership, participation, the degree of support, variations in cultural attributes of innovation, and social and organisational learning in schools. Educational changes and innovations with the agreement and support of school heads and teachers tend to have a greater chance of succeeding (Cheung and Wong 2011). School heads' agreement and actions serve to legitimate whether a change is to be taken seriously and to support teachers both psychologically and with resources.

There are also many studies on educational innovations which relate failures (e.g. Weedall 2004, Winkel 2010, Jennings 2010) in generating or most commonly adopting and implementing innovations. According to Weedall (2004), almost all reported examples of educational innovation at the institutional level show a tendency for failure rather than success. Classrooms go largely unchanged and, in spite of progress motion, "things predictably return to what they were at a prior time" (Perillo 2007). One of the main reasons for the failure of educational innovation is the lack of teacher participation in the dissemination and implementation of educational changes, which fail to develop both the capacity and the will for change at the classroom level. According to Inan and Lowther (2010), research suggests that disappointing innovations are frequently associated with teachers lacking the necessary skills to integrate technology into the classroom. Also Hargreaves (2011) points out that some of the best innovations were fated to a short life. He states that loose coupling explains why most innovations in schools occur in the structures that surround teaching and learning, and only weakly and idiosyncratically in the actual processes of teaching and learning. Loose coupling also explains why successful instructional practices that grow out of research or exemplary practice take root in no more than a small proportion of classrooms and schools. According to Pratt (2005), many educational institutes have adopted innovative learning technologies and practices without critical examination of their merit to those institutions, leading in some cases to wasted resources, unfilled expectations, programme and even organisational failure.

2.1.5 Summary

In educational organisations, innovations have characteristics of a service innovation. The special nature of service innovation makes it difficult to describe exactly what the characteristics of these innovations are and especially how they are generated in practice. According to the literature, a service innovation is, however, defined as a new or significantly improved service experience, service product or process, or a new combination of existing ideas and services that add value to the service producer(s) and/or customer. The literature has also defined the dimensions of novelty of a service innovation: a new service concept, new customer interaction, new value system/business partners, a new revenue model, or a new organisational or technological service delivery system. In education, large-scale innovations aim to change the education system and/or its goals and methods, whereas small-scale innovations are smaller improvements in operations. In practice, innovations in education have been divided into such categories as student-centred learning, flexible curricula, assessment methodologies, learning processes, resource allocation and accessibility and openness. Most of the research concerning innovation in the education sector has, however, focused on formal higher education. Innovations may, in practice may be different in the non-formal adult education sector. The literature has identified many different factors that may have an effect on the success of a service innovation: service-related factors (e.g. added value/cost, frontline expertise and service quality evidence), market-related factors (e.g. customer need/fit, market potential, protection against imitation), organisation-related factors (innovation and resource fit, innovation strategy, culture and management), and new service development factors (e.g. formality and content of the innovation process, customer participation in the development process and involvement of champions). There are, however, no empirical results on what these success factors are in non-formal education sectors. The diversity of service activities means that innovation processes may take various forms, and different phases overlap with each other and cannot be clearly identified. An idea generation phase, a project evolution and design phase, and a piloting and implementation phase have been distinguished in the service innovation processes in the same way as in the product innovation process. Nevertheless, the order of stages may vary and the focus seems to be on the starting and piloting phases. The literature also points out that the durations and stresses of different stages of the innovation process vary in service and product innovations. In service innovation , the idea may be taken quickly into practice where its development continues or a significant renewal is noticed only afterwards, and the systematic development starts after that. The roles of customers and partners is emphasised at every stage of the service innovation process.

2.2 Organisational culture and innovation

This section discusses the relationship of organisational culture to innovation. Although it is widely known that organisational culture has an influence on innovation, it has not been

researched what kind of a culture promotes innovation at non-formal, market-driven adult education organisation, such as in Finnish AECs. First, a brief overview of the impact of culture on the performance of an organisation and different typologies of organisational culture are provided. Then, values identified in innovative organisations are discussed. At the end and in more detail, the Competing Values Framework (CVF) is described as a lens through which to view cultures in adult education organisations in this study. This framework includes six characteristics of the organisation – dominant characteristics and organisational glue (here, values), organisational leadership, management of employees, strategic emphases and criteria of success. The innovation culture is discussed here using these characteristics.

2.2.1 The impact of organisational culture on the organisations' performance

Most organiational scholars and observers recognise that organisational culture has a powerful effect on the performance and long-term effectiveness of organisations (e.g. Schein 1996). Cameron and Quinn (1999) propose that what differentiates successful firms from others is in practice their organisational culture. As the culture reflects the values and norms of the organisation, it plays a role in determining the areas in which the organisation is able to learn easily, and innovate, for example, and those in which it is likely to resist changing its perspectives and policies (Caccia-Bava et al. 2006).

Strong and weak cultures
Cultures are divided into strong and weak ones. A strong culture exists when there is both strength and consensus in the culture. A strong culture provides shared values that ensure that everyone in the organisation is on the same track. Truly strong cultures work at the implicit level and exert a greater degree of control over people's behaviour and beliefs. The value of strong cultures is that, by virtue of deeply-rooted assumptions and beliefs, the organisation is able to facilitate behaviours in accordance with organisational principles. An organisation that can create a strong culture has employees who believe in its products, its customers, and its processes (Ahmed 1998). Firms with strong cultures can still demonstrate a risk-taking attitude and a high tolerance for conflict.

However, as well as being a strength, a strong culture can in some circumstances be a hindrance. Organisations today need to possess certain values and assumptions also about accepting change. These values must be driven by the strategic direction in which the organisation is moving. Without them, a strong culture can be a barrier to recognising the need for change and being able to reconstitute oneself even if the need is recognised (Aaltio 2008). Ahmed cites Denison (1990) who found evidence suggesting that incoherent and weak cultures are sometimes associated with greater organisational effectiveness in the future, and that some strong cultures eventually lead to a decline in organisational performance. Weak cultures do not informally put great pressure on members of the organisation to behave in certain ways, but simple offer a guideline for their behaviour, instead. On the other hand, Ahmed states that also cultures with a strong drive for innovation and change can lead to

problems when market circumstances and customer requirements demand predictability and conforming to specifications (Maslowski 2006).

Subcultures

One question in determining and examining the organisational culture is the unity and fragmentation of it. Schein (1992, 2010) asserted that the strength of culture in an organisation is dependent on the homogeneity and stability of group membership and the length and intensity of shared experiences of the group. Values and norms in an organisation vary along two dimensions: intensity, which means the amount of approval/disapproval attached to an expectation, and crystallisation, which means prevalence with which the norm is shared (Ahmed 1998). For instance, when analysing an organisation's culture, it may be that certain values are held widely but with no intensity, e.g. everyone understands what top management wants, but there is no strong approval/disapproval. By way of contrast, it may be that a given norm such as innovation is positively valued in one group (e.g. management, marketing and R&D) and negatively valued by another (e.g. manufacturing or teaching). There is intensity but no crystallisation. Martin's framework (1992) points out the cultural diversity and the three perspectives of organisational culture: integration, differentiation and fragmentation. Sub-cultures are distinct work and social environments within an organisation. They are a natural by-product of the tendency of an organisation toward differentiation by level and function. Cooke and Rousseau (1988) state that an organisation can show a high degree of internal differentiation both horizontally and vertically, and this differentiation is related to the thinking and behavioural styles of members of different levels and in different functional areas. Cooke and Rousseau have found that these perspectives relate to the hierarchical positions of organisational members. Management personnel (particularly those at senior levels) commonly have views that are consistent with integration; store managers tend to lean towards differentiation and shop floor staff frequently hold views which can be approximated to fragmentation. Cooke and Rousseau state further that by promoting sub-cultural differences, organisational differentiation also creates the opportunity for a counter culture to emerge. Counter cultures are ways of thinking and believing that are in direct conflict with subcultures. Counter cultures arise due to differentiation and insularity. Insularity can be produced when a unit is protected from the pressures of the larger organisation by a powerful unit leader, by geographic distance or by some other boundary-creating feature.

The content of the culture

The content of the culture is the extent to which norms and values differ across settings and the way in which members enact their environment. There are innumerable ways to describe the content of a culture. One frequently used way is to characterise the content by means of dimensions or typologies. Several researchers have attempted to classify and develop integrative frameworks of organisational culture. The current literature has its roots in the early 1980s and Deal and Kennedy's (1983) work, which focuses on the measurement of

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organisations based on feedback and risk, where quick feedback means an instant response and risk represents the degree of uncertainty in the organisation's activities. Deal and Kennedy used several parameters to classify four types of cultures: tough-guy macho culture, work hard/play hard culture, bet your organisational culture and process culture.

Schein's (1992, 2010) famous structural model of culture has three levels: 1) the uppermost level of artifacts and creation, 2) the next level of values that are conscious, shared group beliefs and 3) the deepest level of basic assumptions that are invisible, often unconscious, and taken for granted. Schein explains that artifacts are the more solid or physical representation of culture, including the way employees dress, office layout, common language, jargon, technology used, and rituals and ceremonies. Artifacts are easy to detect and recognise, but their interpretation remains difficult, subjective, and ambiguous. Artifacts comprise all the phenomena that one sees, hears, and feels when one encounters a new group with an unfamiliar culture. In order to understand the meaning of these artifacts, Schein proposes that the second level of culture – i.e. espoused values – needs to be investigated. Espoused values are non-discussable assumptions supported by articulated sets of beliefs, norms, and operational rules of behaviour shared by the employees of an organisation. They are guidelines for behaviours and actions reflecting the organisation's values, principles, ethics, and visions. Schein further stresses that values represent preferences for alternative outcomes as well as the means of achieving those outcomes. The deepest level, basic assumptions are issues that have been taken for granted over the years and shared by the whole group. These assumptions are not debated and may be resistant to change (Schein 1992). They often result from the history of an organisation where founders and leaders used them to succeed.

Also Hofstede (e.g. 1980, 1991, 2010) has been influential in studies of culture. Drawing on a large sample of 116 000 employees of IBM in 72 countries, Hofstede identified four dimensions that differentiate between national cultures. These original dimensions are power distance, uncertainty avoidance, masculinity/femininity and individualism/collectivism and are often used also to describe organisational cultures. According to Hofstede, organisational cultures consist mainly of the organisation's practices (Minkov & Hofstede 2011).

In Hofstede's framework, power distance centers on the extent to which organisation members feel comfortable in interactions across hierarchical levels (Cakar and Erturk 2010). High deference to power suggests an unequal distribution of power (high power distance), and employees feel that it is the manager's job to exercise power and to make decisions. Low deference to power suggests an equal distribution (low power distance) and employees feel that they should be involved with the manager in decision-making. People experience intense communications when deference to power is low.

Individualism/collectivism tracks the extent to which people prefer to be treated as unique individuals rather than as part of a group. Individualism emphasises independence, whereas collectivism emphasises interdependence. Members in individualist organisations believe that

personal value is more important than organisational goals, while members in collectivist organisations insist on cooperation realising organisational value.

Uncertainty avoidance concerns the degree to which organisation members want to avoid ambiguity and uncertainty in favour of clear goals and operating guidelines. Hofstede (2010) strongly emphasises the point that uncertainty avoidance is not the same as risk avoidance. Cultures high in uncertainty avoidance reflect that people feel uncomfortable or insecure with risks, chaos, and unstructured situations. People in a strong uncertainty avoidance organisation are more likely to obey the organisation's rules and wish to have a long term commitment to the organisation in order to protect their positions and contributions. In contrast, cultures with weak uncertainty avoidance reflect that people have more curiosity to discover new things and they are less anxious about the unknown and the future, and more willing to be open-minded. People in a low uncertainty avoidance organisation are more likely to tolerate ambiguity and job mobility, and to have fewer organisation rituals and more flexibility. Masculinity/feminity concentrates on the degree to which people feel that they should be results focused and intensive to emotions versus feeling that they should be more nurturing, and more sensitive to emotions. Cakar and Erturk (2010) label this dimension as assertiveness focus.

Subsequently, Hofstede et al. has added the fifth and sixth dimensions, long-term versus short-term orientation and indulgence versus self-restraint (2010), to cover aspects of values not discussed in the original framework. The focus of long-term versus short-term orientation is on groups' efforts. It refers to the extent to which a culture programmes its members to accept delayed satisfaction of their material, social and emotional needs. Long-term orientation is future-focused and has long-term goals, whereas short-term orientations focus on respect for tradition and are oriented toward the past and the present. Indulgence versus restraint refers to the extent to which a society allows relatively free gratification of basic and natural human drives related to enjoying life and having fun.

2.2.2 Competing Values Framework

Many cultural studies have used Cameron and Quinn's model (Competing Values Framework, CVF) to study performance and also innovation in organisations (e.g. Naranjo-Valencia et al. 2011, Prajogo and McDermott 2011, Quinn & Rohrbaugh 1981, 1983, Cameron and Quinn 1999). It provides a validated and focused method that is consistent with Schein's advice to analyse the central values of the organisation (Kaarst-Brown 2004). This model is also adopted in this study.

CVF looks at organisations in terms of their general orientation towards either stability or change. This is then combined with the focus of the organisation on either internal or external issues. Thus the model defines four cultures using two dimensions: 1) flexibility and discretion versus stability and control, and 2) external focus versus internal focus and integration.

The first dimension of organisational effectiveness distinguishes criteria that stress flexibility, discretion, and dynamism from criteria that emphasise stability, order, and control. This means that some organisations are effective when they are changing, adaptable, and organic, while others are effective when they are stable, predictable, and mechanistic. The second dimension differentiates between criteria that emphasise an internal orientation, integration, and unity from criteria that highlight an external orientation, differentiation, and rivalry. For example, some organisations are effective when they are unified and congenial while others are perceived as effective when their culture emphasises competition with others.

Using these dimensions and six characteristics of the organisation – dominant characteristics, organisational leadership, management of employees, organisational glue, strategic emphases and criteria of success – four types of organisational culture were suggested: adhocracy culture, clan culture, market culture and hierarchy culture (Figure 9).

FLEXIBILITY AND DISCRETION

CLAN
Flexibility, concern for people, sensitivity to customers, management of environment through teamwork, participation and consensus, friendly and supportive work environment

ADHOCRACY
External positioning rather that seeking stability and control, high degree of flexibility and individuality where creativity and risk taking are key values, dynamic, creative and entrepreneurial work environments

INTERNAL FOCUS AND INTEGRATION

EXTERNAL FOCUS AND DIFFERENTIATION

HIERARCHY
Need for stability and control, management of environment through consistency, cooperation and conformity, emphasis placed on predictability and efficiency, formalized and structured work environments

MARKET
Concern for stability and control but focused more on external positioning than internal issue, hard-driving and competitive work environment

STABILITY AND CONTROL

Figure 9. The culture types according to the Competing Values Framework (Quinn 1988)

According to CVF, adhocracy culture emphasises flexibility and change and is externally oriented. It usual occurs in companies operating in dynamic contexts and in those trying to be the leaders in their markets. The key values that adhocracy culture emphasises are creativity, entrepreneurship and risk taking. The leaders are innovators. The glue that holds the organisation together is commitment to creativity and innovation. The long-term emphasis is

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on growth and expanded outreach. Success means launching new and unique products and services. The culture type encourages individual initiative and freedom. Clan culture also emphasises flexibility, but its focus is on the internal organisation. Characteristics of a clan-type organisation are concern for people and teamwork, employee involvement and corporate commitment to employees. An organisation with a clan culture is a friendly place where people share a great deal of themselves – much like an extended family. The leaders are mentors. The organisation is held together by loyalty or tradition and commitment is high. The organisation emphasises the long-term benefit of developing people and attaches importance to cohesion and morale. Success means being sensitive to customers and taking care of people. The culture encourages teamwork, participation and consensus. Service organisations often report high scores on the clan quadrant (Obenchain & Johnson 2004).

Market culture is externally focused, but it is control-oriented. The core values of firms with this culture are productivity and competitiveness. An organisation with a market culture is a results-oriented one whose major concern is getting the job done. The leaders demand excellence. The glue that holds the organisation together is an emphasis on success in accomplishing its mission. The long-term focus is on the achievement of measurable goals and targets. Success is measured as a better market share and new markets. The culture encourages energetic work toward achieving organisational goals. Hierarchy culture is also control-oriented, but focuses additionally on the internal organisation. Efficiency, coordination and close adherence to rules and regulations are its main characteristics (Naranjo-Valencia 2010). An organisation with a hierarchy culture is very formalised and structured. Procedures and rules govern what people do. The leaders are coordinators and organisers who are efficiency-minded, and the aim is a smoothly running organisation. The long-term concern is stability and performance with efficient and smooth operations. Success means being efficient and dependable. The culture encourages stability and predictability.

The competing values model does not suggest that these four culture dimensions cannot mutually exist in an organisation (Quinn 1988, Caccia-Bava et al. 2006). Businesses are seldom characterised by one pure cultural type, i.e. where one of the dimensions greatly predominates (Yeung et al. 1991). Researchers have found that organisations tend to have some strength in all of the four culture types. Some organisations are relatively strong in all four cultures, some in one to three cultures or low in all four cultures. Culture strength has been conceptualised as the degree of intensity of feeling that organisation members have about all culture dimensions, as mentioned above. Some organisations are believed to have strong comprehensive cultures, with previous studies estimating that between 6 and 25 percent of organisations have cultures rating highly in all four culture dimensions (Caccia-Bava et al. 2006).

Culture types in educational organisations
Fullan and Hargreaves (1996) define school cultures as the guiding beliefs and expectations evident in the way a school operates and the product of beliefs, values and characteristics of

teachers and students. Maslowski (2006) cites Firestone and Wilson (1985) who suggest that effective schools are strong in both bureaucratic and cultural linkages. The bureaucratic linkages come as a result of schedules, rules, procedures, hierarchy, authority, superordinate-subordinate relationships, power and the use of rewards and sanctions. The cultural linkages come as a result of communication, persuasion, and the sharing of missions and goals, meanings, assumptions, values and norms.

According to Zhang (2010) a contemporary learning culture involves a number of major components: curriculum guidelines, learning tasks, activities and procedures, learning resources and technologies, assessments of learning, and institutional organisation of schooling. Micro-level properties associated with these component parts of a learning culture are reflected as choices and decisions regarding specific issues, such as what type of knowledge content is taught and how is it organised and sequenced, what learning strategies are applied and activities are conducted, what technologies are used, and how the classroom is spatially organised.There are many researchers who have used CVF to analyse the culture of educational organisations mainly in higher educational institutes (HEI). Cameron and Freeman (1991) have surveyed the effect of culture types comparing 334 HEIs and found that culture type is a significant factor in determining organissational effectiveness. The study of Trivellas and Dargenidou (2009) on higher education in Greece highlights that significant differences in dimensions of organisational effectiveness were present among the four types of cultures of CVF. In addition, each culture type was highest in effectiveness in domains of activity that were consistent with their dominant characteristics: clan culture in morale and concern for human resources, adhocracy in the external environment and academic quality, and market culture in acquiring resources from the external environment. The researchers suggest that it may be possible to predict in what area a higher educational institute will excel based on the type of culture that it possesses.

Ramanchandran et al. (2011) have studied the organisational culture in private and public higher education institutions (HEIs) from the perspective of faculty members. They found first that the cultural setting was more pronounced in public than in private HEIs. In public institutions, the clan culture was found to score the highest mean, followed by hierarchical culture. On the other hand, faculty members in private HEIs tended to rate hierarchical and market cultures as being more prevalent than the adhocracy and clan cultures.

Trivellas and Dargenidou found that in the university context, the culture type was different in faculty and administration. In the faculty, hierarchy and clan cultures were the most espoused archetypes, while administration staff ranked hierarchy as the dominant one. Paparone (2003) studied culture types in different subunits of a military university. He found that the headquarters had a relatively strong hierarchy archetype, a university teaching department had a strong clan archetype, a university research department had a mixed or fragmented culture type but a stronger preference for adhocracy, and a university center for conferences had a relatively strong market-dominant culture archetype.

2.2.3 Organisational culture promoting innovation

Organisational culture is in the literature generally considered as one of the main factors that can stimulate innovative behaviour among members of the organisation (Ahmed 1998, Martins & Terblanche 2003, Dobni 2008, Naranjo-Valencia et al. 2010, Cakar & Erturk 2010, Tushman & O'Reilly 1996). For example, Ahmed (1998) and Naranjo-Valencia et al. (2010) point out that organisational culture is considered to be one of the key elements in both enhancing and inhibiting innovation depending on the values that culture fosters. Organisational culture influences creativity and innovation in a number of ways, including socialisation processes and the value proposition communicated through structures, policies, and day-to-day artifacts and practices and procedures. It affects the extent to which creative solutions are encouraged, supported and implemented and it may lead the employee to accept innovation as a fundamental value of the organisation (Naranjo-Valencia 2010). A culture that supports creativity encourages innovative ways of representing problems and finding solutions and favours innovators as models to be emulated.

There are various studies that try to find the content and type of a culture that best promotes innovation. Some studies have focused on only one or some cultural characteristics or features (Sarros et al. 2011). Some studies use different culture typologies (Dobni 2008, Cameron & Quinn 1999, Hofstede 1980). However, behaviours and the types of culture necessary to produce innovation are not yet clearly known (Martins and Terblanche 2003, Obenchain & Johnson 2004).

Kenny and Reedy (2006) state that an innovative organisational culture is one in which continuous improvement throughout the organisation is a norm. This is achieved through the generation and implementation of ideas. Cakar (2010) has defined innovative culture as a way of thinking and behaving that creates, develops, and establishes values and attitudes within a firm that may require rising, accepting, and supporting new ideas involving an improvement in the functioning and management of the firm. Dobni (2008), in turn, defines innovation culture as a multi-dimensional context which includes the intention to be innovative, the infrastructure to support innovation, operational level behaviours necessary to influence a market and value orientation, and the environment to implement innovation.

For innovative culture to succeed, certain requirements must be met, involving four kinds of attitudes: corporate management is willing to take risks, the participation of all members of the firm is requested, creativity is stimulated and there is shared responsibility. Martins and Terblanche argue that organisational culture is shaped by strategy, structure, support mechanisms and behaviour, and that these factors influence the organisation's ability to stimulate innovation and creativity. Dobni (2008) constructed an empirically-derived scale for measuring innovation culture in an organisation. He suggests that an innovation culture scale may best be represented through a structure that consists of seven factors identified as innovation propensity, organisational constituency, organisational learning, creativity and empowerment, market orientation, value orientation, and the implementation context.

Main characteristics of innovation culture

The possession of positive cultural characteristics provides the organisation with the necessary ingredients to innovate (Cakar & Erturk 2010, Ahmed 1998). Creativity has been mentioned frequently in the literature as a key feature of an innovative culture (e.g. Naranjo-Valencia 2010, Martins & Terblanche 2003). Naranjo-Valencia (2010) defines creativity as the ability to perform work in a novel and appropriate way, or to generate new and valuable ideas. Amabile (2004) states that "no innovation is possible without the creative processes that mark the front end of the process: identifying important problems and opportunities, gathering information, generating new ideas, and exploring the validity of those ideas".

The degree the culture hinders or enhances the process of creativity and innovation depends strongly on the values and norms that are widely embraced by the organisation (Ahmed 1998, Dobni 2008). The basic values, assumptions and beliefs are then reflected in structures, policy, practices, management practices and procedures which directly impact creativity and innovation in the workplace (Martins & Terblanche 2003). Martins and Terblanche (2003) also list values that hinder creativity and innovation, such as rigidity, control, predictability, stability and order, which are mostly associated with hierarchical structures.

Table 3. Values and norms that promote creativity and innovation in organisations according to literature

Values and norms	Writer
Uncertainty and unknown acceptance, risk taking, tolerance for and constructive handling of conflicts, failures and mistakes	Ahmed 1998, Dobni 2008, Hyland & Beckett 2004, Ar & Baki 2011, Jaskyte & Dressler 2005, Cakar 2010, Jaakson 2011, Chaminade & Johanson 2003, Gudmundson et al., 2003, Andripoulos 2001)
Flexibility, freedom, and adaptability	Ahmed 1998, Dobni 2008, Martins & Terblanche 2003, Prajogo & McDermott 2011, Dombrowski et al. 2007
Openness, trust and respect	Ahmed 1998, Hyland & Beckett 2004, Dobni 2008, Andripoulos 2001
Forward looking, future, customer/external and long-term orientation	Ahmed 1998, Quinn 1998, obni 2008, Martins & Terblanche 2003, Gudmundson et al., 2003, Kenny & Reedy 2006
Quick to take advantage of opportunities, and willingness to experiment, support for change	Ahmed 1998, Jaskyte & Dressler 2005

Table 3 presents values that are most frequently positively related to innovation culture in the literature. One of the often mentioned values, uncertainty avoidance or fear of the unknown, refers to the extent to which societal members feel threatened by ambiguity and uncertainty (Hofstede 1980, 1991, Nazari 2011). In organisations where fear of the unknown is prevalent, stability and uniformity are emphasised through adherence to rules (Chaminade & Johanson 2003). Where fear of the unknown assumes a lesser magnitude, there is less rigidity and more

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tolerance. A strong fear of the unknown can impede knowledge sharing and the development and implementation of new ideas (Chaminade & Johanson 2003). Similarly, constructive handling of conflicts and the free expression of opinions is positively related to innovation (Judge et al. 1997, Martins & Terblanche 2003, Leavy 2005, Dobni 2008). Jaakson et al. point out that conflicts are an important source for new solutions and they should not be suppressed, even though they are emotionally difficult. Bringing conflicts upfront assumes trust and trust is also at the core of employee participation.

Risk-taking and experimenting often lie at the heart of organisational innovation. The culture in which too many management controls are applied will inhibit risk taking and consequently innovation. However, it is important that a balance be reached in the degree to which risk taking is allowed (Martins & Terblanche 2003, Nazari 2011). Risk taking is also linked with learning in an organisation, which is influenced by organisational tactics when mistakes are made. Failure tolerance and giving the employee an opportunity to learn from mistakes has been found to be a building block of innovation capability (Jaakson et al. 2011). When organisations tolerate mistakes in the knowledge development process, the barriers to knowledge creation and sharing diminish. According to Nazari et al. (2011), empowered organisational control permits companies to undergo learning processes due to modification or abandonment of ideas or products failing to meet customers' needs and expectations. Fey and Denison (2003) suggest that innovation is most highly associated with the traits of involvement and adaptability. Adaptable organisations are driven by their customers, take risks and learn from their mistakes, and have capability and experience in creating change.

Innovation is concerned with exploring changing and unserved needs of customers and the environment. To succeed in that, especially the values of flexibility as opposed to rigidity, and freedom as opposed to control, are emphasised in the literature to release creativity and ideas in an organisation (Prajogo & McDermott 2011, Martins & Treblanche 2003). In order to allow creativity to flourish, formal rules or procedures must be kept at a minimum level in an organisation. The innovation process should be flexible, as well. Flexibility also depends strongly on the type and structure of the organisation (Ortt & van der Duin 2008). A flat, organic and participative structure with autonomy and cooperative work teams will promote cooperation, freedom to act, quick decision-making and decision-making at lower levels, whereas specialisation, formalisation, rigid departmental separation, centralisation and slow decision-making may inhibit flexibility (e.g. Ahmed 1998, Dobni 2008, Martins & Terblanche 2003). Also job rotation and avoiding formal and rigid job descriptions are examples of flexibility in organisations (Judge et al. 1997).

Freedom is closely linked with flexibility and is seen as a core value stimulating creativity and innovation in many studies (e.g. Peng 2007, Martins & Terblanche 2003). By encouraging freedom, organisations can create conditions that allow ideas and creativity to emerge from the individuals within the organisation or teams (Ahmed 1998, Amabile 1998). An environment of freedom and autonomy is more likely to tap into the intrinsic motivation

of its employees (McLean 2005). According to Martins and Terblanche (2003), freedom implies that personnel are free to achieve their goals in a creative way within guidelines. Freedom gives to the staff a possibility to be independent thinkers who are able to freely promote and try new ideas. Martins and Terblanche (2003) point out that freedom is manifested in autonomy, empowerment and decision-making. Autonomy can be defined as the extent to which organisations allow individuals to work with the greatest degree of freedom possible, controlling their own work and their ideas (Amabile 1998). The degree to which employees have freedom and authority to participate in decision-making and in solving problems determines the level of empowerment, which is positively related to the level of creativity and innovation in an organisation. Martins and Terblanche (2003) also point out that the way mistakes are handled in organisations is linked with the sense of freedom as it determines whether personnel feel free to act innovatively, experiment, try things and discussion "dumb" ideas. McLean (2005) suggests that an organisational culture that supports autonomy in achieving clearly communicated goals, not necessarily autonomy for selecting what goals to go after, will likely be more successful in terms of creativity and innovation than an organisation that does not. Whether – and how – innovation occurs relies also upon whether the organisational system supports and encourages forward thinking change.

Openness within an organisation is supportive of the generation of new ideas and innovation as employees share their knowledge with others. Also informality of knowledge sharing is important when encouraging creativity (Taminiau et al. 2009). If employees fear that their ideas will be credited to others, it is unlikely that new knowledge will flourish in an organisation. The general level of trust within an organisation can be seen as a variable of organisational culture. The level of trust among employees and for the employer, as well as trust and respect for the individual greatly influence the building of relationships, the efficiency and effectiveness of communication and organisational cooperation (Blomqvist 2002, Ellonen et al. 2008, Hardie 2010) and thus increase openness and the amount and ease of sharing ideas and knowledge (Ahmed 1998). Ahmed defines trust as the degree of emotional safety that employees experience in their working relationships. Dovey (2009) states that the courage of people to risk themselves in the interests of their organisation usually stems from the deep trust that they have in the mission of the organisation. Ellonen et al. (2008) have studied the effect of organisational trust (both interpersonal and impersonal) on innovativeness. Their results imply that the impersonal form, in particular, has an important role in determining organisational innovativeness. While trust is critical to the surfacing of ideas within an organisation, it is also important in the realisation practices that convert those ideas into new products, services and/or work practices (Dovey 2009).

Innovation in an organisation depends on the degree to which the organisation is active and forward looking (Ahmed 1998). Ahmed lists the key attributes of future orientation: forgetting the past, willingness not to focus on the short term, drive to improve, positive attitudes towards change, positive attitudes toward the environment, empowerment of people

and emphasis on quality. In addition, external orientation (customer orientation and building external relationships) promotes innovation. Also Quinn (1988) believes that organissations with a long-term rather than a short-term strategic horizon are more likely to innovate.

Hyland and Beckett (2004) state that most innovations occur in divergent thinking environments that thrive on disorder, imagination and ambiguity. Convergent thinking systems, in turn, survive on order, measurement and predictability. Järvenpää and Wernick (2011) maintain that both are needed in the innovation process. Divergence promotes the discovery of new ideas, but it may also lead to difficulties in integrating the ideas. Convergence promotes integration but reduces discovery.

Jaskyte (2002) has studied innovation culture in non-profit human service organisations. His study shows that a strongly shared culture might not be appropriate for fostering innovation, especially considering its content. Jaskyte has discovered that cultural consensus is inversely related to organisational innovativeness, which indicates that the higher the degree of sharing of organisational values, the less innovative the organisation is. He has also studied correlations between innovativeness and organisational values. Willingness to experiment, being innovative, taking risks, being quick to take advantage of opportunities and aggressiveness received the highest ratings. According to Jaskyte's study, innovative organisations are also outcome-oriented and detail-oriented.

Certain values and behaviours are associated with different stages of the innovation process (Cumming 1998, Apilo & Taskinen 2006). Critical to the idea generation phase are the freedom of employees to think and act according to their own ideas rather than follow strict management plans, the encouragement of risk taking, the non-critical acceptance of any failures that result, access to a diverse range of stimuli and ideas, the recognition of success (Cumming 1998) and interaction (Apilo & Taskinen 2006). The development phase of this process is where the new concept is refined to ensure that it meets all the needs of end users, in all respects, and that it functions correctly with other parts of the system into which it will be integrated. This is where the details and specifications are derived for the proposed application. Important issues here are the provision of adequate resources, strong support and direction from the organisation, the use of appropriate external expertise, good co-operation within the team, close contact with the end user (Cumming 1998) and efficiency and know-how (Apilo & Taskinen 2006). Behaviour related to innovation implementation is understood as a range of issues that facilitate the realisation of innovative ideas. Jaakson (2011) states that in this phase, risk-taking behaviour, employee participation, conflict handling, failure tolerance, communication inside and outside the organisation, managers' support and quick decision-making are needed.

The type of the culture and innovation
Studies that have used Hofstede's framework to investigate the relationship between organisational culture and innovation have found that a high level of centralisation and formalisation are associated with lower rates of innovation adoption. Inventiveness is more

likely to occur in low power distance and less bureaucratic surroundings. Also, the avoidance of uncertainty has been found to be negatively related to innovativeness (Ahmed 1998, Dobni 2008, Hyland & Beckett 2004, Ar & Baki 2011, Jaskyte & Dressler 2005). Cakar and Erturk (2010) state that innovative organisations are masculine, where emphasis is on rewards, recognition of performance, training and improvement of the individual. Collectivism seems to foster cooperation and teamwork. Members in individualist organisations seldom share and exchange knowledge with other organisational members, which impedes knowledge creation capability (Wang and Ahmed 2011).

The Competing Values Framework is used as a tool for analysing culture in this study, and its four culture types of adhocracy, market, clan and hierarchy will now be discussed in relation to innovation. The Competing Values Framework (CVF) suggests that each quadrant emphasises different aspects of the organising process – people, adaptation, stability and task accomplishment – issues that are important for every organisation. Different studies have found different results concerning the relationship between these culture types and innovation.

The organisational culture type of CVF which most favours innovation orientation is the adhocracy one, since its most characteristic values are flexibility, creativity and external orientation. Some researchers have found that institutions reporting adhocracy as the dominant culture type reported higher frequencies of both product and process innovation than other culture types (Obenchain & Johnson 2004, Prajogo 2011, McDermott 2011). Prajogo found that clan culture has an influence on process innovations. Naranjo-Valencia et al. (2011) have analysed the organisational culture that fosters or inhibits organisational innovation and imitation strategy using CVF and found that adhocracy cultures foster an innovation orientation while hierarchy culture are associated with imitation. Also higher education institutions reporting adhocracy as the dominant culture type have reported higher frequencies of both product and process innovation than other culture types (Cameron & Quinn 1999).

Obenchain and Johnson (2004) stress that although adhocracy culture is ideal for innovation, it is not the only culture to support innovativeness. They have studied the influence of organisational culture types (using CVF) on product and process innovation in higher educational organisations. They cite Zammuto et al. (1992) who suggest that the balance among the four quadrants within an organisation has a major impact on how its members view an innovation, its intended outcomes and its implementation. They found that institutions having a dominant culture type of adhocracy reported a higher average frequency of both product and process innovations than the remaining culture types. This finding is consistent with CVF, which suggests that the adhocracy culture type has operating values conducive to innovation. Surprisingly, the next highest frequency of organisational innovation was found in institutions reporting no dominant culture type, as all of the types were found to be as strong. Obenhain explains that this suggests that some innovative institutions require a culture emphasising multiple and perhaps competing culture types. These types of

ambidextrous organisations that host multiple cultures with built-in capabilities for efficiency and consistency on one hand and experimentation and improvisation on the other are able to simultaneously pursue both incremental and discontinuous innovation (Tushman & O'Reilly 1996).

Caccia-Bava et al. (2006) have stated that procedural autonomy, such as may be found in adhocracy cultures, coupled with multiple milestones, such as may be found in market cultures, are together believed to provide the ideal structural context in developing innovation capability (Kanter 1996). These culture types have external focus and values that promote change such as risk taking, openness, a shared vision, and high expectations for action. A culture and reward system that supports participation and knowledge sharing should also be important in developing innovation capability. If an organisation is characterised by mistrust and a lack of willingness to share information, knowledge sharing and communication will decrease. Therefore, a strong clan culture would lead to more open communication channels which promote innovation (Caccia-Bava et al. 2006). While testing the value of the Competing Values Framework in a public, not-for-profit university setting, also Berrio (1999) found that to become a more effective and efficient learning organisation, the organisation as a whole also needs to develop a stronger clan culture. The clan culture values would provide a more supportive environment for innovation and risk taking in a traditionally stable, non-risk-taking environment (Karsten et al. 2000).

Hierarchical cultures with their emphasis on stability and control are most likely to result in resistance to change and fewer receptors to the environment (Caccia-Bava et al. 2006). For example, it has been argued that highly mechanistic structures found in organisations with hierarchical values would be more likely to fail in the implementation of advanced technologies because of the organisation's inability to adjust to the new technology (Zammuto & O'Connor 1992). When bureaucracy associated with hierarchical cultures and bureaucratic delays are eliminated, such as in a flatter organisation in which managers work directly with lower levels, communication, creative problem solving, and a rapid turnaround time for innovation are facilitated (Kanter 1996).

Caccia-Bava et al. (2006) suggest that a culture that values both an external focus (i.e. the improvement of its competitive position) and an internal focus (i.e. the maintenance of its sociotechnical system) may maximise its efficient use of innovation. The organisation must procure information and resources from the outside, but without becoming so outwardly focused that the ability to do its work is jeopardised (Kanter 1996). Thus, both management knowledge and communication channels are affected by the value an organisation places on meeting the competition or enhancing internal efficiency (i.e. the external or internal focus).

Management support and innovation
Literature describing methods for changing an organisation's culture seems to support the notion that a leader's ability to manipulate culture is important (e.g. Campbell 2004). A number of theorists and researchers have argued that perhaps the most influential people

affecting innovation in organisations are top managers (e.g. Jaskyte 2002, Ar & Baki 2011, Johannessen 2009, Damanpour 2005). Top managers are a potent force both for and against innovation, especially if the decision-making power is concentrated in their hands (Damanpour 2005). According to Damanpour, the way in which strategic leaders or top managers influence organisational capabilities is by establishing organisational culture, motivating, rewarding and enabling managers and employees, and building capacity for change and innovation.

Damanpour states further that top managers affect innovation through their personal and positional characteristics, functional and general management expertise, and attitude toward change. Also Senge (1990) has presented that leaders' positive view of innovation is a necessary element for the implementation and development of innovation within a firm. In order to maintain focus on innovation, it is necessary for the managers to be proactive, willing to take risks and set personal goals. They have to be able to formulate visions about future opportunities, and must have an active, dynamic attitude towards taking and keeping the initiative (Johannessen 2009). The personal support of top management means in practice showing commitment to innovation, giving time, encouraging the development and implementation of new ideas and processes and rewarding creativity that can occur anywhere in the organisation. De Jong and Vermeulen (2003) point out that managers should encourage creative behavior, not only by emphasizing the importance of innovation in words, but also by setting examples with their own actions. Because the outcome of an innovation process is always uncertain, managers should convince workers that they will not be punished for failure. Ar and Baki (2011) have found that top management support relates with product innovation more than with process innovation. Damanpour (1991) in his meta-analysis of the existing innovation literature found a positive relationship between managerial support and innovation, especially in the implementation stage. Without support, creative individuals will be unable to implement their new ideas even if they find a way to create them.

Ahmed (1998) points out that in order to build a successful and sustainable culture of innovation, leadership needs to accomplish two broad tasks: 1) sensitivity to the environment and awareness of the impact that they themselves have on those around them and 2) the ability of leaders to accept and deal with ambiguity. Tolerance of ambiguity allows space for risk taking. Ahmed states further that empowering people to innovate is one of the most effective ways for leaders to mobilise the energies of people to be creative. Combined with leadership support and commitment, empowerment gives people freedom to take responsibility for innovation. Empowerment in the presence of strong cultures that guide actions and behaviour produces both energy and enthusiasm for consistent work towards an innovative goal. Employees themselves are able to devise ways that allow them to innovate and accomplish their tasks. However, Ahmed finds a problem with empowerment when it is provided in an organisation without a strong value system capable of driving activities in a unified and aligned manner to the super-ordinate goals of the organisation. In these

conditions, empowerment is little less than abdication of responsibility, and when responsibility and power is pushed downwards, chaos typically ensues, according to Ahmed.

The positive relationship between top management support and innovation in educational organisations has also been shown in many studies (Wong & Cheung 2009, Rhodes et al. 2011, Pyhältö et al. 2011, Hargreaves 2011), although schools are typically loosely coupled organisations, teachers have great professional autonomy in classrooms and what happens in the classroom is usually weakly monitored by senior management (Hargreaves 2011, Pang 1996). According to Cheung and Wong (2011), school heads play a relatively essential part especially at the initiation stage of an innovation. Hargreaves (2011) points out that the school's management involves strategic leadership, that is, the ability to provide direction and motivation to the organisation's members. Yanez and Moreno (2008) state that the different forms of managerialism in schools have shown themselves to be ineffective in the creation of innovative and creative cultures in the sustainable development of teaching and research. Also Carmen (2006) claims that there will be fewer opportunities for innovation if the managers are unable to perceive them, do not wish to exploit them, or are unable to respond to them. Moreover, if the top management is not sufficiently interested, is static, unimaginative, and unambitious, or the managers' mental structures are not characterised by variability or flexibility, these characteristics impede innovation (Johannessen et al. 1999).

Gejsel et al. (1999) have studied leadership and innovation in both primary and secondary schools. They found that the school leaders in high innovation secondary schools showed more vision and more support, more stimulation of initiatives, more care for the personnel as well as the cultural climate in the school, and more involvement in decision making than the school leaders in low innovation secondary schools. Also Kantabutra and Saratun (2011) endorse that school leaders are required to communicate their visions and empower and motivate teachers to bring about desirable performance outcomes.

According to Gejsel et al. (1999), transformational leadership is a term used increasingly in relation to large scale innovation in education. They state further that within the wide range of dimensions, the following three dimensions of transformational school leadership appear to be most relevant: charisma/inspiration/vision, which means inspiring teachers to be engaged in their work by developing, identifying, and articulating a particular vision, individual consideration, which means concern and respect for the personal feelings and needs of teachers, and intellectual stimulation, which means challenging teachers to professionalise themselves in such a manner that the organisation is learning as a whole. Gejsel et al. (1999) also suggest that in order to achieve change and innovation, transformational leaders operate in keeping with the four I's: 1) idealized influence, which involves being role models for their followers, 2) inspirational motivation, which involves motivating and inspiring followers by providing meaning and challenge to their work, 3) intellectual stimulation, which involves stimulating followers' efforts to be innovative and creative and 4) individualised

consideration, which involves paying special attention to each individual's needs for achievement and growth.

Hargreaves (2011) states that in educational organisations, the behaviours of the head teachers, who introduce innovative practices, are important. The behaviours of those head teachers generate more extensive sharing of knowledge (intellectual capital) and higher trust (social capital). In addition, higher trust increases the sharing of knowledge, which in turn strengthens trust. Hargreaves presents further that this co-evolution of social and intellectual capital underpins organisational capacity and thus greatly expands the capacity to improve institutional performance in terms of the innovation of both teaching and administration.

Resource allocation is one choice that contributes to the innovative capability of the organisation. It is both determinant and the result of organisational culture (Jaakson et al. 2011, Schein 2004). Jaakson divides resource allocation into three main areas: the allocation of time and space so that people can experiment, creating incentives and providing resources to innovate, and allocating resources for constant learning. Gudmundson et al. (2003) have found that these are especially relevant for innovation implementation. Jaakson also links rewarding innovative employees with resource allocation.

The role of strategy in innovation

Strategy has a decisive role in mobilising members of an organisation to innovate. The role of top management consists of tracing out a framework of action that guides an organisation toward a future that is desired. This can, for example, stimulate teachers in educational organisations toward developing new knowledge that will allow them to build that future. According to many researchers, strategic elements such as a vision, mission and organisational goals reflect the priorities and values of organisations and as a result may promote or hinder innovation (e. g. Jaakson 2011 et al., Naranjo-Valencia et al. 2011). Hyland and Beckett (2004) suggest that an organisation wishing to enhance its innovation capabilities would need to start by assessing its position. To ensure that an organisation achieves its strategic goals, it must determine its destination and some key points on the way and adopt some practices to get there (Hyland & Beckett 2004). Being content with the current situation and maintaining the status quo are seen as obstacles to innovation. Only the internally nurtured desire to be better in the future makes people innovate (Jaskyte & Dressler 2005, Dobni 2008).

Grawe et al. (2009) have studied the relationship between strategic orientation and service innovation. They have compared different emphases of strategic orientations (customer orientation, competitor orientation, and cost orientation) on innovation capability and found that different orientations yielded differing impacts on a firm's service innovation capability. When compared with customer and competitor orientations, cost orientation which is internally focused is not a direct driver of service innovation capability. Grawe et al. (2009) state that customer and competitor information provides important market knowledge, but costs must be considered to see if it is realistic to try to accommodate such market demands.

According to them, cost orientation may, however, be an important driver for other types of innovation, such as product or process innovation. Firms may actively seek potential improvements or changes to products or processes to reduce costs. Furthermore, process innovation resulting from cost orientation may also contribute to innovations in the service area.

Naranjo-Valencia (2010) presents that especially managers of large companies should pay special attention to the definition of their innovation strategy and to its transmission across the organisation, as this is extremely important for guiding the search for new ideas effectively. In the case of managers of small companies, however, generating a favourable organisational culture for innovation proves to be a much more relevant issue, together with the development of a good IT infrastructure.

Strategic elements such as a vision and mission are found to be correlated with the innovation outcome in many studies (Jaakson 2011 et al., Dombrowski et al. 2007, Leavy 2005, Dobni 2008, Lau & Ngo 2004). Most definitions of organisational vision share the view that it reflects a desired ideal for the organisation's activity and future (e.g. Yoeli 2009, Kantabutra & Saratun 2011). Kantabutra and Saratun (2011) argue that an organisation with a well-articulated vision can achieve a sustained competitive advantage over organizations lacking such a vision. According to them, a vision works in various ways by providing a link between the present and future, serving to best energise and motivate followers toward the future, giving meaning to people's lives and work, and setting a standard of excellence in an organisation. Successful innovators have a common mission, vision and value statements that encourage innovation. Committing to innovation in formal documents has then implications in practice (Carmen et al. 2006).

Yeoli (2009) points out that organisational vision is a central element also of educational environments. A school vision may serve as a measure of school performance and is a significant factor in planning the curriculum, the teaching methods and the professional development of the educational staff. Yeoli (2009) cites Korland (2006) who states that visionary schools are considered to be more effective in achieving their goals (Korland 2006). Korland classifies three types of school visions according to content: mission-oriented, inspirational and communication-oriented. Martins and Terblanche (2003) present that the vision and mission of a creative and innovative organisation are focused on the future and are customer and market-oriented. In particular, the clarity of goals is deemed to affect innovation positively. Jaakson et al. (2011) claim that innovation has to be mentioned in the mission statement of the organisation. Martins and Terblanche (2003) add that goals that are concerned with quality rather than effectiveness are better for innovation. They have also found that reflecting the value of purposefulness in the goals and objectives of organisations has an influence on creativity and innovation (Martins & Terblanche 2003).

It is also important that employees understand the vision and mission and the gap between them and current situation to be able to act creatively and innovatively. Judge et al. (1997)

describe successful innovation as chaos within guidelines; in other words, the top management prescribes a set of strategic goals, but allows personnel great freedom within the context of those goals. Although an innovative vision is important to enhance innovation in organisations, Carmen et al. (2006) find that strategic vision alone cannot explain improved innovation performance in firms. They state that innovation also requires the existence of diverse, cohesive, and autonomous work teams whose members engage in fluent informal communication. Also Kantabutra and Saratun (2011) state that vision alone is not sufficient to lead effectively.

As innovation can demand risk-taking, incentives and rewards may be needed to build an innovative culture (Hyland & Beckett 2004, Oke 2007, Albers-Miller et al. 2001). Albers-Miller et al. (2001) have studied support and reward mechanisms on innovation in market education. Four types of support were identified as relevant: reduced teaching loads or release time, decreased class size, increased graduate assistant support, and grant support. With respect to rewards, credit toward promotion and tenure and credit toward merit pay increases were the relevant mechanisms. However, scholars have reached no consensus on whether reward management can improve innovation and creativity in the workplace (Zhou et al. 2011). The main debate in the field is termed as the battle between which Zhou et al. call utilitarianism (extrinsic incentives such as monetary compensation) and romanticism (creativity as self-motivated psychological behaviour). Zhou et al. have studied these reward approaches and employee creativity in the workplace and have found that tangible extrinsic rewards are necessary to encourage the innovative behaviour of employees but that excessive extrinsic rewards may depress this behaviour by eroding self-motivation. According to Zhou et al., different intrinsic rewards emphasising a clear innovation orientation, flexible empowerment, recognition, learning support and the comprehensive development of human capital have a substantially robust effect on promoting innovative behaviour. Furthermore, they also found that extrinsic rewards and intrinsic motivations exert significant interaction effects on innovative behaviour. The results indicate that long-term and sustainable reward systems are necessary to promote innovation.

2.2.4 Summary

Through values and norms held by the organisation, culture plays an important role in determining the areas in which the organisation is able to learn and develop easily. According to literature, there is a variety of values and norms that most often are found in innovative organisations, e.g. acceptance of uncertainty, risk taking, tolerance for and constructive handling of conflicts, failures and mistakes, freedom, flexibility and adaptability, teamwork, participative and quick decision making, shared responsibility, future, customer/external and long-term orientation, trust, openness and respect, rapidly taking advantage of opportunities, emphasis on development and support for change, willingness to experiment and goal orientation. Different researchers emphasise slightly different values. Also different typologies and frameworks are used to describe innovation culture. One of these frequently

used frameworks in educational organisations is the Competing Values Framework (CVF), which defines four types of organisational cultures: adhocracy culture, clan culture, market culture and hierarchy culture. Which of them is the best type that to promote innovation in an organisation is not clear. The CVF culture type which most favours innovation according to its values is the adhocracy culture (most characteristic values: flexibility, creativity and external orientation). Nevertheless, also organisations with multiple cultures or with a balance of the four culture types may have such flexibility which is important for institutions to promote high innovation capability. The only dominant culture type which may hinder idea generation, experimenting and change is the hierarchy culture. Studies conducted in educational organisations (mostly formal education, such as universities and higher education institutes) have, however, found that typical culture types in teaching departments are the clan and hierarchy types. In administration, the dominant culture type has often been hierarchy. The adhocracy and market culture types have been identified in a research department and a department with external customers, for example. Empirical research also shows that managers seem to have a great possibility to affect and change the culture in educational organisations, as in companies. They influence innovation through strategic goals, their own positive view of innovation, respecting and caring for the people, by motivating, rewarding and empowering them and building capabilities for change and innovation. This study examines rganisational culture in AECs in order to determine what organisational culture type and values/characteristics are found in innovative non-formal adult education organisations.

2.3 Cooperation and social network and innovation

Innovation is viewed as a social process (Panayides 2006) and innovations are viewed as the product of cooperation and continuous interaction of the actors (Alguezai & Raffaele 2010). This section discusses what characteristics of social networking have an effect on innovation and how. First, the benefits of different elements of cooperation in innovation are presented and subsequently, the structure of social networks in relation with innovation.

2.3.1 Benefits of cooperation and networking on innovation

Innovation processes are increasingly interactive, involving multiple actors distributed within and across the organisation. According to Trott (2008), the overall innovation process may be thought "of as a complex set of communication paths including external and internal linkages". Many researchers have found that the structure, strength of the relationships and nature of networks – both internal and external – enhance an organisation's capability to generate new knowledge and transfer it to new products and processes (Casanueva & Gallego 2010, Cavusgil 2003, Lin et al. 2010, Roffe 1998, Panayides 2006, Ar & Baki 2011, Alguezaui & Raffaele 2010). Active cooperation between organisations can enable them to achieve outcomes that they could not achieve on their own, while allowing each individual partner to realise its own strategic goals (Hyland & Becket 2004). The main reasons that push

firms to use external sources in innovation are, on the one side, the need to reduce the costs and risks of innovation and, on the other, the need to extend knowledge, skills, competences and creativity (Lazzarotti et al. 2011, Chiu 2008, Panayides 2006). Burt (1992, 1997) has considered three basic informational benefits of networks: access to valuable information and its possible uses, the speed at which information may be accessed by those using channels through which such knowledge and information flows, and the existence of additional references or information on the opportunities that the network offers to exchange information with other actors. Also Chiu (2008) states that social relations and ties constitute information channels that reduce the amount of time and investment required to gather information and each partner can potentially receive a greater amount of knowledge. Cooperative linkages facilitate the pooling of complementary skills from different partners. The positive effect of social ties emerges also through scale economies which arise when larger projects generate significantly more knowledge than smaller ones (Chiu 2008). Also for Maskell (2000), the contribution of social networks to innovation includes reducing costs: transaction costs between firms and other actors, search and information costs, bargaining and decision costs and enforcement costs. Inter-organisational relationships would also entail openness to new patterns of behaviour and the adoption of new ideas (Panayides 2006). Thus cooperation and social networks seem to have a positive effect on innovation although e.g. according to Ojasalo (2008) there are also findings in the literature that suggest that networked cooperation as such is no guarantee for successful innovation.

Open innovation

One commonly used concept that can be linked to cooperation and networks is the idea of open innovation. It is a way to communicate and cooperate with the external environment and actors of an organisation (Hennala et al. 2011). Open innovation means that "valuable ideas can come from inside or outside the organization and can go to market from inside or outside the organization as well" (Chesbrough 2003). Openness allows the combination of resources from a large and diverse pool of complementary organisations (Järvenpää & Wernick 2011). At the center of the open innovation model is how organisations use the ideas and knowledge of external actors in their innovation processes (Savitskaya 2011). Open innovators are those that integrate these external sources into their innovation processes and competitive strategy (Chesbrough 2003). One drive of an open innovation is many organizations' way to operate too internally and maybe miss many such opportunities that fall outside the organisation's current activities (Chesbrough 2003). Degen (2010) has described how today online social networking is changing the way open innovation is being used by companies. Innovative companies harness online social networks to source ideas for improving existing products or services, and to develop new ones.

Lazzarotti et al. (2011) suggest that opening an innovation process to a wide variety of partners and along the innovation process is conceived as part of an aggressive strategy. Lazzarotti et al. (2011) have studied different degrees and types of openness using two

varieties: 1) the number and type of partners (partners' variety) and 2) the number and type of phases of the innovation process open to external contributions in and/or out (innovation phase variety). Using these varieties, Lazzarotti et al. found four different models for open innovation in the practice of companies: open innovators, specialised collaborators, integrated collaborators and closed innovators. Two extreme models – open and closed – are according to Lazzarotti two significantly different open innovation models. According to him, open innovators are those who choose an aggressive innovation strategy and work to be the first to introduce a new product on the market and to pursue even radical innovations.

2.3.2 Success factors for innovation in networks

Ojasalo (2008) presents five critical success factors for innovation management in networks suggested by Biemans (1990, 1992): cooperation between parties, the coordination of activities, communication between people, creativity, and the level of chaos. Cooperation, coordination, and communication may reduce the level of chaos in an innovation process, and, thus, increase the probability of developing successful innovations (Biemans 1990). Ojasalo states that the advantage of cooperation is that each partner can do what it does best. Through good cooperation, the parties involved establish effective and efficient coordination of activities to be undertaken. An important prerequisite for successful coordination includes creating and maintaining good and timely intra- and inter-organisational communications.

Network compence

As network thinking becomes an essential part of managerial practice, an organisation's ability to develop and manage relationships within a network context increasingly turns into a core competence (Chiu 2008). Birkinshaw et al. (2007) state that specific interaction competencies imply ways to identify good partners and create fruitful cooperations and maintain them. Ritter et al. (1999) define "network competence", as the "ability of an organization to handle business relationships". He introduces a scale that measures network competence along two dimensions: first, the organisation's degree of network management qualification, which includes social and specialist qualifications, and secondly, the execution of network management tasks, which includes planning, coordinative, adaptive and controlling activities. Ritter et al. also identified four organisational antecedents of network competence, which are the availability of resources, a network orientation of human resource management, an integrated communication structure, and a corporate culture supportive of the networking idea. Hargreaves (2011) states that "interfirm partnership competence" has three core features: coordination (building consensus on partnership goals, ways of working, roles and responsibilities), communication (being open and honest, sharing information fully and with accuracy and in a timely way), and bonding (creating trust and ensuring that people get pleasure from working together).

Organisations with a high level of network competence have a higher propensity to engage in networking behaviour and intensifying network activities. It can therefore be assumed that

companies with a high level of network competence are characterised by rich social interactions. Network competence also indirectly determines innovation performance through network location coreness (Chiu 2008). From a network perspective, the central challenge for organisations is to find a way in which they learn to exploit their accumulated knowledge, and at the same time prevent existing knowledge and competencies from obstructing the creation of new ones (Colurcio et al. 2012).

Organisation structure and heterogeneous teams

The structure of the organisation and its internal mobility has been found to affect innovation substantially through better communication. The lack of hierarchy as an innovation-facilitating precondition is mentioned e.g. by Dombrowski et al. (2007). It is suggested that employees should rotate functionally or regionally and strict job descriptions should be avoided (Martins & Terblanche 2003). A cooperative structure refers to multi-functional or cross-functional teams (Jaakson et al. 2011, Martins and Terblanche 2003). The use of cohesive work teams, which are autonomous and diverse and in which individual talents complement one another and informal communication is encouraged, has a direct effect on an organisation's innovation (Martins & Terblanche 2003, Carmen et al. 2006). Although Jaskyte and Dressler (2005) have found that team orientation was negatively related to innovation, and Lau and Ngo (2004) have concluded that team development is insignificantly related to innovation, these results stand out as exceptional against the background of the stream of research that shows the positive influence and relevance of internal cooperation for innovation (Jaakson et al. 2011).

Ar and Baki (2011) point out that a high level of internal integration practices, such as the early involvement of participants, the cross-functional team approach, and the simultaneous work on different phases of product development, may lead to enhanced product innovation. Also in public sector innovation, one of the trends is breaking down departmental "silos" and enhancing cross-departmental cooperation (Pekkarinen et al. 2011).

Daugherty et al. (2011) have studied how organisational structural factors (decentralisation, formalisation, and specialisation) influence an organisation's innovation capability in logistics service firms. They found that both decentralisation and formalisation are positively related to a firm's service innovation capability, although the formalisation was, according to them, originally proposed to have a negative impact on logistics service innovation capability. However, specialisation was not a significant predictor according to their results. In complex organisations, the depth and diversity of the knowledge base stimulate creativity and increase awareness and cross-fertilisation of ideas and facilitating initiation (Damanpour 1996). More complex organisations have access to more information about different innovations and are thus more likely to identify and acquire it. Damanpour has found that organisational complexity influences the implementation of innovations more positively than it influences the initiation of innovations. However, potential conflict and diversity of values arising from complexity may lead to resistance in accepting the innovation, moderating the positive impact

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of complexity on implementation (Jaakson et al. 2011). Innovation is enhanced by organic structures rather than mechanistic structures, in general (e.g. Ahmed 1998). Ahmed lists many features of organic structures that promote innovation: freedom from rules, participative and informal, many views aired and considered, face to face communication, inter-disciplinary teams, breaking down departmental barriers, emphasis on creative interaction and aims, outward looking, willingness to take on external ideas, flexibility with respect to changing needs, and non-hierarchical and information flow downwards as well as upwards.

Diversity encourages groups to look at problems from different angles. Jaakson et al. (2011) stress cooperation with different partners and belonging to different networks in order to favour innovation. As heterogeneous teams are likely to have more task-relevant skills, knowledge and abilities as well as members with different opinions and perspectives, and thus have larger pools of resources, they may be especially effective in handling non-routine problems. Rodan and Galunic (2004) have found that knowledge diversity among actors is useful in the implementation of new ideas, particularly when the tasks involved are multifaceted or complex. Complex ideas generated in an innovator's mind must be understood and supported by others. Achieving this support and acceptance will be more likely if the innovator can draw on contacts that have relevant skills, experience or know-how to prove and may be able to develop the idea further. Rodan and Galunic also state that having heterogeneous abilities on which to draw will be particularly useful where formal resource allocation procedures may be ineffective, for example, because of early ambiguity over the resources in the development of an innovative idea. However, it is not insignificant with whom the innovators seek to cooperate, because in different types of relationships, the transferred knowledge is different in quality, and the readiness and ease of cooperation is different (Hennala et al. 2011).

Personal networks and informal communication
Improving innovation capability is also linked to personal networks (internal or with external agents) in which individuals participate (Rodan & Galunic 2004). Organisational members can access a variety of knowledge required for their work to increase their innovation involvement through close personal contacts and interactions (Huang & Li 2009). Knowledge is typically possessed by individuals, and it cannot easily be transferred across different members in an organisation (Tsai 2001). Social interaction allows employees to access knowledge developed by other members. Social interaction, such as mutual trust, effective communication, and coordination, may ensure the motivation and capability of organisational members for innovation. Rodan and Galunic (2004) have studied especially managers' social networks and found that managers' social interaction networks (in terms of both position and content) are positively associated with innovation performance. Access to diverse knowledge matters much more for innovation performance than it does for overall performance.

Coleman (1988) demonstrated a self-interest paradigm, which describes two-actor interactions with both of the actors operating from self-interest. Each actor is trying to maximise his or her

own self-interest, being simultaneously embedded in and constrained by the interdependent relationships with the other actor. The relationships are thus considered both to limit actor behaviour and to give improved access to resources through other actors (other team members).

Nazari et al. (2011) state that the transmission of knowledge and the development of creative ideas depend upon the dialogue occurring through the interaction of employees. Informal communication among team members or members of organisations is an important process for innovation (Harborne & Johne 2003, Carmen et al. 2006). Setting up informal situations which allow individuals to meet one another and have discussions permits the sharing of knowledge and feedback on visions and perspectives, and it is a good way to develop creative proposals by means of the connection of ideas from different fields or areas (Carmen et al. 2006). Through informal interaction, the members of organisations or networks overcome barriers of communication, routines, and the division of labour that may exist in different functional areas and increase information flow. Greater flow of informal communication may also lead to greater and deeper interaction among the members, which increases proximity and trust among them. This, in turn, favours the generation of creative ideas and hence innovation.

Also Taatila et al. (2006) emphasise the informal discussions during the innovation process. They have described the social structure along the innovation process for economic innovation. Harmaakorpi (2004) views an economic innovation as a product of several individual minds and a complex social organisation. In the framework of Taatila et al., the innovation process begins from the situation before the actual innovation, and even before the innovation process has begun, people interact and share ideas freely with other people. Some of these ideas may be formed into innovations. The process continues by the phases during which the idea is developed and implemented into a situation where the innovation has become a normal solution, i.e. it no longer is an innovation. In the idea development phase, people form the social structure that is used for developing the innovation. When individual people come into contact with the innovation network, they become a part of the social structure around the innovation. Taatila et al. suggest that an innovative idea is formed by a social network which "concentrates" the network's knowledge via one or more central persons, "the innovators". The importance of the social networks can also be seen in the verification processes (Taatila et al. 2006). Verification is used for obtaining feedback about the idea and developing the idea further. As always, the feedback may be either positive or negative, i.e. it either supports the idea developers' opinion about the situation or conflicts with their view.

Cooperation with customers
One of the most important groups of external partners for enhancing innovation capability in an organisation are customers (Lin et al. 2010). For example, Apilo and Taskinen (2006) have presented that especially in service innovation, the role of customers is important in all phases

of the innovation process. However, Hennala et al. (2011) state that despite the recent trend of increased user involvement in innovation processes, there is no clear agreement as to whether the user involvement is beneficial, and findings are somewhat contradictionary, as well. There seems to be, however, a general consensus about the valuable input of users in the early phases of an innovation process, especially in the context of incremental innovations. In the context of radical innovations, the importance of user involvement still remains questionable (Lettl 2007). According to Pekkarinen et al. (2011), public services are traditionally produced to the user as a target of services, but not for the user as an active customer whose wishes and demands should be taken into serious consideration.

Generally, customers and lead-users are considered a source of innovative ideas, as they provide valuable knowledge about latent and future needs, new uses of existing products, novel functionalities, and the like (Ar & Baki 2011). A close customer relationship will lead to a greater mutual understanding of what needs to be done also for improving current products, processes and procedures. Panayides (2006) points out that an organisation oriented towards a customer relationship can improve its innovation capability as it will become more creative in its methods of operation, will seek new ways of doing things and trying out new ideas and will be the first to market new products and services. Focusing on the interest of customers can help the organisation to identify new opportunities and gaps in market offerings (Grave 2009). Lin et al. (2010) state that the benefits of customer involvement are very similar to those deriving from other external partner involvement. Constant communication with the customer leads to less design rework, and ultimately to better time performance in the design phase.

The effect of cooperation on different innovation types and phases of the innovation process

In the innovation literature, different suggestions have been made about how cooperation influences different innovation types. Panayides (2006) has proposed a positive link between a firm's relational orientation and technological innovation, in particular. According to Laforet (2011), cooperation with customers and the public sector are positively associated with product innovation success. In contrast, cooperation with suppliers and universities are positively associated with process innovation success. Ar and Baki (2011) have found that organisational cooperation relates with process innovation and supplier relationships with product innovation. The findings of Delgarvo-Verde et al. (2011) show a statistically positive and significant influence of organisational capital assets on product innovation capability.

Toivonen and Tuominen (2009) describe five service innovation patterns in terms of their degree of formality and pattern of cooperation: 1) internal processes without a specific project, 2) internal innovation projects, 3) innovation projects with a pilot customer, 4) innovation projects tailored for a customer and 5) externally funded innovation projects. According to Toivonen and Tuominen (2009), the first pattern describes the situation when service innovations emerge in an unintentional, unplanned, and incremental way and existing

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services are gradually adapted to new problems. The second possibility is that internal project-based innovation efforts are carried out deliberately within the organisation. They are usually focused on the improvement of the service production system, but sometimes also including innovations in the service content. The third way to develop a service innovation is to seek a pilot customer for the new idea. The customer supplies resources, sponsorship, critical evaluation, and information. The client may also present a specific problem and the service provider seeks a solution, with commitment to development activities often negotiated when the project is contracted. This may facilitate the reproducibility of the innovation, or limit it to an ad hoc solution. The fifth way to introduce a service innovation is to use externally funded innovation projects. They are usually formal and research-oriented, involving several collaborators and intended to generate new service concepts or platforms that benefit the entire sector or cluster.

Troshani and Doolin (2007) have studied the diffusion of network innovations. They state that with network innovations, institutional networks have to be established to ensure that innovations are diffused successfully in the community of the adopters. Successful diffusion may require specific institutional actors, such as opinion leaders and change agents, to initiate and carry out interdisciplinary undertakings involving different stakeholder communities. The array of resulting outcomes, which is not necessarily shared by the participating stakeholders, would then be integrated into commonly accepted scenarios and solutions aiming at accomplishing diffusion objectives (McAdam 2005). Troshani and Doolin further state that because individual stakeholder outcomes would not necessarily be convergent with the overall diffusion objective, iterative modifications and changes may be required if the integrated outcomes are skewed from overall diffusion objectives. As the complexity and inter-organisational nature of network innovations increases, the network relationships among interacting stakeholders and their power dependencies, knowledge and skill transfer are expected also to increase and become determinant factors in shaping the diffusion trajectory of innovations (Webster 1995, Damsgaard & Lyytinen 1998).

There are two models by way of which network relationships impact innovation diffusion, namely, the relational and the structural diffusion models (Valente 1995). With the relational model, the adoption behaviour of the focal organisational stakeholder is analysed in the context of its relationship or direct ties with influential opinion leaders or change agents. In contrast, structural models focus on all relationships or relationship patterns that the focal organisational stakeholder may have in its network, including the stakeholder's position within the network. For instance, a stakeholder may adopt an innovation because a highly central stakeholder has adopted it, although the two may have no direct relationship with each other (Liu et al. 2005).

2.3.3 Characteristics of a social network and innovation

The theory of social networks considers two basic types of networks – individual (or personal) networks and organisational networks – according to whether their relations are between individuals or between organisations. Both types of networks are present and are interwoven in organisations at different levels, as many contacts between organisations are based on relations between individuals. In addition, the individual networks can be either internal or external to the firm.

A network is usually described by nodes (actors) and connections (social ties). According to Davern (1997), a social network has four basic components: a structural component, a resource component, a normative component, and a dynamic component. The structural component is used to describe the configuration of the actors and ties within a network. Resources in a social network can be characteristics of both individuals (ability, knowledge, class, property, etc.) and networks. The normative component contains norms, regulatory rules, and effective sanctions that govern the behaviour of actors within a particular network. Coleman (1988) sees these as a form of social capital. On the other hand, social capital can also be considered as a resource of a network. The networks are dynamic because linkages are changed and created over time (Davern 1997). In the following section, a social network is discussed using the structural component as it is found at the origin of the relational dimensions (Alguezaui & Filieri 2010). The other three dimensions are included in it.

Network centrality, density and coreness
The structure of a network basically describes the arrangement of actors and ties in a network. The main elements of this structure are centrality, density (cohesiveness) and coreness. The concept of network centrality reflects the importance of an actor in a network (Chiu 2008). If an actor is in a central position in his or her network, the actor has many connections with other stakeholders or occupies a significant strategic position in the overall structure of the network. Network location centrality has a significant positive impact on a firm's innovation performance (Chiu 2008, Valente 1995, Ibarra & Andrews 1993). A more central network position helps individuals and organisations to access or control desired strategic resources or information and increases their social interaction to involve innovation activities (Ibarra & Andrews 1993, Tsai 2001, Bell 2005). A central stakeholder may also possess a status which enables influencing the adoption behaviours of other members in the network (Liu et al. 2005).

Closely associated with centrality is also the notion of an organisational stakeholder's salience in its network relative to others. Mitchell et al. (1997) argue that stakeholder salience is characterised by three attributes, namely, power, legitimacy and urgency. Power is similar to the notion of centrality and it constitutes the ability of those who possess it to force stakeholders or influence their behaviour to bring about desired outcomes. In a network, power is important because it identifies the nature of the mutuality of power-dependent relationships among stakeholders. Legitimacy constitutes the perception that the actions of an

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organisation are "desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (McAdam 2005). The distinction between power and legitimacy is important because legitimate stakeholders are not necessarily powerful and powerful stakeholders are not necessarily legitimate (Mitchell et al. 1997). Urgency is the degree to which stakeholder claims are critical, and therefore, require immediate attention. Urgency is important because it captures the dynamics of the interactions among stakeholders. Organisations that possess one or more or different combinations of these attributes have different levels of salience which determine their role in the network (Mitchell et al. 1997). The salience of an actor in a network has an effect on different phases of innovation.

Using the network position (high versus low centrality) and competence level (high versus low network competence), Chiu (2008) has developed a framework containing four "network strategies" to help organisations to enhance their innovation performance (Figure 10).

High centrality	Situation III: LAGGARDS Emphasis on fostering and improving network competence	Situation I: CHAMPIONS Emphasis on holding, defending and extending the current position
Low centrality	Situation IV: NEWBEES Emphasis on personnel recruitment and resource allocation	Situation II: POTENTIALS Emphasis on effectiveness the networking practices and communication ties
	Low network competence	High network competence

Figure 10. Network strategies to enhance innovation performance according to Chiu (2008)

Four different situations are identified, resulting in four principle strategies. The situation I is characterised by a high level of network competence and a central network location. Firms which occupy this position ("Champions") are in an ideal situation. Strategic considerations should be aimed at holding, defending and extending the current position. In situation II, firms display a high level of network competence, but find themselves located in the periphery of the network. Obviously, these companies ("Potentials") have not been able to transform their network competence into a more favourable network location, resulting in a suboptimal state-of-condition. In this situation, firms are advised to investigate their current

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networking practices and communication ties with their partners, paying particular attention to the effectiveness of their activities.

Companies in situation III find themselves in central positions despite a low level of network competence. These companies ("Laggards") are in a situation where they do not and (due to low network competence) cannot fully reap the benefits that usually come along with a central network positions. Therefore, strategic and practical emphasis should be on fostering and improving network competence, e.g. by recruiting people with better communication skills and intensifying the dialogue with partner companies. Firms in situation IV can be described as having a low degree of network competence and holding peripheral positions. In contrast to "Champions", these "Newbees" still have a long way to go in terms of establishing and fostering network awareness. Activities such as personnel recruitment and resource allocation should be carried out under careful and deliberate consideration of network requirements.

Network density or cohesiveness characterises the network as a whole. It refers to the degree of tie interconnectedness among network members in terms of the relative number of ties in the network that link the actors together (Alguezaui & Filieri 2010). A network is described as cohesive when all actors within that network are connected to each other. Chiu (2008) states that the more social ties an organisation holds, the more information it can access and the better the firm can exploit the wealth of information to its advantage. In addition, firms which are able to build and use relationships with other organisations will be in a better position to achieve their innovation goals. Also Daly et al. (2010) present that the importance of dense networks is supported by previous research indicating that interaction patterns in networks in which members interact frequently around work-related issues perceive deeper levels of social and professional exchange. Dense interconnected networks at all levels of an organisation may facilitate the uptake of complex knowledge, thus increasing the potential for organisational change.

The third element of a network structure is network coreness. Coreness describes the closeness of an actor to a core of densely connected actors observable in the network. Members in the core are densely tied to each other, while members in the periphery have more ties to core members than to each other (Chiu 2008). The degree of knowledge transfer depends on this coreness of the partners (Hyland & Beckett 2004, Huang & Li 2009). Frequent interaction among employees promotes the sharing of knowledge and supports knowledge creation and innovation (Cavusgil et al. 2003, Nazari 2011).

Strong and weak ties and structural holes
Granovetter (2005) describes the relations between the actors in networks as strong ties and weak ties. Strong ties are characterised by common norms and high network density. Strong ties to other actors mitigate uncertainty and promote adaptation by increasing communication and information sharing (Agarwal & Selen 2011). These strong ties are easy for innovations since they normally include a relatively high amount of trust, common aims and the same kind of language with which to communicate. Cavusgil et al. (2003) have found that interfirm

relationship strength may influence the extent of tacit knowledge transfer. Tacit knowledge obtained from partner firms, in turn, affects firm innovation capability. However, according to Granovetter (2005), strong ties add little value when one is searching for new knowledge because everyone within the network has access to the same resources. Thus the weak ties (distant and infrequent relationships) can be more fruitful for innovations than strong ties because more novel information flows to individuals through weak ties. Weak ties allow for diversity, which is needed for innovations, and they bring the network members in contact with other, less-known actors, groups or individuals that may otherwise be unconnected. Granovetter (1973) has introduced an argument on the strength of weak ties that serve as bridges between network segments. He defines tie strength as a function of three factors: frequency of contact, reciprocity, and friendship.

Burt (1995) has presented the idea of structural holes as a main component of a social network. He has developed the weak ties argument further by arguing that innovations are most likely found in these structural holes. The term refers to the social gap between two groups. Structural holes are often the weak connections between groups of densely connected individuals. Structural holes increase the efficiency of deriving benefits from the network because fewer contacts need to be maintained. Networks with an abundance of structural holes create opportunities for a new combination and recombination of ideas. Rodan and Galunic (2004) present the same idea stating that a "network broker" residing within a sparse network of disconnected contacts puts the broker in an advantageous position. Burt (1992) explains that managers in brokering positions are better able to successfully execute their objectives. The presence of structural holes in a team may prevent the restrictive enforcement of norms that occurs among mutual friends. Routines may also turn into rigid rules in cohesive teams in the absence of structural holes. Thus, structural holes may function as vehicles that encourage a diversity of views and openness to new ideas within teams (Alguezaui & Filieri 2010). Rodan and Galunic point out, however, that a network with disconnected contacts is not a guarantee of heterogeneous knowledge. They also cite Burt (2000) who presented that structural holes have a tendency to close. It means that maintaining a network full of structural holes requires time and effort and is not costless.

Diversity and cohesion
Social networks are more likely to form among members who are similar than among those who are dissimilar (Jaakson et al. 2011). Similarity in experiential and demographic backgrounds promotes harmony and trust, but also tends to favour the exploitation of familiar knowledge and to be bounded by current constraints at the expense of exploring new possibilities. Thus, high cohesiveness may lead to group-think and hinder innovation (Jaskyte & Dressler 2005). The diversity in skills and experience means that a greater variety of ideas, knowledge, and perspectives are introduced and shared by the team, and hence there is a greater likelihood of finding solutions that are more innovative (Hennala et al. 2011). Carmen et al. (2006) state that a high degree of cohesion among group members facilitates

communication within the group as a consequence of the consensus achieved, but at the same time, in very cohesive groups the members prioritise the defense and maintenance of their personal relationships with other group members over their own proposals of innovative ideas, thereby hampering the generation of new ideas and creativity.

Although diversity has generally been regarded as having a positive influence on innovation, diversity has also been regarded as an inhibitor of innovation. Carmen et al. (2006) explain this by greater conflict and lower cohesion inside the group – a consequence of the diversity of languages, vocabularies, and objectives among the team members that complicates the decision-making process and exchange of knowledge. In this approach, diversity may lead to information overload, internal conflicts, and difficulties in finding a common perspective. Carmen et al. state further that in order for diversity in skills and experience to positively affect innovation, some amount of cohesiveness is, nevertheless, needed for effective communication and trust. Carmen et al. point out that it seems obvious that the existence of cohesion in homogenous groups will negatively affect innovation performance, but cohesion in heterogeneous groups has a more complex effect. When there is diversity, cohesion appears to have a positive effect on innovation because the consensus achieved allows the conflict that the diversity produces – whether due to personal or functional differences – to be redirected. That is, both variables jointly may have a positive impact on innovation performance. In this respect, diversity up to a certain level permits the convergence of a multitude of perspectives and raises innovation. But beyond this point, negative consequences for innovation begin to appear due to the conflict inherent in the diversity of perspectives. This may be mitigated when a certain degree of cohesion among the members is achieved, allowing the conflict to be redirected and leading to the generation of innovation.

Alguezaui and Filieri (2010) emphasise that while it is widely agreed that social interactions enhance innovation performance, it is still ambiguous what the optimal structure of a social network is that best contributes to innovation. They have compared the opportunities and threats of two different network structures: cohesive (dense) networks which are the basis of Coleman's (1988) argument and sparse networks which refer to Burt's (1992) structural holes theory on innovation performance (Table 4). Alguezaui and Filieri state that while the two network structures display contradictory features, their benefits and risks are complementary to one another. The benefit of cohesive networks is e.g. that they facilitate tacit knowledge sharing and provide governmental mechanisms (e.g. tacit norms of behaviour) to effectively exploit the opportunities previously identified. However, cohesive networks risk constraining the effective implementation of the innovation activities preventing its members from searching for new partners. Alguezaui and Filieri point out that if the organisation maintains strong ties that are no longer beneficial, they may result in higher costs. If outsiders' knowledge is rejected, the result may be the so-called Not Invented Here syndrome. The benefits of a sparse network and structural holes are e.g. unique access and control over novel knowledge as well as an efficient search for new opportunities. In the attempt to reconcile

both views, Burt (2000) claimed that although brokerage across structural holes is the source of added value, closure can be critical to realising the value buried in the holes. Therefore, as a result of the comparison, Alguezaui and Filieri suggest that organisations that want to succeed in achieving higher innovation performance need to develop a balanced mixture of both types of structures.

Table 4. Benefits and risks of cohesive and sparse networks according to Alquez and Filieri (2010)

	Benefits	Risks
Cohesive networks (Coleman) Refers to the degree of tie redundancy and interconnectedness among network members	Tacit norms of behaviour Effective joint problem-solving Effective sharing of fine-grained information Trust Redundant information channels Risk sharing attitude Shared identity Effective cooperation Reduced risks of opportunistic behaviour Reduced transaction costs Easy resource mobilisation Shared understanding of problems and solutions Members more likely to engage in innovation activities	Costly relationship maintenance Redundant knowledge flows Restraining the firm's capability of exploring new knowledge and exploiting novel recombination ''Not invented here'' syndrome ''Lock-in'' situation
Sparse networks (Burt: structural holes)	Access to unique and novel knowledge Control of information exchange Efficient knowledge search Inter-industry knowledge recombination	Action problem Impede frequent interactions Poor understanding of the knowledge (and resources) available

Alguezaui and Filieri (2010) also present that different configurations of social networks are needed to satisfy the distinct requirements of radical and incremental innovations. Organisations may opt for sparse or cohesive networks depending on their innovation strategies and objectives. Organisations aiming at incremental innovation need to derive knowledge residing in various sources of knowledge (Laursen & Salter 2006). Therefore, sparse networks might contribute greatly to the higher performance of incremental innovation. In contrast, cohesive networks contribute to radical innovation through intense interactions and a trusting social context (Alguezaui and Filieri 2010

Resources and social capital

The ability to gather resources and ideas from diverse groups is important to success. Resources flow through ties. Network structures may facilitate the transfer of resources if the necessary relationships are in place and are accessible, but they may also constrain resource exchanges if the network does not hold sufficient connected ties to move the resource (Daly and Finnigan 2009). One of the basic conceptual foundations in understanding resources in social networks is the concept of social capital (Daly et al. 2010). Social capital is concerned with the resources that exist in social relationships (ties) between actors as opposed to the resources of a specific individual. The actors can be both individuals and organisations (Coleman 1988). The concept of social capital allows the value of the relations held by individuals or organisations to be associated with their results (Casanueva & Gallego 2010). In the literature, social capital is a wide umbrella concept that is defined by many theorists, many of them applying the concept to a wide range of phenomena and presenting a different aspect of the concept (Bourdieu 1986, Burt 1992, Coleman 1988, Lin et al. 2001, Putnam 1995). Social capital theory emphasises the human aspect of organisations in operation. Central to the concept of social capital is that it has an output (here, innovation).

Bourdieu (1986) defines social capital as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition". It can be understood either as an individual or group specific feature, which is associated with membership in networks of people of similar personal characteristics and values. Bourdieu finds that social capital is a tool in competing to enhance one's position or status.

According to Burt (1992), social capital refers to relationships and contacts that provide the individual an opportunity to take advantage of the economic and human capital. It is essential, what persons the individual knows and where he or she is located in a network in relation to the entire network structure. Daly et al. (2010) present the idea of some scholars: "It is not what you know, but who you know" and give it more accurately as "Who you know defines what you know".

According to Coleman, social capital is a productive resource associated with social structure, whose task is to help actors' intentional action. Forms of social capital are reciprocity obligation (including trust), information channels and the flow of information, and norms (including effective sanctions). These forms of social capital are, according to Coleman, resources that can be used to achieve the interests of those involved. Keeping the norms requires a closed network structure, in which case each member of the network is able to observe the other.

Lin et al. (2001) note that the common denominator between all major theorists of social capital includes the understanding that social capital consists of the "resources embedded in social relations and social structure which can be mobilized when an actor wishes to increase the likelihood of success in purposive action". Social capital is therefore composed of a

system's social relations, through which the resources of other individuals can be accessed, borrowed, or leveraged. This differentiates social capital from human capital, which refers to the intelligence, skills and character of individuals (Bourdieu 1986, Coleman 1988, Lin et al. 2001).

The mechanisms of social capital are trust, trustworthiness and communication, which promote information transfer between actors and make cooperation easier (Ruuskanen 2001). According to Panayides (2006), building a mutually beneficial and sustainable relationship requires a level of commitment and understanding on behalf of both parties. This can be achieved by viewing the relationship not merely as a business transaction between two separate entities but as a joint venture instead. Trust is often based on former experience of earlier cooperation (Ojasalo 2008). Also Nazari et al. (2011) emphasise that lower trust levels among employees inhibit sharing knowledge and building strong relationships. Ellonen et al. (2008) have found that both organisational (e.g. in the management) and institutional trust (e.g. in the organisational system) have a positive influence on organisational innovativeness. Knowledge exchange requires each of the partners to allow the other partners to "look into their kitchen". In addition, priorities given to internal work and work associated with the cooperation must be equitably balanced. As this cannot be enforced upon any of the partners, an above average level of trust and respect for each other's competences and best intentions is required. Also Daly et al. (2010) emphasise the importance of relational trust as a condition for more productive interactions and overall improved outcomes. In their study of teachers' social networks, they suggest that high levels of trust may allow teachers to take instructional risks in improving practices.

Dynamism in social network

Networks are dynamic and change over time because actors, relationships, needs, problems, capabilities, and resources change over time (Ojasalo 2002, Huggins 2010). In addition, an innovation network may be project specific (temporary) or continuous. Huggins (2010) states that the stability or dynamism of networks is dependent upon whether or not network actors seek to form additional relationships with actors within an existing network or new relationships with actors outside a network (Beckman et al. 2004). In a knowledge-based environment, there is an increasing focus on the dynamic nature of networks and their changeability, heightening the importance of indirect ties and the need for the on-going reconfiguration of networks (Gargiulo & Benassi 2000, McFadyen & Cannella 2004). Unless diversity is sustained, in the long run, networks may reduce firm heterogeneity through the articulation of shared norms, standards and rules of conduct among firms. Huggins emphasises that more fluid and temporary networks, such as one-off project-based cooperations and networks of contacts, have grown in importance as sources of innovation and competitive advantage (Bell 2005, Zaheer & Bell 2005). Szeto (2000) emphasises that in network cooperation, sustainability is crucial to the development of innovation capacity. He justifies his thought by proposing that innovation is not usually a one-time act, and if

sustainability is absent in the cooperation, continuous improvement of the capacity will be impossible. Lin et al. (2001) suggest that in maintaining a long-term partnership, loyalty and commitment between partners can be established.

Also the level of involvement and motivation may change along the innovation process (Taatila et al. 1997). Some people will enter the innovation project and some will leave it. Taatila et al. suggest that social structures may also remain after the implementation phase, perhaps supporting the developed innovation or possibly creating new innovations since they have learned to operate to achieve the goal. Ojasalo (2008) states that in the case of a project specific innovation network, the organisation which developed the initial product idea in the first place has the natural position to decide whether it wants to carry out the product development project in-house or in networked cooperation with other companies. If it wants to operate in terms of a network, it can establish an innovation network and select its members. He has found that the organisation which developed the initial product idea often, but not always, is also mainly responsible for managing the innovation process in the network context.

In the case of a continuous innovation network, Ojasalo (2008) suggests that the formation of such a network be enhanced by a common professional history and friendship between the actors. The fact that a key network is continuous enhances innovation management because the actors of the network learn to know each other. On the other hand, in such cases the network partners must ensure that their operation does not turn into an isolated insider club. Ojasalo suggests that the innovation network may include both actors who are interested in creative and artistic self-fulfilment and actors who are interested in the commercial success of the product. The data of Ojasalo's study show that creative and artistic self-fulfilment, lifestyle entrepreneurship, and friendship between individuals may be the most important motivational factors behind an innovation network. The disadvantage of this kind of motivation is the shift from business to hobby and less profitable lifestyle entrepreneurship. Consequently, if the operation is excessively oriented toward lifestyle entrepreneurship, this may be a barrier to external financing, larger-scale product development projects, and the expansion of the business.

2.3.4 Summary

Researchers today strongly agree that innovation processes are increasingly interactive, involving multiple actors distributed within and across the organisation. However, it is not yet obvious what the ideal structure of a network is in order to enhance an organisation's capability to innovate. The main reasons that seem to push an organisation to use networks in innovation, according to literature, are the need for reducing costs, the time and risks of innovation and the need to extend knowledge, skills, competences and creativity. One important advantage of cooperation is that each party can do what it does best. The concept of interaction competence implies ways to identify good partners and engage in and maintain

fruitful cooperation with them. To promote high network competence, the organisation should, according to literature, take care of resources available, have network-orientated human resource management, have an integrated communication structure and corporate culture supportive of networking and rich social interaction. Also ways of working, roles, responsibilities, creating trust and ensuring that people enjoy working together are found to promote high network competence. The structure of the organisation (e.g. lack of hierarchy, use of cross-functional and diverse teams), internal mobility, informal communication and close customer relationships affect innovation substantially through better communication.

On the basis of current knowledge, maybe the best network structure for innovation is a balanced mixture of cohesive and sparse networks. Also a more central network position helps individuals and organisations to access or control desired strategic resources or information and increases their social interaction to involve innovation activities. The interaction patterns in networks in which members interact frequently around work-related issues (the density of a network) and these dense interconnected networks at all levels of an organisation may promote innovation. The strength of weak ties seems to be important for innovation, as weak ties allow for diversity, which is needed for innovations, and they bring the network members into contact with other, less-known actors, groups or individuals that may otherwise be unconnected. Innovations are also most likely found in structural holes meaning weak connections between groups of closely connected individuals. Also the mechanisms of social capital (trust, trustworthiness and communication) promote information transfer between actors, make cooperation easier and thus have an effect on innovation.

2.4 Synthesis of the literature review

Figure 11 shows the synthesis of three themes of the literature review. This study focuses on innovation in a non-formal adult education organisation and the cultural and cooperational factors that promote innovation in these organisations. Innovation in educational orgnisations has characteristics of service innovation. Therefore, the elements of service innovation (dimensions of novelty) and the factors that most affect the success of service innovation are presented in the middle of the figure below. Also the characteristics of a service innovation process are presented. The left and right columns in the figure present the elements of organisational culture and social networking that have an effect on generating service innovation. On the left, the values, culture types and management practices that promote innovation are presented. On the right part the benefits of networking for innovation and the network structure and competency that promote innovation are shown. These three topics are studied empirically in Finnish AECs and the findings are presented and discussed in chapters 4 and 5.

INNOVATION IN EDUCATIONAL ORGANISATION

Culture promoting innovation

Values and norms promoting innovation:

- Uncertainty acceptance, risk taking, and tolerance for failures and conflicts
- Freedom, flexibility and adaptability
- Participative and quick decision making
- Future and external/customer orientation
- Trust, openness and respect
- Emphasis on development and taking rapidly advantage of opportunities
- Support for change, willingness to experiment and goal orientation

Culture type promoting innovation:

- Adhocracy culture type promotes innovation through flexibility, creativity and external orientation
- Multiple culture type (no dominant culture) or balance of four types promotes flexibility and innovation by competing values and characteristics.
- Clan culture type helps innovation through good communication, learning, participation and openness
- Market culture type helps innovation through external focus, risk taking and high expectations for action

Management practices promoting innovation culture
- Strategic goal setting
- Manager's own positive view of innovation
- Respecting and caring for people
- Motivating, rewarding and empowering
- Building capabilities for change and innovation

Generation of service innovation

Dimensions of novelty

- New service concept
- New customer interaction
- New value system and/or partners
- New revenue model
- New delivery system

Success factors

Service-related factors: e.g. added value/cost, frontline expertise, service quality evidence

Market-related factors: e.g. customer need/fit, market potential, protection against imitation

Organisation-related factors: e.g. innovation and resource fit, innovation strategy, culture and management

New service development factors: e.g. formality and content of the innovation process, customer participation in the innovation process, involvement of champion

Service innovation processes
- Overlapping phases
- Order of phases may vary
- Emphasis on idea generation and piloting
- Role of customer and partners emphasized at every phase

Social networking and promoting innovation

Benefits of networking for innovation
- To reduce costs, time and risks
- To extend knowledge, skills competencies and creativity
- Possibility to focus on one's own expertise

Good conditions for communication

- Lack of hierarchy
- Use of cross-functional and diverse teams, internal mobility, informal communication and close customer relationships

Network competency

- Ability to identify good partners and create fruitful collaboration
- Available resources
- Network orientation of management
- Integrated communication structure
- Culture supportive of networking
- Rich social interactions
- Ways of working, roles and responsibilities, creating trust
- Ensuring that people enjoy working together.

Network structure promoting innovation

- Balanced mixture of cohesive and sparse networks
- Relatively central network position
- The strength of weak ties
- Use of structural holes
- Good social capital (trust and communication)

Figure 11. The synthesis of the literature review

3 THE RESEARCH DESIGN AND METHODOGY

The objective of this study is to determine significant factors that have an effect on innovation in non-formal adult education organisations. The research question of this study is: What are the characteristics of an innovative non-formal adult education organisation? The main research question of the study is further divided into the following three sub-questions: 1) What are the benefits and drivers of innovation in these organisations and what types of innovations are generated in AECs and how? 2) What type of culture supports innovation in innovative AECs? 3) What cooperation practices and social networks support innovation in innovative AECs?

This section first presents the research approach of the study, methodological choices and design of the study. Secondly, the case study method is discussed as the research method. Finally, the data collection and analysis of the data is presented.

3.1 The research approach

In the first pre-study phase of this study, a survey is used to get a preliminary understanding of innovation from the perspective of all AECs in Finland. A survey is an effective and economic way to collect data when there are many informants. Data for a survey is typically collected with a questionnaire. The benefit of a survey is that a great amount of data can be collected and many questions can be asked. Also the effect of the researcher is minimal. The disadvantages are often a low response rate and the possibility to misunderstand questions. Moreover, making additional observations is not possible (Heikkilä 2001).

Because of the hermeneutic nature of this study, a qualitative case study method was a natural choice for the main research approach. Yin (2009) defines a case study as follows: "A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident." The method is particularly suitable for the examination of a phenomenon where the boundaries between the phenomenon and context are not clearly evident (Yin 2009). A case study is a research strategy which focuses on understanding the dynamics present within single settings (Eisenhardt 1989) and can involve either single or multiple cases and numerous levels of analysis (Yin 2009). In this study, the phenomenon is innovation and the research context is non-formal adult education organisations, in this study Finnish adult education centres. The nature of this multicase study is mainly descriptive (describing, analysing, explaining and understanding) and normative (modelling, guiding and controlling) (Olkkonen et al. 1991).

Case studies typically combine several data collection methods such as archives, interviews, questionnaires, documents, and observations. The evidence may be qualitative, quantitative or

both (Yin 2009, Eisenthardt 1989). The case studies can be used to provide description, test theory or generate theory. The main data collection method in this study is interviews. Hirsjärvi and Hurme (2008) have suggested several reasons for the use of interviews: the opportunity to clarify questions, pose additional questions and to link the answers to a broader context. In qualitative research, the experiences of the informants are important. In this study, the interest focuses on the perceptions and experiences of the principals and full-time staff of case AECs.

This study is a comparative multi-case study. In principle, a multi-case study provides a more complete picture of the phenomenon under research, and its use is recommended if possible (Yin 2009). The number of cases depends on the study design, but in general, they are few. This study aims to understand and describe innovation at four innovative AECs.

Case study scholars such as Yin (2009) emphasise the importance of using a theoretical framework to guide the study. Therefore, this study examines innovation through the lens of service innovation, the organisational culture through the Competing Values Framework and through organisational values, and cooperation through social networking. According to Steward et al. (2002), a case study can be divided into five key stages. The first step is to set the research questions. The second step is the instrument development and the selection of suitable cases so that the data can be collected for analysis. Here, the development of the instrument means the decision on the questions for the interviews, and designing the questionnaire for the culture assessment. The third step is data gathering. The data here consists of written material and interviews and the culture questionnaire. The fourth step is the analysis of the collected data, including what has been learned and how it is presented. The fifth step is the dissemination of research findings.

This study began in practice in spring 2008. First, literature on innovation management was explored. Based on the literature and the experiences of the researcher of the AEC system as a context, a pre-study survey was conducted among the full-time principals of the AECs in order to determine the meaning and drivers of innovation and how the AECs innovate in practice. The survey was conducted in spring 2009. As the survey revealed that innovation is an important element at AECs, the researcher wanted to deepen the understanding of the phenomenon. As the literature of innovation management emphasised the meaning of organisational culture and cooperation in promoting innovation in organisations, these elements were chosen as the backdrop for studying innovation at AECs further. These perspectives were also interesting because AECs are typically very loose network organisations where both cultural issues and cooperation are great challenges. Exploring the innovation literature from these points of view began in the autumn of 2010. A qualitative multi-case study design was selected as a primary design method and cases for that were selected mainly based on the pre-study survey. The data collection was designed in the autumn of 2011 and the interviews were carried out in early 2012. Also an inquiry related to

studying organisational culture using the Competing Values Framework was conducted with the interviews.

3.2 Research strategy

The methods of this study are mainly qualitative, but certain quantification will also be used.

3.2.1 Data collection

Phase 1: Pre-study survey
The pre-study phase of this study focuses on studying the meaning of innovation at Finnish AECs, what drivers and barriers influence it, and identifying how AECs innovate. The objective was to construct an initial description for an innovative adult education centre. Another important objective was to search for innovative AECs for the second multi-case phase. The pre-study data was collected by e-mail survey from the full-time principals of Finnish AECs.

The data collected by a survey can be either qualitative or quantitative. In this study, the questionnaire consisted of open, structured and semi-structured questions (Appendix 2). The first questions 1-3 addressed the background information of the respondents and questions 4-6 that of the institutes. After that, the questionnaire consisted of five themes: the need for innovation at AECs (questions 7-8), the drivers and obstacles of innovation (questions 10-17), innovativeness in the institutes at the moment of responding (questions 18-21), how the institutes innovate (questions 22-30 and 38) and the resources for innovation (questions 32-34). In addition, respondents were asked to write the vision of their institute (Question 41) and describe an innovative AEC in general (Question 9). The questions 33, 35 and 37 are not used in this study. Every theme included (semi)strutured and open questions. In multiple choice questions, the respondents were asked to select one to three alternatives and were also given the opportunity to expand on the answers. A five-point Likert-type scale was used in 14 questions with responses ranging from 1-5.

In the pre-study phase, the population was the principals of AECs. At the beginning of the year 2009, there were 206 AECs in Finland. According to the Act on Liberal Adult Education, every AEC must have a principal. The principal can be either full-time or part-time. In the latter case, usually a manager of another educational or municipal organisation or association works as a principal of an AEC alongside his or her primary work. A questionnaire was produced using Google Docs and was sent to all principals by e-mail in the spring of 2009. However, in the first round almost all responses came from institutes which had a full-time principal. As a result, the target group was limited only to such institutes. In addition, AECs that are members of the Finnish Federation of Settlements were included in the target group. The number of full-time principals and principals working in an AEC that is a member of Finnish Federation of Settlements was altogether 130. Principals were reminded twice to

respond to the questionnaire. Eventually, 92 responded to the survey, two of them principals of two AECs. These were counted only once and thus the entire sample was 128 institutes. The final response rate was 72%. One of the principals was working as a fixed-term principal, one was a substitute principal, one was a language teacher and three principals were working in an AEC of the Finnish Federation of Settlements.
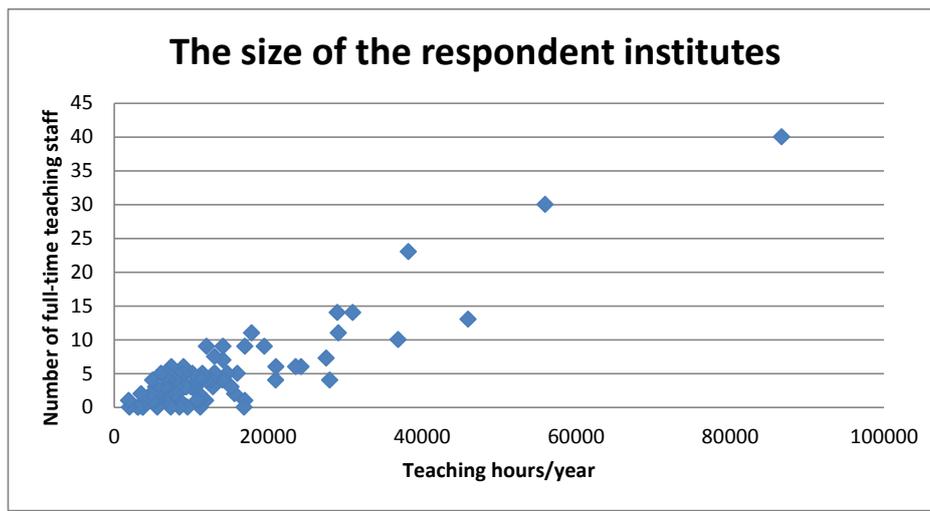
Figure 12. The size of the institutes in the pre-study phase

The Finnish AECs are typically small or medium-sized insitutes. Only a few organisations are large with great volumes of teaching hours and full-time teaching and design staff. Figure 12 presents the respondent institutes of the pre-study phase. The size of the respondent institutes ranged from 1 887 to 89 000 teaching hours and from no full-time teaching staff to 40 full-time teaching staff members, including full-time teachers and designers. In this study, there were one institute with over 86 000 teaching hours, two institutes with 40 000–80 000 teaching hours, three institutes with 30 000–40 000 teaching hours, seven institutes with teaching hours between 20 000 – 30 000, 31 institutes with 10 000–20 000 teaching hours and 44 institutes with under 10 000 teaching hours. Four respondents did not tell the number of hours. Nine of the responded institutes had no full-time teachers, and 57 institutes had one to five full-time teachers.

Figure 13 shows the profile of the respondents, N = 92. Over half of the respondents (65.2%) were women, 63% of the respondents were over 50 years of age and only 8.7 % were under 40 years old. A little over a half of the respondents (51.1%) had been working as a principal at an AEC under 10 years and 31.5% under 5 years. A total of 17.4% of the institutes were privately-owned.

Characteristic	Options	%	n
Gender	women	65.2	60
	men	33.7	31
	no answer		1
Age	≤30 years	0	0
	30-39 years	8.7	8
	40-49 years	28.3	26
	50-59 years	48.9	45
	≥60 years	14.1	13
Work experience as a principal	≤5 years	31.5	29
	5-10 years	19.6	18
	10-15 years	14.1	13
	15-20 years	15.2	14
	≥20 years	16.3	15
	no answer	3	3
The location of the institute	South Finland	31.5	29
	East Finland	15.2	14
	West Finland	40.2	37
	Oulu	7.6	7
	Lapland	5.4	5
Administrator	Municipal	82.6	76
	Private	17.4	16

Figure 13. The profile of the respondents of the pre-study phase, N=92

Phase 2: Multi-case study

Case selection

In a multi-case study, random sampling is not necessary and not even advisable in the selection of cases (Eisenhardt 1989). Each case must serve a specific purpose for the overall research goal (Stake 1995, Yin 2009). Yin (2009) suggests that the selection of cases should be based on the idea that they aim to obtain either similar or contradictory results. Also, the cases must be selected so as to maximise what can be learned in the period of time available for the study. The primary objective of the study is to identify the defining characteristics of an innovative adult education centre. Consequently, the main objective of case selection was to select cases that represent innovative institutes. The selected AECs are presented in a Table 5.

The selection criteria included the following:

1. Institutes that assessed their innovativeness with a score of five in the pre-study survey. Six out of 92 respondents did so.
2. Recommendation of the Executive Director of The Finnish Association of Adult Education Centres
3. An institute that has received a quality award because of its innovative networking practices

Table 5. The case selection of the study

	Case A	Case B	Case D	Case D
Selection criteria	1	1 and 2	2 and 3	1
Type of institute	Rural institute with a private administrator	Municipal institute near the capital	Municipal institute in a small city	Municipal institute in a big city
Teaching hours of liberal education	13 000	13 000	18500	28 000

The time between the pre-study and multi-case study was approximately 2.5 years. It was revealed, however, at the early stages of the case interviews and soon after the interviews of the principals that the situation in Case institute D had changed markedly after the pre-survey. According to the interviewed teachers and designers and also according to the annual report 2010 of Case D, the institute has a history as an innovative institute, but many changes, such as the changing of the principal and vice principal and the type of contract with the administrator, a possible upcoming merger, the ongoing renovation of the main building and operating in temporary premises, had contributed to that the situation at the institute had become more confusing and uncertain. The intervieweed teachers and designers described that all these changes and fear of the coming merger had also affected the atmosphere in terms of development and especially innovation. Because of the confusing situation, the vice principal and some leading teachers were not initially willing to take part in a study dealing with innovation. However, the majority of the leading teachers and designers were finally interviewed and thus the sample of Case D can be considered reasonably comprehensive. Because the basic criterion of the case selection in this study was based on the principal's understanding and estimation of the great innovativeness of the institute and Case D had fulfilled this criterion, it was decided to include also Case D into the survey.

Interviews
In the multi-case study, the data was primarily collected through interviews. The interview method was selected because the subjects studied – especially innovation and culture – are not always clear or even familiar phenomena to the interviewees. With the help of an interview, a

researcher aims to find out what a person thinks, or why he or she acts the way he or she acts and what his or her viewpoints and attitudes are (Tuomi & Sarajärvi 2003). An interveew is a flexible way to collect information. It allows greater control over the situation (e.g. by the sequencing of questions) while providing the opportunity for making clarifications and collecting supplementary information. The interviewer may set more specific questions and engage in free discussion with the interviewee (Metsämuuronen 2001, Hirsjärvi et al. 2004)

In this study, in-depth and semi-structured interviews were conducted. The interviews focused on pre-selected themes (innovation, organisation culture and networking) and the form and order of questions was not strictly defined (Hirsjärvi & Hurme 2008). The themes and main questions are presented in Appendix 5. The first theme dealt with innovation at AECs. The goal was to determine how the interviewees understand innovation as a concept and as a phenomenon at the institutes. The second theme was related to the organisational culture. The concept of organisational culture is an abstract and broad construct which is not easy to define or measure. Each organisation is presumed to have a unique culture because the culture has been developed as a function of the unique history of the organisation (Campbell 2004). The artifacts cannot be used to assess the culture in AECs, as the courses of AECs are held in many places which are owned by other organisations. Thus the physical environment is not built by the AEC. Only if the AEC has its own building where the administration is situated can the physical environment shape the values of the organisation, but also in those institutes major lessons are held in other rented premises, usually buildings of basic education. That is why organisational members' words have been used in this study as measures of organisational culture based upon the belief that language and verbal responses are an appropriate means of identifying organisational culture and values. The type of culture was approached using the Competing Values Framework. The third theme of the interviews was related to internal and external cooperation and social networks and how networking is valued in the case institutes. All these themes and questions for the interviews were sent to the informants in advance by e-mail.

This study does not attempt statistical generalisations, which, along with the organisation structure of AECs, affected the choice of the number of interviewees. AECs typically have a very small full-time staff and a large number of part-time teachers with diverging weekly teaching hours and who are committed to the institutes to differing degrees. This is why only the principals and full-time teachers and designers were selected as interviewees. Because in one case institution there was only one full-time teacher, also one experienced part-time teacher was interviewed, and in one institute the principal recommended one additional part-time teacher to be interviewed. A total of 23 interviews were conducted (Case A: 5, Case B: 4, Case C: 6, Case D: 8). Despite the relatively small number of interviewees, it appeared that saturation was reached. Thus the number of the interviewees can be considered sufficient in order to obtain an understanding of the phenomenon.

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During the first interview round in January 2012, the principals of each case institute were interviewed, and during the second round in February-April 2012, the rest were interviewed. Most of the interviews were face to face, but because of some teachers' sick leaves or schedules, some informants were interviewed by phone. The interviews lasted 40 min. - 2 h. They were recorded and transcribed before analysis. In addition to the interviews, data was collected from written documents of the institutes, such as action plans, annual reports, curricula, websites, Facebook and newspapers.

Assesment of the culture type using OCAI
The Organisational Culture Assessment Instrument (OCAI) developed by Cameron and Quinn (1999) based on the CVF was used to identify the culture types. Through the use of the OCAI, an organisational culture profile can be drawn up by establishing the organisation's dominant culture type characteristics. The questionnaire used to gather data from the sample consisted of a slightly modified version of the original OCAI aiming to be better understandable in the conterxt of AECs. Two almost identical questionnaires were used, one for principals and one for the teachers and designers (Appendix 1). Six characteristics serve as the basis for the OCAI: 1) the dominant characteristics of the organisation, or what the overall organisation is like, 2) the leadership style, 3) the management of employees or the style that characterises how employees are treated and what the working environment is like, 4) the organisational glue or bonding that holds the organisation together, 5) the strategic emphases that define what areas of emphasis drive the organisation's strategy and 6) the criteria of success that determine what is rewarded and celebrated. The OCAI questionnaire includes these six charactiristics and four alternative statements representing four different cultural orientations (clan, adhocracy, hierarchy and market cultures), making a total of 24 questions. A total of 22out of 23 interviewees completed the organisational culture assessment questionnaire (OACI). A part-time teacher from the case institute D did not answer the questionnaire because his Finnish skills were insufficient. The respondents were asked to rate their organisations' culture on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The questionnaire is presented in Appendix 1.

3.2.2 Data analysis

Reasoning is the process of using existing knowledge to draw conclusions, make predictions, or construct explanations. The three methods of reasoning are the deductive, inductive, and abductive approaches. Inductive reasoning is suitable in moving from specific observations to broader generalisations and theories, whereas deductive reasoning is applicable to drawing specific conclusions from more general observations. In an inductive study the emphasis is on the data, which means that, for example, the units of analysis are not predestined and theory will be constructed based on individual observations. The inductive approach is not based on a theory or testing hypothesis, and the researcher does not decide what is important (Hirsjärvi et al. 2004). In deductive research, the data analysis is based on an existing theory or model

and the aim is to test this model or theory in a new context. In this study, the reasoning is primarily inductive in both phases.

The qualitative data in this study (qualitative data of the survey in phase 1 and the interview data and written documents of case institutes in multicase phase 2) is analysed using inductive content analysis. The aim of the inductive content analysis in this study is to attain a good understanding and description of the phenomenon (here, innovation from the viewpoint of a non-formal adult education organisation). Content analysis is a method of analysing written, verbal or visual communication messages (Cole 1988). Inductive content analysis can be used if there are no previous studies dealing with the phenomenon or when it is fragmented. Content analysis is a research method for making replicable and valid inferences from data to their context, with the purpose of providing knowledge, new insights, a representation of facts and a practical guide to action (Krippendorff 1980). The outcome of the analysis is concepts or categories describing the phenomenon. Usually, the purpose of those concepts or categories is to build a model, conceptual system, conceptual map or categories.

Inductive analysis can be described as a three-stage process of organising the qualitative data: 1) open coding, 2) creating categories and 3) abstraction. In the open coding phase of this study, notes and headings were written while reading the data to describe all aspects of the content. After that, the first categories were generated. The categories were grouped under higher-level headings in order to reduce the number of categories by collapsing those that are similar or dissimilar into broader higher-order categories. In the abstraction phase, the aim was to formulate a general description of the research topic, which in this study is characteristics of an innovative an adult education centres. In findings (chapter 4), the main themes, subthemes and their content are presented. Direct quotations are used to support and describe the interpretations of the researcher.

Data analysis on the pre-study phase

The quantitative data of the pre-study phase was collected with multiple-choice questions (questions 11, 13 and 15) and five-point Likert-type scale questions. The descriptive statistics of quantitative data include frequencies and percentages to present the main characteristics of the sample. The objective of the quantitative data was to promote a preliminary understanding of the studied phenomenon. In multiple-choice questions the respondents were asked to choose the one to three most important alternatives. However, some respondents chose more. Only the responses which included one to three choices were accepted. Because of this, the accepted number of responses in multiple-choice questions were the following: Question 11: 69, Question 13: 85 and Question 15: 77.

The main focus in the pre-study phase, however, is on qualitative data. The qualitative data of the survey consisted of open questions (questions 10, 17, 18, 28, 41, 42 and 43) and comments on the structured questions (questions 9, 12, 14, 16 and 30). The open questions were properly answered, but only a part of the principals (a total of 91 respondents) gave

comments. The number of replies received, question by question, is presented in Appendix III.

Because the principals' qualitative answers on the studied phenomenon were somewhat scattered in different questions, the final qualitative pre-study data for the analysis was obtained by combining the answers of all qualitative questions and comments into one final pre-study data set. For the resulting data, the following questions were presented:

1. *How do the principals see the meaning and the benefits of innovation at the institutes*?
2. *What are the key drivers and barriers of innovation at the institutes?*
3. *What kinds of innovations have the institutions developed and how?*
4. *How do the principals describe an innovative AEC?*

The aim of this data and these questions was to understand the nature of innovation and its meaning to AECs in general and find prelimany answers to the research questions and specifically to sub-question one.

In the questionnaire, the concept of innovativeness was defined as the ability of a leader, employees, a team or an organisation to produce and apply new ideas and develop them into new or improved products, services, working methods, technology or markets.

An example of the categorisation of the qualitative pre-study data is presented in Appendix 4. The original statements were first simplified into one key idea. The simplified staments were then grouped under higher-level typical characerics. The typical characteristics were then further grouped under subthemes. The subthemes used in the pre-study phase were: 1) The meaning and the benefits of innovation, 2) The drivers of innovation and 3) the barriers of innovation. A description of each subtheme was then formulated using their content (typical characteristics). Also the frequencies of typical characteristics under each subtheme in the pre-study data were calculated in order to find out how often each characteristic appeared in the data.

Data analysis on the multi-case study

In the case study phase, each case was first treated independently as a single entity. The data were analysed by identifying first the statements linked to the three themes: innovation, culture and networking. Then the data was analysed using inductive content analysis as in the pre-study phase. An example of the analysis of the interview data on the theme of innovation is presented in Appendix 4. After the original statements were reduced, they were grouped under typical characteristics, which were further grouped, and the final subthemes were formulated. First, the description of innovation in each case was formulated using subthemes and their content (typical characteristics). When the data on organisation culture was analysed, the original statements were first reduced and then grouped under typical characteristics. These typical characteristics were then grouped under the subthemes that were partly based on the six characteristics of the organisation in the Computing Values Framework: dominant characteristics, organisational glue, strategic emphases, organisational

leadership, management of employees and criteria of success. In the analysis, the two characteristics, organisational leadership and management of employees, were combined into the subtheme "leadership and management" and the two characteristics of strategic emphases and criteria of success were combined into the subtheme "strategy". As a result, four subthemes were adopted: dominant characteristics, organisational glue, leadership and management, and strategy. In analysing the data on networking, the data was grouped under subthemes of internal and external networking.

After the analysis of individual cases, a cross-case analysis was conducted. The aim was to combine and compare the results of different cases to identify if there were any common factors associated with the phenomenon and thus to identify the defining characteristics of an innovative non-formal adult education organisation.

Analysis of culture type assesment instrument (OCAI)

The culture type of each case institute was assessed using the Organisational Culture Assesment Instrument (OCAI). The cultural profiles of the principals and full-time staff were derived by calculating the mean score for each type (adhocracy culture, clan culture, market culture and hierarchy culture) from the six characteristics (dominant characteristics, organisational leadership, management of employees, organisational glue, strategic emphases and criteria of success) from each AEC. The results were graphed on the basis of CVF to provide a holistic view of each organisational cultural archetype. Statistical methods were not used because of the small amount of respondents per case (4-8) (Metsämuuronen 2004).

The culture type that had the highest score was used as the dominant culture type of the respondent organisation. Institutions reporting identical or almost identical scores on two or three dominant culture types were designated as multiple culture types. Institutions reporting four identical culture types were designated as balanced culture type.

4 EMPIRICAL FINDINGS

This research answers the research question: What are the characteristics of an innovative non-formal adult education organisation? The viewpoints are organisational culture and social networking. In this section, first the findings of the pre-study phase and then the findings of the multi-case study phase are described in detail. The cases of the multi-case study are first presented separately, and in the cross-study section, the cases are compared with each other in order to find if there are any characteristics that are common especially in the three innovative cases A, B and C.

4.1 The findings of the pre-study phase

This section presents the findings of the pre-study phase. The aim is to understand the nature of innovation and its meaning to AECs in general. Based on the results of this phase, a first description of an innovative AEC is constructed.

4.1.1 The benefits of innovation at AECs

The respondents strongly agreed that the need for innovation at AECs (Question 8) is great (Table 6). More than 97% (89 respondents) answered that innovation is needed much or very much. The two respondents who answered that they need innovation little or somewhat represent relatively small institutes which do not have any full-time teachers.

Table 6. The need for innovation in AECs

No	Question	1 Not at all	2	3	4	5 Very much	Mean	SD	No answer
8	Do AECs need innovation?	0	1.1%	1.1%	34.5%	63.3%	4.6	0.57	1

The data shows two different ways to understand the concept of innovation. Most of the principals (81 respondents, 89%) seem to understand innovation both as a process and an outcome and that it is needed broadly at the institute: in planning the course offerings, in teaching methods, in administration, in marketing, in the development of teaching and processes, in financing and in recruiting temporary workforce, for example. Innovation is also needed in countless different interactive situations at AECs where the profile of student groups and teachers is very heterogenic. Ten (11%) respondents mentioned innovation only in connection with new courses.

The meaning of innovation at institutes was sought by asking about the benefits of innovation (Figure 14) and comments on the need for innovation. The respondents were asked to choose

the one to three most important benefits in a multiple-choice question (Question 11). According to responses, the most important benefits are improved customer satisfaction, improved image and attractiveness of the institute, and developed know-how in the institute. The number of accepted responses in question 11 was 69.
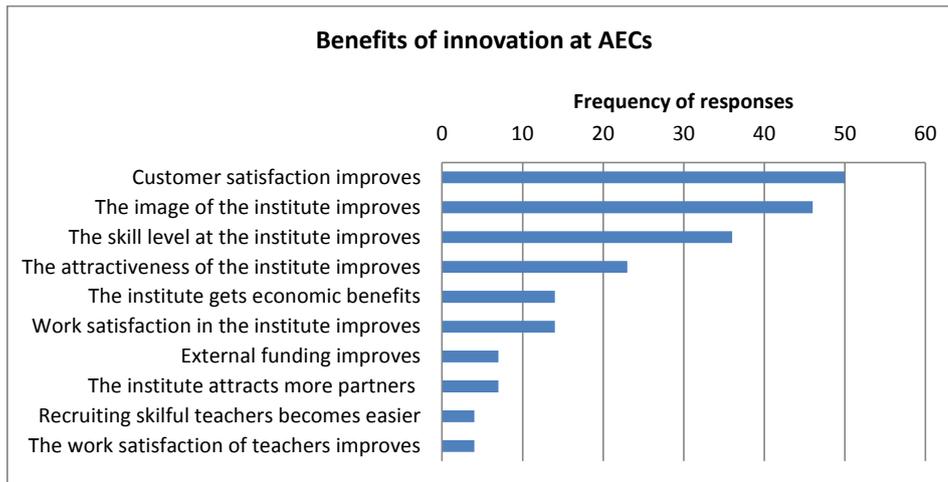
Figure 14. Descriptive statistics: the frequency of the benefits of innovation in AECs based on multiple-choice question 11

The respondents felt that innovation has many benefits and that it was not easy to choose only some of them. In addition, the issues have an effect on each other. Six respondents stated that innovation creates a snowball effect, or a positive circle that leads from one thing to another and thus feeds on itself. The positive circle produces knowledge, well-being and productivity, which produce more innovations. The data also suggests that both the institute and its environment are winners because of the innovative activities of AECs.

When analysing the qualitative data, the following five categories describing the meaning of innovation in AECs were identified (Table 7):

1. The institute will be more attractive and customer satisfaction will increase.
2. The institute will be on the cutting edge and a pioneer in its area, responding more quickly or efficiently to changing customer needs and new opportunities.
3. Innovation prevents its decline.
4. Innovation is at the heart of the institute's primary mission.
5. Innovation is a solution to the shortage of resources.

The Act on Liberal Adult Education gives AECs extensive freedom to choose how to operate. Because AECs have no formal teaching duties and objectives, their operation is based almost completely on fulfilling the needs and expectations of their customers. Crucial challenges

include responding to the changing needs of the target group and reaching new customers, especially young people and men. New students will not be interested in AECs if their image is old-fashioned. In order to be innovative, AECs also need innovative teachers and partners. If the curriculum and marketing material show that the institute is open-minded and reforming, it will increase its attractiveness also in networking and recruiting. As one respondent states: "*If an institute is not innovative, innovative partners are not interested in it.*"

Table 7. The meaning of innovation at AECs according to responses

Key categories: Why is innovation important?	n	% respondents N=61	Example statement
The institute will be more attractive and customer satisfaction will increase.	20	32.7	*"The students come to the institute only because of a topical and interesting course."*
The institute will be on the cutting edge and a pioneer in its area.	19	31.1	*"If we had no innovation, there would be no activity. You must constantly be on the cutting edge, see and identify the weak signals, try, succeed and also fail."*
Innovation prevents decline.	17	27.4	*"An institute that is not innovative will not survive."*
Innovation is at the heart of the institute's primary mission.	15	24.5	*"Innovation is not an isolated element of the operation which should particularly be fed. It is a basic tool to accomplish the basic mission and vision of an institute".*
Innovation is a solution to the shortage of resources.	12	19.7	*"I think it would be all too easy to invoke the lack of economic resources as an obstacle. On the contrary, the lack of economic resources, which is a fact in AECs, often provokes creativity and innovation".*

Respondents find that AECs need innovation to respond to the changes in their environment and to be on the cutting edge and even a bit ahead of their time. Customers are more demanding than before. New generations wish to study in different way than former generations and are interested in different issues. Seventeen respondents point out that without innovation, AECs will not survive. The situation is the same as in private companies. One respondent states: "*Without innovativeness, the AEC will fall asleep and the negative results will be seen in a few years.*" Many AECs (especially small ones in rural areas) have no full-time teaching resources and their curriculum may easily remain unchanged year after year, as there are no resources for renew activities. The amount of students may gradually start to decrease, and in consequence, also the funding from municipalities may decrease. With innovativeness "*the future becomes possible*", as one respondent presented.

The primary mission of AECs is to respond to local and regional education needs and to provide opportunities for self-learning and civic capacity building. Some of the principals describe the role of innovativeness at the institutes as "*built into the basic idea of the institute*", and as "*the core of its activities*". Also the nature of any education organisation includes the idea to develop the organisation continuously over time. The respondents describe the role of innovation at the institute:

> *When the society around us is changing, the staff needs innovation capability to invent and create new methods and contents in order to carry out the statutory duty of the institute in its own region.*

> *Innovation itself is not important, but how it helps the institute to carry out the basic functions of liberal education.*

According to the responses, AECs are both the guardians of traditions and developers of innovations. In addition, one mission of AECs is to transfer skills and life experiences of previous generations to new generations. One respondent describes the situation as follows: *"It is like a bride who wears both something old and something new."* Many respondents agree that designing the curriculum is a big challenge for institutes because it should be a combination of old and attractive courses and new experiments, the attractiveness of which is not yet known. The role of innovation in AECs is described, on one hand, as a separate wild part of operations, where there is room for improvisation and side-tracking, but on the other hand, it is linked to all operations; as one respondent stated: "*innovation which is an isolated part of operation is a waste of resources.*"

According to the responses, the scarcity of resources is a controversial matter from the perspective of innovation. On one hand, scarce resources are considered to be an obstacle to innovation, but on the other hand, they force institutes to be innovative. One principal remarked: "*I regard our institute very innovative, as also our regional partner institutes do. To be innovative, we have not needed extra money or additional staff, both of which we have very little of.*" Another principal mentions the same thought: "*even in conditions of scarcity, there can be innovative individuals who are creative and dedicated and get great results.*" According to the responses, AECs need a great deal of ingenuity and effort to operate with little money and resources, and at the same time keep activities versatile, modern and attractive. The respondents describe innovation in relation to resources in very different ways:

> *"Create something out of thin air" describes at least our institute perfectly: with diminishing resources we have created quite a comprehensive curriculum in our rural region.*

> *I have no innovativeness left when all my energy has been used to come up with savings. However, innovation is also required when you have to give up something and replace it with a lower-cost solution.*

> *It is possible for an institute operating with scarce resources to find new insights into proven practices.*

Innovation and economy actually have nothing to do with each other. The weak economic situation may even lead to innovative behaviour.

According to the pre-study data, one additional resource that comes from innovativeness in an institute is increased productivity and enthusiasm for work. The development of work practices and new courses will inspire and drive. As elements interact with each other, one successful idea or innovation also develops other activities. Evolving innovativeness increases productivity, well-being and knowledge, as the respondents describe:

Without any change, the staff falls asleep and the work becomes routine.

Even a small change in working methods is a great stimulant.

The staff becomes energised just from creating something new. The best is cooperation and planning together.

It is interesting that only two principals commented on the economic benefits of innovation. The other wrote that innovation is not realised as economic benefits. The other mentioned that financial benefits arise from new students' course fees. It is also interesting that none of the respondents mentioned improved learning outcomes as a benefit of innovations.

4.1.2 Characteristics that affect innovation at AECs

Characteristics affecting innovation at AECs were sought by asking principals to choose the three most important barriers (Questions 13 and 14) as well as drivers (Questions 15 and 16) of innovation. In addition, principals were asked to describe the effect of the AEC system itself on innovation activities (Question 17) and how they see their purpose as the managers for innovation in their own AEC (Question 18).

The AEC system as a basis of innovativeness

All respondents felt that the Act on Liberal Adult Education gives a great deal of freedom for innovative activities. Even the name "liberal education" describes the type of activities in AECs. They are institutes that have no specific regulatory functions and they have no given curricula which they have to offer. In addition, AECs do not have a similar requirement to assess learning as formal education organisations do. The institutes are usually very independent, as well. Principals describe the freedom as follows:

This is a unique system, no legal obstacles, the only obstacle is your imagination.

If there ever was an institution that had the opportunity to innovate, it's the adult education centre! I do not think any other education organisation has so great an opportunity to be innovative.

Because the institutes have no mandatory curricula, it enables a flexible and rapid response to new needs, opportunities and changes in the environment and trends in the society. As students come to study on a voluntary basis and easily abandon the institute if they are not satisfied, the institutes are forced to keep their courses up to date. In practice, a new curriculum can be drawn up once or twice a year and new courses or teaching methods can be

implemented often also during the semesters. A lack of bureaucracy and a lean organisational structure increase flexibility, as well. A small full-time staff and a large number of part-time teachers make the staff structure very flexible. The institutes have a great number of teachers of different ages, education backgrounds and experience. This greatly supports innovativeness. Based on the responses, most principals feel that the teachers are very committed and relaxed.

> *The teachers have a desire to be innovative in their teaching. They are entrepreneurs in the sense that they have to market their courses through their own work and own personality because the education is not compulsory, but voluntary.*

> *The staff consists of people who do not work only for money but from the heart.*

> *Those who love their routines do not come to work in AECs.*

> *A good group of people, and innovations are generated. You can never over-emphasise the importance of good teachers.*

> *With an extremely broad variety of courses, and a lot of different types of skills, a variety of teaching methods and practices and by creatively combining them, you can create something new.*

The status of a teacher at an AEC is not authoritarian. Students are largely adults, and the relationship between teachers and students is usually equal and informal. Thus, it is possible for the teachers to become close with the students and learn to know their thoughts and expectations. In most AECs, there are many art courses which also attract creative people to work and study there. The extremely small number of full-time teachers at AECs is often considered more as a problem and as an obstacle to development, but from the perspective of innovation, it may be a benefit and trigger flexibility in operation. The curriculum can be designed according to needs and opportunities and not according to the current teachers' skills. New part-time teachers may bring new competence and enthusiasm into the institute every autumn and also during the semesters. The possibility experiment relatively risk-free with new courses, teaching methods, marketing techniques, and so on, provides a good basis for innovation at AECs. Teachers, customers and partners can offer new ideas. Failed experiments in general do not usually generate great economic losses.

AECs are currently an environment for learning targeted for the entire population. The age range is from infants to senior citizens. The number of students is high and students are very different in terms of their social and economic backgrounds and even nationality (e.g. Finnish language courses). The students' freedom to choose freely what and how they want to study is crucial. When studying is voluntary, students also are active and enthusiastic in learning. AECs are also working with positive things and the threshold to study is low. However, students come to study at an AEC only if the courses and teaching methods are attractive and interesting. It should drive the AECs to develop themselves. Customers must also have good opportunities to influence the curriculum and AECs can usually implement their ideas quickly.

The principals were asked to estimate the amount of human resources for development work in their own institute (Question 32). The responses suggest that the amount of resources is not good, but not extremely bad, either. A total of 35 respondents (38.5%) feel that they have only little resources and 7 respondents (7.7%) feel that there are no resources at all. Overall, 32 principals (35.2%) estimate that resources are available to some extent. Good resources were available to 15 institutes (16.5%) and very good resources only to two institutes (2.2 %) (Table 8).

Table 8. Human resources for development and cooperation at AECs (Question 32)

No	Question	1 Not at all	2	3	4	5 Very good	Mean	SD	No answer
32	How much human resources do you have for developing new things?	7.7%	38.5%	35.2%	16.5%	2.2%	2.7	0.92	0

Drivers and obstacles of innovation

Five of the respondents (5%) feel that there are no real obstacles to innovativeness, and if there are some, they are not insurmountable. Attitudes towards the obstacles seem to be crucial and it was suggested that it would be better to use the term constraint than the concept of an obstacle. The respondents who see no obstacles point out:

> *The sky is the limit for innovation at the institutes.*

> *There are many barriers, but only rarely do they completely inhibit innovative activities. They just require attention.*

> *There are necessarily no barriers for innovation when you approach the world around us inquisitively. It's more about the attitude and the practice.*

In multiple-choice question 13, the respondents were asked to choose the one to three most important obstacles. The responses suggest that the most crucial obstacles involve a lack of different resources (Figure 15). According to the responses to the multiple-choice question 15, the most significant drivers include the innovation capability of the staff and both internal and external networks (Figure 16).

It is also interesting to notice which factors were not among the three most important drivers in the multiple-choice answers. External factors such as the competitive situation, changes in the working environment and also new teaching technologies were mentioned only by some respondents. Similarly, institute size was not seen to have a crucial impact on innovation. One conclusion can be that the lack of resources is so crucial that the other factors do not rise to the top three.

Obstacles of innovation at AECs

Frequency of responses
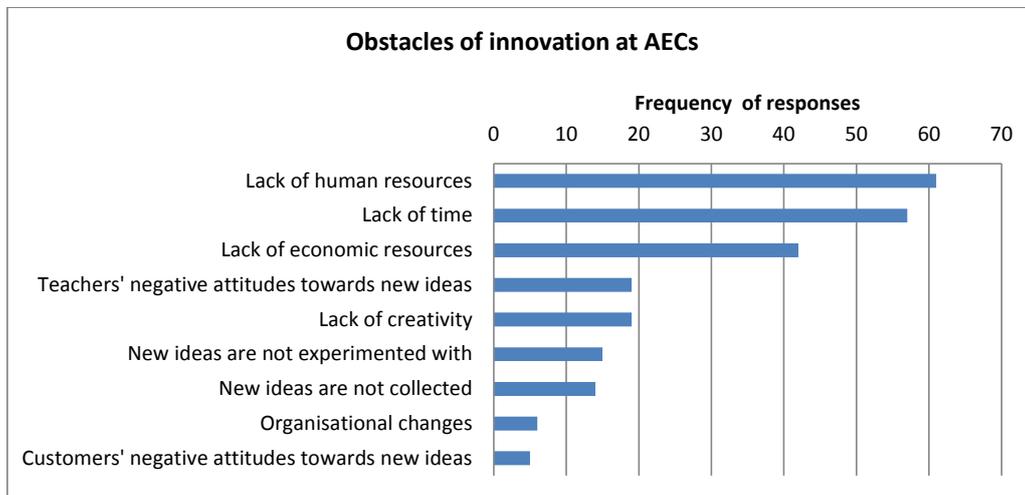
Figure 15. Descriptive statistics: the frequency of responses on the obstacles of innovation in AECs

Drivers of innovation at AECs

Frequency of responses
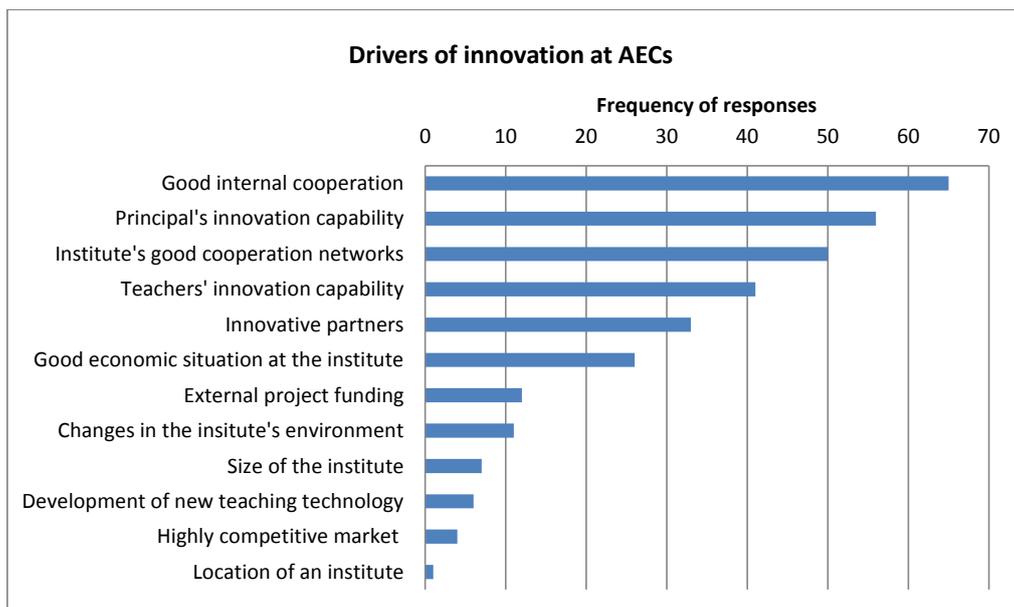
Figure 16. Descriptive statistics: the frequency of responses on the drivers of innovation in AECs

The written comments revealed the same significant factors affecting innovation as the multiple-choice questions: the amount of resources, cooperation networks and staff attitudes (Table 9). Other frequently mentioned elements were the atmosphere at the institute, the

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attitude of administration and the management style in the institute. Some elements were mentioned as both as drivers and obstacles.

Table 9. The drivers (D) and obstacles (O) of innovation at AECs according to the comments of the respondents. The number of responses is in brackets.

The drivers (D) and obstacles (O) of innovation at AECs	n	D	O	% respondents N=48	An example of statements
Scarce resources	31	x (5)	x (26)	65%	*"The number of full-time staff members is minimal compared to the volume of the institute's activities. As a result, the staff's working time is spent on practical issues – and it is not even enough for that."*
The attitudes and innovation capability of the staff	29	x (13)	x (16)	56%	*"It is easy to stick to the old. Why would somebody do something new when he can get the same salary by working less."*
Networks, cooperation and atmosphere at the institute	12	x		25%	*"The principal and full-time teachers are important but they cannot make the institute go forward on their own. We need good cooperation between everybody in the institute. Also brainstorming with external partners is much easier. I can say that a good network is necessary."*
The attitude of the administrator toward the institute	6	x (1)	x (5)	12.5%	*"The local administrator takes up the principals' time quite effectively by having them write various of reports; then the work focuses on the "wrong" things".*
The leadership at the institute	6	x		12.5%	*"Innovation depends on the principal."*
Development projects	3	x		6.3%	*"Projects are important in development and in different experiments."*

Scarce resources

The respondents discussed the lack of resources extensively in open questions and comments. The written data shows more clearly a "*harsh reality*" at the institutes. When the economic situation of municipalities has weakened, the institutes have been forced to economise constantly. As the economic situation at AECs is poor and there is little or no full-time staff, those working there (sometimes only a principal and an office secretary, who may also be part-time) become easily overburdened even with the usual everyday tasks. Principals' comments reflect the everyday situation:

Often the office is working with a really small staff, and the routines occupy all their time. Launching new ideas takes a lot of time and resources. It is much easier to offer the same course selection from year to year.

The time is spent on routine work, every day is fully booked with duties. Innovation requires "idle" time to think, and especially the time to discuss shared ideas and dreams with others.

Innovation needs a sufficient full-time staff. On the other hand, a large amount of resources is not a guarantee of innovation.

Although AECs have a wealth of part-time teachers – usually including great potential to develop new innovations – scarce financial resources, however, prevent the resourcing of the development work:

When the full-time staff is 1+1, it is hard work to squeeze innovation out of part-time teachers: they do not have time because the institute has no money to pay for design and idea generation.

The limited financial resources make it difficult, particularly for teacher training and the development of new courses. Some teachers work with dedication and design new courses in their own time. In particular the arts and crafts courses also need material for the development of new courses.

One reason for the lack of time is partly the fact that especially in municipal institutes, the principals must use their time for municipal activities such as meetings and the preparation of various reports. This means in practice that the office staff and possible full-time teachers must carry out a great deal of administrative work which usually belongs to the heads of organisations. As one respondent presents:

The possibilities for creativity and innovation have been continuously reduced. A significant part of my working time is spent on serving the administration. In the good old days, the situation was the opposite, as it naturally should be: the administration served the institute. (I have about 15 years' teaching experience, I know even this.) Now, the local administration constantly wants different papers and calculations on this and that. You have to compare the course fees in various institutes, to calculate the effects of fee increases, to calculate this and that impact on costs and reliability, and vice versa, to economise. From time to time, the atmosphere is surreal: curriculum development and design is not important.

The attitudes and innovation capability of the staff

According to the respondents, the innovation capability of AECs is largely in the people, in their attitudes and their creativity. A positive attitude of the staff towards work and a willingness to develop help to advance innovation in the institutes. It is interesting that in spite of the scarcity of resources, there seems to be quite a deal of enthusiasm for development (Table 10). None of the responses indicated that there is no willingness at all and only 4.4% suggested that there is only little enthusiasm. Almost half (46.7%) of the respondents felt that the staff is enthusiastic and 12.2% felt that the staff is very enthusiastic.

Table 10. The amount of enthusiasm for development work (Question 33)

No	Question	1 Not at all	2	3	4	5 Very good	Mean	SD	No answer
33	What is the amount of enthusiasm for development work in your institute?	0	4.4%	36.7%	46.7%	12.2%	3.7	0.75	1

The principals and full-time teachers are those whose positive attitude is crucial to the innovativeness of an institute. The careers of full-time teachers and many part-time teachers at AECs are usually long and the turnover is low. Although this can be an obstacle to innovation, only two of the principals mentioned that they wanted to have new, eager and young teachers to give power to the development work. Also, many students are loyal to the institute and they attend the same courses year after year. AECs are characterised by the fact that students will no longer attend the classes if they are not satisfied. Although the students usually register every autumn especially for the same arts and crafts and physical education courses, they expect that the teacher has something new to offer. This pushes teachers to renew the contents of their courses. According to the respondents, also an enthusiastic and creative attitude towards the work helps in finding additional resources.

> Of course, the principal needs to have innovation capability, but you cannot be an expert in all areas, so the emphasis is, after all, on the teachers' innovation capability.

The principals listed many attitudes that limit innovation: stuck thoughts, satisfaction with the status quo, the lack of questioning, daring and risk-taking, unwillingness to make the effort, a strong need for safety and adherence to the old, and being accustomed to working and designing alone (teachers). Although the ideology of AECs is based on liberal education, AECs today must also take into account economic issues, which is not easy to accept by those who have been working at AECs for many decades. The principals describe the obstacles in the attitudes:

> When the staff has had the same job for a long time and starts to get old, their thinking will become narrow, people no longer see new opportunities, they are afraid of doing something new and they don't want to try anything new, especially if they have previously had bad experiences. People easily get into a rut and it will creep up on them. Enthusiasm may be lost and it does not promote innovation.

> Even if the atmosphere at the institute is excellent, a young, enthusiastic, innovative teacher with many ideas would bring a fresh, new perspective to the community. A young age is in itself no guarantee of the above.

> We need to listen intently and be open-minded. It is always easier to find barriers than new opportunities. The principal has to work to help the staff expand their perspective.

Usually AECs have many courses in which the group of students is the same year after year. For teachers, they are known as easy groups, and teachers are usually not willing to make changes or question the existence of these groups.

> Then there are "eternity groups" that have been in the curriculum for decades and are considered as kind of an acquired right. They take up space from the reform in the system. But, of course, the teachers want to ensure their income. And it is true that new innovations do not always "sell". We don't get students. We have tested it every year.

The data suggests that health and well-being problems of the staff may also be barriers to innovation. These are also affected by the fact that the full-time resources are limited and their workload easily becomes great. Moreover, the principal's own health problems consume the minimal resources of an institute. Different organisational changes and mergers and a variety of new tasks and requirements are taxing to the staff. In such situations, adherence to the old working methods is easy. Creating something new easily demands additional work. On the other hand, changes and mergers of institutions push the organisations to find new solutions to new problems.

Networks, cooperation and atmosphere at the institute

The importance of cooperation in internal as well as in external networks is considered crucial for innovation in the data. The respondents emphasise that in the networks, both brainstorming for new ideas and developing them further is easier and also more convenient. Furthermore, receiving support from partners for new ideas is encouraging. In addition, the good innovation capability of an institute helps to find new ways to cooperate and to search for new types of partners. Based on the responses (Table 11), the teachers of different disciplines in the institutes cooperate to some extent (35.2%) or much (38.6%). Only two principals (2%) estimate that there is no cooperation at all in the institute. Both of these principals regarded their institute generated only little innovation and had no resources. Only little cooperation was found in 10.2% of institutes. On the other hand, at 13.6% of the institutes the teachers seemed to cooperate very much.

Table 11. The amount of cooperation at AECs (Question 35)

No	Question	1 Not at all	2	3	4	5 Very much	Mean	SD	No answer
35	Do the full-time and part-time teachers of different disciplines cooperate in you institute?	2.3%	10.2%	35.2%	38.6%	13.6%	3.5	0.93	3

Good internal cooperation is linked with a good atmosphere and the thought that the cooperation is useful to all parties. A safe atmosphere encourages generating ideas freely without fear of discouraging comments. Cooperation is needed especially in creating an up-to-date and innovative curriculum. A great challenge at AECs is to find ways to motivate the

loosely networked part-time teachers to work together. One respondent states that the level of dialogue in the institute is a good indicator of active cooperation.

External networks were also considered very important, especially for small institutes. External networks were found to be both important sources of innovation and additional resources for development. Good cooperation networks produce new project initiatives that encourage teachers. In general, networks of AECs have been local or regional, but also networking between institutes in other parts of the country was hoped for. The challenge is to find good new partnerships and deepen the existing ones.

The attitude of administrator toward the institute

Local administrators' attitude toward the institute and its needs and the impact of that attitude on the innovation of an institute emerged from the data at several different points. In particular, the municipal administrator may significantly affect the development and the resources of the institute. The administrator who gives value to the institute may support innovation by providing the institute with sufficient resources. Nevertheless, the administrator may also reduce the AEC's ability to be innovative by reducing the resources and controlling the activities of the organisation. In municipal decision-making, the institute may be experienced only as an item of expenditure. The principals describe the situation as follows:

> *If it is possible to operate according to the fundamental ideals of liberal education, things are really good. However, the various control and mandatory measures have increased recently from the owner's side – for example, course fees and some obligatory functions which an institute must take into the curriculum.*

> *At the moment, for example, the institute is often undervalued – the administrator doesn't even understand how important the institute has been for a large number of local residents.*

> *Currently, the institute is seen in decision-making, preferably more as an item of expenditure than an opportunity. The general tendency is such that the municipalities are committing only to the basic services.*

The leadership at the institute

The principals were asked to analyse how they themselves could contribute to the innovation capability of the institute (Question 18). According to the responses, the principals feel that they have a great impact on innovation. Innovation seems to be a challenge, an enjoyment and a cause of stress in their work. The written qualitative data showed seven ways how the principals think they can provide opportunities for innovation in institutes: 1) creating a safe and inspiring atmosphere, 2) giving the staff the freedom to operate, 3) appreciating the staff and bringing out their strengths, 4) ensuring the clarity of tasks, 5) obtaining additional resources, 6) building networks and finding new partners and 7) being an example and fostering their own innovation capability.

Proper human resource management contributes to a safe, collaborative, and inspiring atmosphere in which people have space, courage and freedom to experiment and come up with ideas, even if success is not certain. It is also important that the principal is

approachable. Also good humour and a sympathetic attitude can have a positive effect on the innovative atmosphere. A constructive approach to errors and failures promotes courage to try new things. Sharing the joy of success and a "we did it" attitude encourages the generation and experimentation of new ideas:

> *What is important is the attitude towards errors: everybody makes errors and the more you work with all kinds of things and experiments, the greater will be the number of errors. But mistakes can always be corrected and, above all, lessons can be learned. The principal should also have a broader perspective, that is, small errors are not catastrophic but the big ones should be avoided – one should therefore be able to see where the experiments can be made and with less design work.*

> *Play should always go hand in hand with learning. A person's fun side doesn't disappear at any age, and I believe that creativity always springs forth from play.*

While principals feel that they have a great possibility to affect the innovation capability of the institute, they state that their possibility to impact part-time teachers' work and attitudes is a challenge. Part-time teachers are very independent and, in particular, their network is very scattered. Principals meet many of the part-time teachers only rarely or never if they do not attend the teachers' meetings.

In an education organisation, also pedagogical leadership is emphasised. The respondents stated that they encourage innovation by training and empowering. One important aspect is to see the employees' competence and strengths and rely on them. When the staff feels that they are important and their expertise is noticed, they will have the courage to innovate. Giving recognition and positive feedback will also promote innovation:

> *Autocratic management, in my opinion, is the worst mistake which a principal at an AEC can make. It does not mean that principal doesn't need to be a stand-up guy and get things done, but there must be space and demand for expanding and improvising. A great deal of feedback should be given, and it is important to remember that especially the formally unqualified teachers are sometimes not brave enough to bring up their ideas.*

The data suggests that keeping the mission and basic objectives of the organisation clear is also considered important. The principal should carve out space and time for developing new ideas and solutions and to ensure that the organisation has practices and processes that support innovation. One of the tasks of the principals is to ensure that the general operating systems are in such a good condition so that no time is wasted. Also developing the full-time teachers' job descriptions and definition job evaluation criteria were considered to support innovation. The innovation emphasis in recruitment was also mentioned in the data. The principal may also contribute to innovation by the acquisition of additional resources, for example applying for project funding and subsidiaries, and thus ensuring that the staff is not be overburdened. Rush is the enemy of innovation, according to the principals' answers.

Innovation in linked with cooperation. The principals have a significant role in finding and engaging innovative partners. It requires both the will and ability to cooperate. Principals can

promote internal and external cooperation by using good meeting practices and development seminars and by acting as a link between experts in different fields and organisations. Also the principal's own spirit of innovation and example are an encouragement, inspire and serve as a model, and as an impulse for innovation. It is often mentioned that each AEC resembles its principal. He or she may be a good example in matters that he feels important. The principal should be genuinely interested in teaching and students, and, above all, the staff, because the staff, after all, generates the innovations. A principal is in the position of a leader and provider of encouragement

The principal himself should have new ideas and creativity. His commitment to the work, facing sticking challenges, open-mindedness, courage, and enthusiasm for development are spread to the environment. The principal must have the courage to try new things in spite of the institute's internal resistance to change. Principals often work also as a teacher in their institute, and therefore, they could try out new courses and teaching methods in their own teaching. It is important, according to the responses, that principals are concretely involved in the activities at their institute and put themselves on the line. There are, however, some general barriers to the principals' innovative activities, as one principal states:

> The principals of AECs are rather old, so it is understandable that to a certain extent we have also regressed. The principals' prior work experience is often very narrow, so it is often not easy for them to promote innovation.

In order not to stagnate, a principal must consciously pay attention to his own creativity and attitudes. According to the responses, a principal's own innovation capability includes genuine interest, activity, and the openness to monitor the environment regionally and internationally. Active reading and listening, a positive attitude and faith in the future also contribute to the principal's own innovation capability.

Development projects
AECS have had the opportunity to apply for external subsidies and project funding for various types of development projects from both domestic and European sources. This is seen as a means to obtain additional resources for the development of activities. Although the tight financial situation is very obvious in the data and subsidies and project funding is available to all AECs, only three respondents stated the importance of project funding. Project funding gives institutes possibilities to experiment with new types of courses, activities and processes without great risk and fear of failure, and extra money gives the possibility to buy time from part-time teachers.
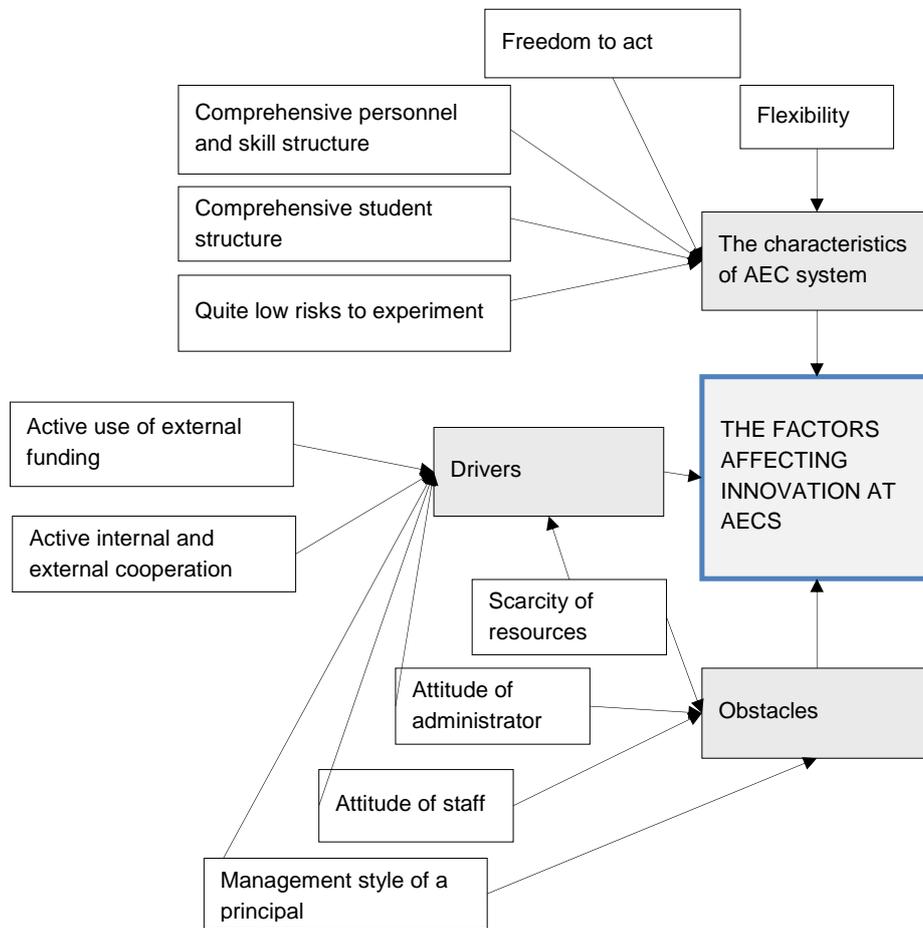
Figure 17. The main drivers and barriers of innovation at AECs

Summary of the factors affecting innovation at AECs

The pre-study survey suggests that the basis of innovation at AECs is the system itself. It gives the freedom and flexibility to operate. The other main drivers are the use of project funding and internal and external networks. The leadership/management style, attitudes of the staff and administrator and the limited resources act as a driver or a barrier to innovation (Figure 17).

4.1.3 The types of innovations and innovation processes in AECs

The data suggests that the principals find their institutes quite innovative. The majority (88% of principals) regarded their own institution as innovative or very innovative. Six principals regarded their institute very innovative, and four respondents viewed their institute only a

little innovative. No special elements that could have differentiated the very innovative and non-innovative institutes were found in the data.

The principals were not asked to define the concept of innovation, but five respondents wanted to describe innovation at AECs in particular in open questions. Innovation was described as follows:

- Human-centric and citizen-based
- Insight derived from a specific moment which is refined into an effective way to work, learn something new or find a new method in order to identify existing opportunities that have been overshadowed by prevailing routines
- Accepting coherent, mistaken paths, and a different type of thinking, modern, combining the new and the old creatively, the attitude of life
- A matter of everyday life which may comprise, for example, a way to make decisions, solve problems or lead the education institution.
- Innovation is behavioural changes, a better image and attractiveness.

The data suggests that the generation of new ideas is not a problem at the institutes (Table 12, Question 23). Almost 90% of the principals answered that they generate somewhat (34.1%) or many (53.4%) new ideas and 10.2% felt that they have very many new ideas. The respondents were also asked to assess the number of innovations a year (Question 25). The question was considered very difficult and the respondents stated that they actually did not know how to differentiate innovations from other improvements or changes. Answers varied between one to hundreds.

Table 12. Idea generation at AECs (Questions 23, 27 and 29)

No.	Question	1 None	2	3	4	5 Very many	Mean	SD	No answer
23	How many ideas are generated in your institute?	0	2.3%	34.1%	53.4%	10.2%	3.72	0.68	3
		1 None	2	3	4	5 Regularly			
27	Do you use any specific methods to generate and collect new ideas?	10.3%	40.2%	26.4%	19.5%	3.4%	2.8	0.99	4
		1 Not at all	2	3	4	5 Very well			
29	Do the methods work and generate ideas?	2.4%	14.5%	38.6%	38.6%	6.0%	3.3	0.88	8

The data shows that institutes do not regularly use specific methods to generate and collect ideas (Table 12, Question 27). A variety of methods are regularly used only in 3.4% of institutes, and 10.3% of the institutes do not use any methods. Table 13 is a summary of the methods identified in the data. Cooperation in meetings, development days, informal discussions, and networks have key importance. Ideas are generated also through performance and development discussions. The respondents viewed that the methods have worked quite well (38.6%) or well (38.6%) (Table 12).

Table 13. Typical methods for idea generation at AECs mentioned in the pre-study data

Method for generating ideas	Number of institutes
Weekly meetings of the full-time staff	28
Informal discussions	26
Customer and staff feedback	26
Developing day and seminars	21
Cooperation networks	15
Performance and development discussions	10
Encouragement to generate one's own ideas	5
Preparing applications for project funding	4
Following general activity and the environment	3

Idea generation often takes place spontaneously in informal everyday discussions, at the coffee table and in regular weekly meetings (Table 13). These discussions were considered very fruitful. It is probably typical at AECs that the principal and the full-time staff, i.e. full-time teachers, designers and office staff, meet on a weekly basis to plan and develop activities. Meetings of teachers of different disciplines (for example language teachers or art teachers), in which also part-time teachers are involved, are usually organised one to two times a semester. Special brainstorming and development seminars are held in 21 (23%) institutes, usually once or twice a year. One principal mentioned that they use the curriculums of other institutes to find ideas. Also special "future workshops" were used in three institutes. One institute awards a "flower of creativity" to the most creative idea of the year and one institute uses the "walking around the block" method to generate ideas. One institution has asked the customers to attend their development seminars together with the full-time staff. Customers, teachers, different associations, residents and other stakeholders can usually offer ideas on courses through web pages, queries and discussions. The principals describe idea generation in their institutes:

Ideas come from everyday activities. Ideas and innovation cannot be subjected to any particular method. If people can work well, and they have interesting and challenging tasks, there will be innovations.

We sometimes have brainstorming sessions with our own staff or partners. Often the best ideas seem to come up at regular meetings, or someone has been in training and found a new perspective.

We encourage local residents to tell their ideas to teachers, in teachers' letters, and we use the local newspaper columns. In joint meetings of teachers and staff, we aim to create a casual and relaxed atmosphere, which also triggers new ideas. If we want to create something very new, we call a multi-disciplinary team of different people to discuss the issue, either live or via e-mail.

The methods have worked well, in my opinion. When we have looked back at our proposals after some years, we have often said that goals have been realised.

The more different types of people are together, the more likely they are to create innovations. The problem is, however, how to find and get different people. The part-time teachers are often at work in some other organisations and that is why many schedules are problematic.

I think the best innovations come from practical work as a side product or the desire to experiment.

Open-mindedness and willingness to experiment will replace the methodological underdevelopment.

The methods may seem informal but they are not.

There were merely a few further suggestions for the improvement of idea generation in AECs in the data. Two principals wanted a more systematic approach and two new types of methods. Also better possibilities for free discussions were hoped for, such as shared coffee and food breaks and travel. The data suggest that better possibilities for discussions with part-time teachers could increase the emergence of ideas.

From idea to innovation

Based on the responses, 68.2% of the institutes test new ideas much or very much and 28.4% moderately (Table 14). According to the responses, the development and implementation of new ideas is a long and difficult process, and on the other hand, ideas are piloted very quickly. The further development of the ideas needs human resources and belief in success. One principal stated that it is quite easy to prepare SWOT-type analysis during the development days, but not easy to implement them. That is why ideas that are generated during everyday work are more successful. Especially at institutes which have very scarce resources the main development method is to put the new idea into the practice very soon. One of the obstacles to the success of new products seems to be marketing. Especially marketing for target groups needs resources that institutes do not have.

Table 14. Idea experimenting at AECs (Question 31)

No	Question	1 Not at all	2	3	4	5 Very much	Mean	SD	No answer
31	Do you experiment with the collected and generated ideas?	0	3.4%	28.4%	55.7%	12.5%	3.8	0.71	3

The generated innovations

Based on responses, a variety of elements referred to as innovations were developed at AECs (Question 24). Most of the innovations are new courses (Figure 18). It is interesting that there are more new working methods and customer target groups than new teaching methods or use of new teaching technology. This may indicate that AECs are not yet accustomed to developing new pedagogical innovations. One reason for the small number of pedagogical innovations maybe the fact that often only few part-time teachers have pedagogical education. Another reason may be that the work of teachers is very independent and smaller pedagogical innovations happen in a classroom without the principal being aware of them.
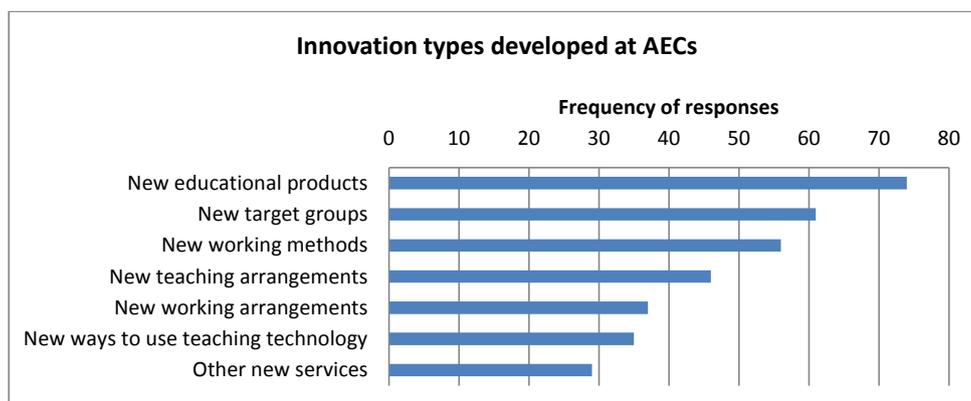
Figure 18. Descriptive statistics: the frequency of responses of innovation types developed in institutes

Examples of new services and processes that the respondents called innovations are presented in Table 15. These innovations can be divided into four types: new innovative courses, new process innovations, new innovative events and programmes and new teaching arrangements. New innovative courses include courses that have an innovative content or target group. New process innovations include comprehensive innovations in management, organisation, marketing and idea generation. According to the data, new innovative teaching arrangements include the use of information technology but also new teaching innovations which are based

on the integration of different substances. In addition, many local events have started as an innovation of a local AEC:

> *After all, it was a great innovation when our institute was founded 110 years ago as the first in Finland. We can be proud in Finland; this is a European level innovation because now the baby-boomers are retiring. In Europe, they are thinking about what needs to be offered to them, but here in Finland we have tried and true product that we offer at a low cost and as a local service.*

> *Looking back at the AEC's activities, there are numerous examples of innovation which have been implemented on the field or in the institute's environment. Many summer events have their origin in our activities, for example the Kaustinen Folk Music Festival.*

Table 15. Examples of issues called innovations at AECs

Innovative courses	Process innovations
How to buy a car from Germany Downhill skiing course for senior citizens (over 65 years old) Combustion engine and tractor repair course, which attracted male participants of a wide age range in the municipality Walk around the block	New management practices, new working arrangements Functional operating system (management system) Searching for new ways to organise arts and crafts exhibitions at the institute New kind of advertising campaign for the beginning of the school year Development of a new study guide which has received much praise from both locally and nationally. "Multidisciplinary future date" where local development was brainstormed
Innovative events and programmes	**Innovative teaching arrangements**
Success story of the academy of creative writing St. Bridget weeks in Lempäälä every two years Old Music Event and Regional Senior Citizens' Day Children's clothing and diaper support, where using recycled and donated materials the participants produce products for the children's hospitals of developing countries. Volunteers learn about ethical and ecological thinking, engage in arts and crafts and obtain new experience. Virtual municipality theatre project, which brought together writers from four municipalities, theater enthusiasts and other performers to put on a play, the events of which the viewers were able to influence by voting on the Internet. The project involved a fictitious local newspaper columnist and fictitious electoral panels.	Integration between different substances in the teaching Computer courses have been changed almost entirely to use laptops Swedish language courses where the students visit the local cultural centres - guided tour in Swedish Eurfood project, multidisciplinary material. Household skills, computer skills and language training combined in an interesting way. Teaching, conversations and food recipes in English, cooking in Finnish, recipes saved on the computer and sent to partner countries. Two interactive online courses in textile design and related learning materials Experimental online lace-making course at the national level. Online Bulgarian language courses

Many principals mentioned also the entire AEC system as a significant innovation.

<u>Innovation in the visions of AECs</u>

The respondents were asked to give the vision statement of the institutes at the time of the study in 2009. The aim of that question was to find out what was the meaning of innovation in the institutes' goals for the future. Thirteen principals did not respond to the question, which suggests that these institutes had no written vision. Moreover, seven principals said that they have no written vision. Thus the total number of institutes without a vision was 20 (22%). Six respondents reported that their vision was only the personal idea of the principal.

Only in two institutes, the term innovation was clearly mentioned in the vision.

> *Our vision is to be the most high-quality and innovative AEC in the metropolitan area also in the future, taking the changes in the environmental and customers' training needs flexibly and rapidly into consideration.*

> *A publication dating back a few years says: "... we want to be a place for residents to interact and innovate, an active and creative partner."*

Creativity was mentioned in three visions:

> *We are currently working on the vision, so the vision of this new institute is not yet ready. At the early stages of the merger, the vision was "the institute is a nationally significant rural institute which by its unconventional creativity and networking skills promotes residents' know-how and well-being as well as the vitality of its region."*

> *Our AEC is a new, experimental and creative education institution with an increasingly active role corresponding to the region's needs and focuses its resources appropriately. The institute is well-known and accessible to all.*

> *The institute is a leader in the area of traditional liberal education, creative and brave, skilled, ever-renewing and one of the leaders in Finland.*

According to the written visions (N=72), AECs want to be highly networking (N=14), comprehensive (N=13), current (N=12), high-quality (N=10), flexible (N=8) and highly valued (N=6) education institution in the future. The institutes felt that their task was to produce both "useful and enjoyable services", that is, knowledge, joy and a sense of community to their students. In addition, ten visions mentioned the desire of the AEC to influence the development of their own environment. The following concepts also illustrate the future goals of the studied institutes: Active (7), leading (5), renewing (4), forerunner (3), quickly responding (3), developer (3), prospective (2), unconventional or open-minded (2); trendsetter (1), and dynamic (1). These are concepts which can also be used to describe an innovative institute, suggesting that institutes want to describe themselves as innovative without using the actual word.

4.1.4 A description of an innovative AEC

The respondents described an innovative AEC in many ways. The most frequently mentioned characteristics were almost the same as in the visions: current (N=26), constantly renewing (N=15), networked (N=14), future-oriented and pro-active (N=10) and forerunner (N=9).

Other characteristics also mentioned were: courage to try and implement ideas (N=15), a good, enthusiastic, and developing staff and atmosphere (N=15) and the use of new kinds of pedagogical approaches and teaching technologies (N=8).

A preliminary description of an innovative adult education centre
Based on the results of the pre-study phase, the following description of an innovative AEC was constructed:

1. Innovation is an important element (integral part) of all activities in AECs, and the Act on Liberal Adult Education in Finland and AEC system itself provide a good opportunity for institutes to act creatively and boldly.
2. Innovation is needed in the institutes to keep up to date and be perhaps a forerunner in the region. Innovation has an impact on an AEC's image and attractiveness and thus helps to attract new students and innovative partners. Innovation may also be an additional resource when the economic situation at the institute is otherwise poor.
3. The key drivers of innovation at AECs are the principals', full-time teachers' and other staff's positive attitudes towards renewal, resources (both scarce and good), use of projects and subsidies, both internal and external cooperation networks, the positive, supporting and encouraging attitude of administrators towards the institute and the principal's own management style.
4. Ideas for innovations are generated either spontaneously or according to plan during informal discussions, different meetings, development seminars or project meetings or by customers and teachers. Networking has an important role especially in idea generation.
5. The resulting innovations can be divided into four types: new courses, new curricula and events, new teaching arrangements and process innovations.

4.2 Multi-case study at four AECs

A multi-case study to investigate innovation deeper in relationship with organisational culture and cooperation in non-formal adult education organisations was conducted in four Finnish AECs. The case insitutes were selected to represent innovative AECs during the pre-study phase. The innovativeness of these institutes was not measured but the principals assessed the innovativeness of their organisation with a score of five on the scale 1 = not at all innovative to 5 = very innovative. Data were collected through interviews of full-time staff and publicly available documents. The interviewees also responded to the survey of culture types according to the Competing Values Framework. The themes of the interviews were innovation, organisational culture and cooperation practices. The method used in analysing the data were content analysis, but the emphasis was also on conceptual traits in the responses. Especially in analysing values and characteristics of organisations and definitions of innovation, special attention was paid to keywords used by the interviewees.

4.2.1 Case institute A

The majority (85%) of Finnish AECs is maintained by municipalities or several municipalities jointly operating. Case institute A is one of approximately 30 private AECs in Finland. It is administrated by a private association. Case A was established in 2008 by an amalgamation of two different adult education centres. The operating area of Case A consists of three municipalities. There are roughly 24 000 residents on the area. The institute has two offices in two municipalities but not its own main building. The offices are situated and the courses are held in rented premises. The full-time staff at the time of the interviews consisted of the principal, a training and development designer, two office secretaries and one full-time teacher. From August 2012, the number of full-time teachers has increased by two. There is also a part-time PR officer at the institute. The number of part-time teachers is approximately 130. The institute organised approximately 15 000 teaching hours in 90 locations in 2010. The number of participants in the courses in 2010 was slightly over 9 000. The interviewed persons for this study were the principal, designer, public relations officer, full-time teacher and one part-time teacher. The policy of Case A is to serve the individual residents but also to take into account the regional and local needs. The emphasis of teaching has been on dance and physical education, arts and crafts, music, performing arts, literature and the visual arts and design. Language courses are also organised to some extent.

Organisation culture in Case A
<u>The characteristics of the culture</u>
The written values that guide the education at the institute are voluntariness, self-development and the principle of life-long learning. Also creativity and cooperation are mentioned in some documents of an institute as its basic values. The content of creativity as a value is defined by the institute as new ideas and new ways to do things without prejudice, regarding the diversity of teachers and students as a resource and paving the way for the emergence of new ideas through an encouraging and open atmosphere. Cooperation as a value is understood to mean that services are planned and implemented in cooperation with other actors and institutes in order to use their networks to find the best services for customers. All of the interviewees describe the institute in a similar way. They use such expressions as: an enthusiastic and inspiring place, looking for something new with open eyes, open and respectful, free, dynamic and forward-looking, bold, experimental and interactive. The following quotes show the thoughts of interviewees:

> *Moving, the opposite of static, more forward-going, sometimes it may be going sideways or backwards; we, however, try to move forward.*

> *Sometimes groundbreaking in a positive way, in the sense that we try to differ from what is traditionally perceived as the role of the AEC.*

> *It's very important that we are in constant interaction with the region, and with different actors.*

As a new teacher, I have always received support and advice when I have asked.

But we always listen intently to what our environment thinks.

Customer focus and the principle of local services are emphasised both in the written mission statement and by interviewees, although the area is geographically large. Although the institute's mission is to organise training for local residents, an important aspect is also the development of the entire region. The institute's focus is also on increasing mobility across municipal boundaries so that the cohesion and social capital in the region could be increased.

The principal believes that a key factor affecting the institute's activities is trust. He sees that the trust is actually a basis for activities in all Finnish AECs. This is because activities and teachers of AECs are greatly scattered across the region. The majority of part-time teachers and the principal meet each other quite rarely, especially at institutes that do not have their own main building. Operation will succeed only if the principal is able to trust that freedom given is not abused. The word flexibility is not actually mentioned by interviewees as a characteristic of Case A, but it is apparent when the principal, the designer and the teachers describe the institute's attitude to work and processes in the institute.

The management of the institute

The institute's mission states that the institute organises a wide range of education and cultural services for the needs of the residents of the region that create opportunities for self-learning and civic capacity building. The vision is formulated as follows: The institute is a nationally significant rural institute which promotes the well-being and vitality of its residents and region using creativity as well as unconventional networking. In a national programme for rural culture, AECs especially in rural areas are seen as important cultural actors (Keto and Takamaa 2008). Case institute A wants to strengthen especially this role. Both the principal and the person responsible of public relations want to emphasise that institute A is more than an education organisation. It is a kind of a cultural institution, the task of which is to reform and to produce local culture. From the point of view of an individual customer, the task of Case institute A is to build the self-esteem of the students and bring the people together. From a regional perspective, the institute is also seen as a catalyst for creativity. The institute provides information on its activities in the course catalogue which is distributed in every autumn to all households in the region, in the springtime newsletter, on the website, in three local newspapers, on the radio, on Facebook, and in separate advertisements in libraries, schools and shops.

It is considered valuable at the institute that the municipalities in the region see the institute as an important organisation, although it is privately owned and not maintained by the municipality:

It was really nice last spring, when the city revised its strategy, they asked us the take part in the strategy work even though we are a private organisation. We feel that we are valued and are an important actor in the region.

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In recent years, the institute has also invested in its own strategy work. Strategy training has been organised for the personnel and the institute has formed its values and vision. The strategy pays particularly attention to regional development needs, to the age of the residents and profiling the local city as a Film City. Quantitative targets for operation have not been set, but the following indicators are used to monitor the operations: number of new courses, students' age distribution, number of partners, information and marketing in the media, customer satisfaction, number of participants in courses, number of locations where activities are organised, and distribution of teaching equally according to the population.

The institute has defined as its goal as to be a vibrant, interactive AEC, the success factors of which are the four cornerstones: customers, the business environment, processes and resources. Attention is especially drawn to both existing students and to the activation of new customer groups, good cooperation in the region with other actors, customer-friendly service systems, skilled teachers, a positive and strong brand, a positive working atmosphere and high-quality premises (Strategy 2011-2016). The institute has also recorded priority areas for the next strategy period: improving regional approachability, the needs of immigrants and other specific groups, the curriculum, new teaching methods, extensive cooperation and development of personnel. The strategy paper also states that the attractiveness of the institute will be increased by visionary, unexpected courses, which refers to the aim to be innovative. No special reward systems are in use, but teachers who are willing to perform additional work are rewarded with out-of-town training and seminars, for example. Further education is offered for all staff members interested.

Case institute A wants to grow by continually increasing the teaching hour volume and actively pursuing new target groups. The designer describes the wish to grow:

> We have the continuous goal to increase the number of teaching hours so that we can reach a desired level of activity. At present, approximately 20% of the residents of the region are our students. This means that 80% of local residents have never been involved in the activities of the institute.

The interviewees do not feel that the institute would compete with other organisations. The other education organisations in the region do not offer a significant number of liberal education courses. The aim is not to offer services that compete with other local and regional organisations and associations, but to cooperate and supplement existing services. The key competitors of rural AECs are "*mainly the television and the like*."

The principal considers himself as a determined, goal-oriented, supportive and facilitating person. However, he finds the management of the institute a challenge because the institute's activities are so fragmented geographically and the majority of the courses are organised far from the principal's office. For the same reason, also the innovation management is challenging. That is why, the feeling of inadequacy in supporting the work of teachers, however, in his opinion, constantly present in his work:

> *As a principal you would like to hold in your hands the whole institute, but it is certainly hopeless. There are always areas which you do not know about.*

The interviewees mention in various contexts that they want to emphasise especially to the part-time teachers that everybody's work is valuable and important for the institute. This message is conveyed in teachers' meetings and in the office. Part-time teachers' needs and wishes are inquired about, listened to and met actively, as is seen in the data:

> *Although some part-time teachers have only a few lessons in our institute, they all are equally important. We do not focus on how many lessons somebody teaches; we maintain contact with all teachers in the same way.*

> *All part-time teachers have the problem that they feel that they are just teachers at an AEC. We need to support the teacher's identity in that this is important and valued work, and we hope that they really appreciate this work.*

> *We (part-time teachers) have been provided opportunities and we are encouraged and involved. He (the principal) is a person who makes us teachers feel that what we do is important, it has a meaning. [...] He praises our work also publicly, and with him it is possible to discuss issues.*

The interviewed full-time teacher who has been working at the institute only for two years says repeatedly during the interview how important it has been for him that the principal has listened to him and given support, the freedom to work and opportunities to pursue his own "stuff":

> *As a new teacher, I have received support, and my new ideas have been supported. I bring something new to the institute and something different from the other teachers because I'm a different person. I feel that I have room, I have been heard and I have got opportunities to carry out my own ideas that might not be the same as those of others.*

The institute has been eager to incorporate new education technology into teaching. It has been an active Facebook user and tries to use social media in providing information as well as in teaching. The institute has also been active in enhancing IT skills in its region through both projects and training. It has developed and adopted its own e-learning environment, which has been used in language courses and in courses for writers. The Moodle learning platform has been applied to some extent and the aim is to organise training for teachers and to launch new e-learning courses for customers in the near future.

Development projects
The institute has actively applied for project funding and subsidies from different sources and has been involved in several regional development projects, including a Grundtvig Learning Partnership project of the European Commission. At the time of the interviews, the institute was also applying for Nordic Nordplus project funding. The projects are considered to be of great advantage to the institute as well as to individual teachers and students. They provide additional resources for the institute, new partners and ideas, enjoyment in and variety to the work, the opportunity to learn to know new people and practices. Project know-how for

regional development projects as well as international projects has been acquired through special training:

> *We have effectively learned to take advantage of projects and we apply for them, even though they are, of course, extra work. We see that they will always bring some added value. But they have to be closely connected to this work and the must support our own activities.*

The organisation culture type in Case institute A

The values and characteristics of Case institute A based on the data are summarised in Table 16. Values and characteristics found in written documents (e.g. mission statement and values) are presented in the left column and values and characteristics mentioned by four to five interviewees are presented in the right column. The text in the brackets mention if a value was mentioned only by one person. Total number of interviewees was five. Flexibility, growth orientation, systematic planning and determination were not actually mentioned as a concept in the written or interview data but the systems, processes and innovation stories showed that the institute strongly values those aspects.

Table 16. The characteristics of the organisation culture in Case A

Characteristics and values describing the culture in Case A	
Written material	Interview data
- Creativity - Cooperation - Principle of local services - Voluntariness - Self development - Regional development perspective - Active citizenship - Customer orientation - Systematic planning and determination - Active use of project funding in the acquisition of new resources	- Freedom and equality - Inspiration and enthusiasm - Openness - Dynamism - Growth orientation (designer) - Trust (principal) - Flexibility - Boldness and risk taking - Forward looking and future orientation - Appreciation for the staff - Appreciation of networking

The graphical presentation of the mean scores of each of the four culture types in Case A is presented in Figure 19, using the Competing Values Framework axis and quadrants. For the six items corresponding to each particular culture type, a mean score was calculated, yielding a numerical score for each culture type for each institution. The type with the highest numerical score is assigned the dominant organisational culture type for the institution. The red line in the Figure 22 describes the thoughts of the principal and the blue line is a mean value of the responses of other interviewees. The mean values of each culture type are presented in Table 17.

CULTURE PROFILE FOR CASE A
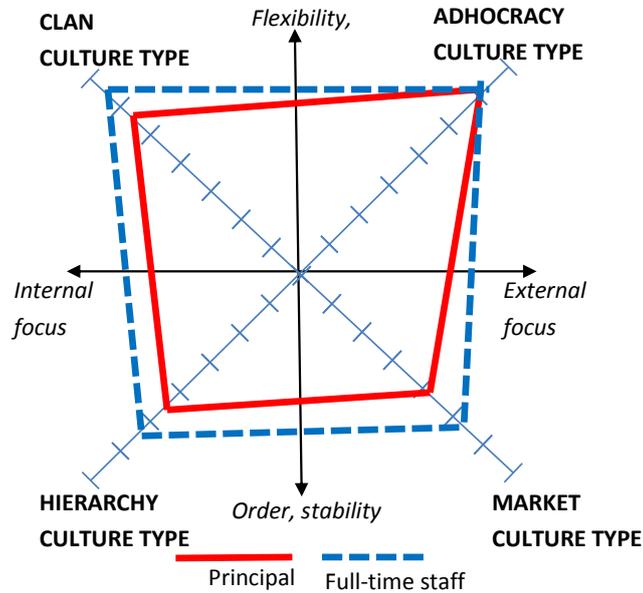
Figure 19. The culture profile in Case A according to the CVF

The principal's responses emphasised most clearly the characteristics of an adhocratic culture (mean 6.17) and the second strongest culture type was clan culture (mean 5.33). The mean values of the two other culture types were also quite close. In the figure of other interviewees the clan culture has the highest value (mean 6.42). The other three types are, however, quite close (means 6.20, 5.25 and 5.29). The largest distribution of the responses is in the values of market culture.

Table 17. The scores of different culture types in Case A

Culture type	Principal		Other staff		
	Mean	Order	Mean	SD	Order
Clan culture	5.33	2	6.42	0.5	1
Adhocratic culture	6.17	1	6.20	0.70	2
Hierarchy culture	4.33	3	5.25	0.87	4
Market culture	4.17	4	5.29	1.14	3

Values that are related to the adhocratic culture type and found in the interview data are dynamism, boldness and risk-taking, future orientation, enthusiasm in the development, a search for growth, freedom, creativity and the acquisition of new resources using project funding. The values representing the clan culture at the institute are cooperation, transparency, trust and strong appreciation of the staff.

Some differences can be found between the OCAI figures of the interviewed staff and the principal in terms of both the shape and size of the figure. The staff members consider the culture slightly more open or stronger than the principal and emphasise the clan, hierarchy and market cultures more. The values of an adhocratic culture are very much the same in both figures.

The characteristics of cooperation and social networks in Case A
The institute strongly emphasises cooperation and networking. The strategy of the institute for the years 2011-2016 states that in order to carry out its mission, the institute cooperates with a variety of actors. Cooperation is also one of the institute's recorded values. Even the administrator of the institute expects that the institute makes an effort to build network and requires regional cooperation of the institute. According to the annual report, the aim of the cooperation is to increase knowledge of the region and to eliminate of possible overlaps. The number of partners is also recorded yearly.

Internal cooperation practices
The institute has activity in approximately 90 locations and the staff consists mainly of part-time teachers. Consequently, there are not many obvious possibilities for interaction between teachers. Moreover, there are quite few forms of action that are common for all the staff. According to the interviewees, the glue that holds most of the teachers and the institute together is their enthusiasm for their own discipline and also inspiring adult students. Teachers of the institute are described as active people who enjoy teaching, even though it is often in the evenings after their primary workday in another organisation. The role of a teacher at the institute is seen more as an adviser than a traditional teacher.

The full-time staff has meetings approximately once a month. According to the interviewees, the atmosphere in the meetings is open, conversational and informal, as the PR officer describes:

> *It is nice; we all have a wealth of ideas. At times, we'll get side-tracked. We have an awful lot of fun, the atmosphere is open. We all have the courage to speak.*

Large-scale teachers' meetings are organised three times a year. The place for the meetings is usually some interesting building or area and the programme includes training and entertainment. The meetings are characteristically informal. Participation is voluntary and has, according to the principal, been reasonably high, on an average 40% of the teachers. Creativity is also encouraged in the meetings:

We really had fun last fall when we brainstormed for names of new courses in order to come up with names that were more interesting than before; not ones like "Woodwork" or "Crafts course". Even if it was a little bit silly, we all had a great time generating new ideas. And we also came up with names that we can use in practice. And the teachers began to think about their own courses, whether the name could be changed.

Teachers are also provided by the possibility to sign up for one course per year themselves, free of charge. The aim is to broaden and deepen the knowledge of the teachers and support recreation. In addition, the preparation of the spring exhibition of arts and crafts groups brings teachers of those disciplines together. The part-time teachers organise informal cooperation amongst themselves without the help of the institute, but the institute supports those meetings, if needed. The institute is also actively trying to support the regional cooperation of part-time teachers. The institute has just got external project funding for part-time teachers' mentoring.

External cooperation practices

The institute has large and diverse external networks. The key partners of the institute are municipalities, regional education organisations, libraries, churches, different associations and companies, and The Finnish Association of Adult Education Centres. The institute is also engaged in active cooperation with other adjacent AECs with joint projects, marketing, planning, idea implementation and staff training. Also international cooperation has been very active. Records of partners are updated annually. Maintaining these networks in a positive and active manner is considered important. An essential feature of these networks is the aim to obtain very diverse contacts and partners and establish different ways to cooperate. Some of the current contacts are built by the former principal and some have been built during the current one's term. The principal aims to be active and in touch with the surrounding community, and he tries to take part in various events of the partners in the region as much as possible. The principal describes:

When I was elected as principal, I had no contacts. I worked with the previous principal for a month. I remember how I wondered that whatever meeting we had or topic we discussed, he always had new ideas and had so many contacts. And when I had been a principal for ten years, I had become identical.

The benefits of networking are great according to the interviewees. Networking helps to know one's own region, to develop the work at the institute and to market courses and other activities. One reason for the emphasis on cooperation is the need to show that the institute is needed in the region. As a result of cooperation, the institute has become better known, has received additional resources for planning and the opportunity to design more extensive curricula. The principal finds that networking is also the basis for innovation. He points out that the comprehensive networks help in all phases of the innovation process: in generating new ideas, developing them and testing and implementing new innovations. Although the institute wants to have extensive networks of cooperation and to seek as many cooperation partners and patterns as possible, the principal admits that limited resources force the institute to consider which networks are useful for cooperation.

Innovation in Case A

<u>Innovation as a concept</u>

The interviewees were asked to tell what their subjective understanding of innovation is or how they would define the concept. The attitude towards the phenomenon was mostly positive. One respondent stated that the word is often used, but he actually does not know what it means. That is why his attitude is partly negative. The interviewees suggested that innovation means new ways of doing things, or new points of view on familiar and everyday matters, thus creating something new. Innovation may be a new method of working or a new thought, as one interviewee describes:

> *Introducing something new and thinking about issues from other angles. Thinking about what else there could be than what has so far been done.*

> *It may be something very familiar or ordinary, but when we find a new perspective or the matter is examined from a slightly different viewpoint, it may appear to be quite new and has completely new possibilities or potential. Things can be done in many ways; there is not only one right way to operate.*

The definitions of the interviewed staff suggest that innovation is mainly understood as an incremental change to existing issues and approaches. According to the principal, the AECs in Finland need innovation. He states that especially in rural regions, the institutes have to "*air out their thoughts frequently*" if they wish to survive and to develop their performance. The principal finds that innovativeness can have an impact on all activities at the institute. He states, however, that it is important that an institute operates according to a set of principles and extensive guidelines to which the institute is committed in the long run. However, the institute also needs a creative and informal side, which in time may have an impact even on the institute's main policies. He relates:

> *All things can't constantly be changing, but if the innovative part of the activities is at a suitable level, it continually produces refreshing and new material for the entire institute.*

The aim to generate innovations in Case A can be seen both in the action plan of the institute and in the project plans. The interviewees point out that innovativeness can be observed in practice in the processes of the institute, in new courses and in new pedagogical methods. The principal describes his idea of innovation management at the institute as follows:

> *You just have to look around and if you see that something new is about to pop up, you have to grab it.*

The interviewed teacher states, however, that teachers and students do not always consider the emphasis on innovation a good thing. He points out that the majority of the adult students expect safe and traditional education. In particular, the idea of introducing information technology into teaching is shunned. One teacher describes the attitudes of some students towards new practices:

> *Part-time teachers seem to consider that the use of ICT in teaching seems to be like an intrinsic value at the institute [...]. Still, our customers – the grandmothers who knit – they*

are less interested in computers. They, frankly, fear them. It's conflicting. It seems that the intrinsic value of the institute is that we must have something new and really magnificent.

The perspective that I bring is different from the previous teachers. I get very excited, but then I notice that this issue could have be taken forward in a more relaxed manner, little by little. And if there was any issue the previous autumn that seemed to be absurd, if you got even one of the students excited about it, the following year many more students would come.

The culmination of innovativeness in Case A has been a theatre project, which brought together four local writers, theatre enthusiasts and other performers to put on a play, the events of which the viewers were able to influence by voting on the Internet. That method was chosen because the aim was also to encourage the local residents to use the Internet more actively. The theatre project also involved a local newspaper columnist, and fictitious electoral panels. Another innovative activity were cross-disciplinary meetings in which local development activities were brainstormed in an innovative way.The principal points out that in recent years, municipal and institutional mergers have constrained the collective innovativeness of the institute and the innovations have included mainly individual courses and management practices.

<u>From an idea to an innovation</u>
Idea generation is involved in all activities at the institute and the principal states that there is no shortage of ideas. Ideas are generated spontaneously during informal discussions with the staff as well as with external partners. When describing the idea generation, the principal uses such words as: ideas pop out, incidentally and suddenly. It is not always easy to remember the origin of an idea afterwards. Idea generation is also stimulated by creating a casual and relaxed atmosphere in the staff and teacher meetings. Idea generation tools are used only occasionally. That is considered also as a problem because there are so many ideas and a systematic innovation process would give direction for the innovation, as the principal states:

We have used brainstorming methods only randomly, we do not have an exact and agreed way to innovate. Admittedly, it would be nice if we had one. I would prefer clearer structures. It would calm the situation down a bit, especially since these ideas sometimes bubble up from every direction, sometimes even too many of them. It would be nice if there were a framework for these things.

Ideas for new courses are also gathered informally from both teachers and students. The residents of the region and teachers are encouraged to present their ideas to the institute in the letters for teachers and through local newspapers. New ideas are also searched for in the curriculums of other AECs and by following the current trends of the society.

The principal suggests that the most effective way to produce new ideas is to have different people discuss a matter that interests them all. He states that the most effective way is that a principal or a teacher invites people based on their interests and not as "official representatives" of a party. According to him, a good brainstorming team is made up of people who live in the area, are of different ages and sexes and represent completely different

professions. In addition, he wants to find cooperative, enthusiastic and creative people for these groups:

> *I no longer bother to make the effort to cooperate with people who are not interested. Since the institutes can choose how they cooperate, I choose partners mostly depending on my own preferences. Or if I must cooperate with an organisation, I try to find a person in that organisation who is cooperative. Enthusiastic and creative people are always a source of energy to others, but citing Harry Potter, I avoid the dementors whenever I can.*

Teachers find new ideas for their own courses on different trips, with colleagues, in training, on the Internet, with students, in literature and by experimenting, as a teacher states: *When you walk with your eyes open, you are not able to escape ideas.*

In many cases, the student groups that have been working together for years are the ones which force the teachers to reform their courses, as a crafts teacher says:

> *But the truth is that an AEC is a demanding workplace for a teacher because we do not have the same curriculum from year to year, telling us what to teach. Instead, there will be customers in the autumn who ask the teachers if they have something nice and new to offer.*

> *There should always be something new to offer. I have to walk with my eyes open and gather ideas. This is already automatic; you can never turn off your work mode.*

Creative ideas are also found when looking for solutions for different problems, in unexpected situations and in the face of challenges, such as reaching new target groups, reforming the organisation or designing projects. The idea for a new kind of summer music camp was created when the institute had to find something to do for a foreign teacher visiting the institute in the summer when there is normally no activity at the institute, for example:

> *So, in our first international project, one music teacher (from Scotland) became very fond of Finland and wanted to come here, and we had to come up with something for him to do in the summer.*

The institute does not use special tools for the selection and evaluation of ideas, but the principal, for example, discusses ideas with his colleagues or friends:

> *I have always told the idea to at least one or two people, either the designer or a member of the board or someone else, and I ask what they think about it. What is your take on the matter, what do you think about this? If you have slightly bigger issues, I always bounce them off of someone else.*

Sometimes the idea seems immediately to be a good one and no selection or evaluation is needed, as was the case with the theatre project:

> *It's strange that when we four gathered, we got the feeling that now we have stumbled on to something. What it was, we didn't know. This is something totally our own. It was an amazing project.*

The designer points out that they want to create a positive atmosphere for new ideas and try to find possibilities to develop them. However, the designer emphasises that there should always

be a pedagogical element in implementing the ideas. Special importance is attached to the beginning of a new pilot; it should be interesting and inspiring, so that people are engaged. The institute has used the local newspapers to inspire people to take part in new projects, for example.

The institute has had a wide range of experiments, and not all have been considered successful. The principal says that they have learned that everything is not worth experimenting. Projects are valuable only if they have special benefits for the institute, they are linked to the competences of the institute and the institute has resources for them. The basis for many projects at the institute has been the development of regional culture. The principal also states that changes in the organisation have an impact on the willingness to innovate. He says:

> *During our heavy merger, I have felt that we should have tried more to limit than to encourage innovation. An embarrassing fact is also that if ideas are created, there are no implementers. So, there is still a long way from creativity to innovation, and unless there are enough resources I do not bother to encourage innovation.*

The drivers of innovation

The basis for innovation at the institute consists of many factors. The AECs are often described to be like their principals because the interests and enthusiasm of a principal have an impact on the activities of the institute. The willingness of the principal of Case institute A to develop the institute has strongly been influenced by his first years as a principal. The financial resources were very scarce then, and the principal's appointment also was questioned. As the principal wanted to prove his ability to manage the institute and he also had time to develop new activities, the innovative development started. The interviewees suggest that the personality of the principal has also had an impact on the innovativeness of the institute:

> *Our principal comes up with ideas frequently and becomes easily excited. Obviously, this is of paramount importance. Without this element, this institute would not look like it does.*

> *With whatever idea any one goes to the principal, he never says no directly. And even if someone suggests something in passing, the principal immediately starts to think about how the institute could also be involved.*

Freedom to operate, experimenting with ideas boldly and applying actively for external project funding and subsidies are the key drivers of innovation listed by interviewees. The staff wants to be equally active, positive, open-minded and fair towards all new ideas.

The support of the administrator is considered one of the major facilitators of innovation. There seems to be a good dialogue between the principal and the administration. Due to that support and confidence, the institute is able to exercise its freedom and to be flexible. New things can be tested and implemented quickly and deviations from plans are allowed. The interviewees feel that the freedom to operate and flexibility are possible because the administrator is a private association. They perceive that a municipal administrator might

make the operation cumbersome and slow. Also the characteristics of the region and the need to attract new students force the institute to reform and find creative solutions, as the principal states: *I think finding different possibilities to apply to our teaching is our creative strength.* One teacher describes the drivers of innovation:

> *In this working environment, the team spirit feels good. The fact that we are a small group and not a big one. We are listened to and given the opportunity to implement our ideas. From the teacher's point of view, this is the most important thing. We have the opportunity to try, and it is also possible that things might not succeed at all. This is how I see the institute. The fact that if something does not work at all this year, it was, nevertheless, tested. We never knock ideas, saying that we have always done this way.*

One of the important drivers mentioned in all of the interviews is the appreciation of the staff. The principal suggests that every principal should have good self-knowledge and knowledge of human behaviour so that he or she could see the staff's strengths and utilise them to profit the entire community:

> *When a person feels that he is important and his expertise is noticed, it will encourage him to do and come up with something new.*

According to data, the teachers of the institute are enthusiastic about their work and trying out new approaches. The amount of new ideas seems to be great. The principal states that there are some truly inspired teachers; not all are, but a sufficient number in order to create new ideas. The interviewees also consider the attitude towards mistakes important at the institute. They know that the more one experiments, the more there will also be mistakes, and mistakes will happen to everyone. However, the principal points out that usually the mistakes can be corrected and, above all, lessons can be learned. The principal states that teachers should have the ability to see things from a broad perspective to be able to identify which ideas can be experimented with, without any significant risk and with minimal deliberation and planning. The institute does not want to "play it safe" and arrange only courses and activities that are sure to attract a crowd. Risks should be taken reasonably so that there is room for new elements and experimentation. The aim and pride of the institute is to create a comprehensive, varied and surprising curriculum:

> *I am proud of our extensive and surprising curriculum, but I wouldn't be proud of one without any surprises. In my opinion, our curriculum should arouse reactions in people. Surprises are important.*

The data shows that the principal aims to be a very approachable and willing to listen. The threshold to suggest different ideas to him is low according to all interviewees. The principal himself states: *one gets no ideas if he does not listen to the people*.

One of the key values at the institute is cooperation. Attention is paid both to the amount and to the modes of cooperation. The goal is to develop an institute that all residents in the region consider as their own institute. Cooperation is also considered the most significant driver of innovation. The principal points out:

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The basis for innovation is in networks, and the more comprehensive networks you have in use, the easier the development and implementation of ideas is. You can consciously promote innovation by gathering different people together and watching what happens.

If you have even one person who has a different point of view, it is surprising how stimulating it is.

While mergers are often considered to be exhausting and to suppress ideas, they also have a positive impact on the development of the institute. When institutes are merged, new kinds of working communities are created and there is a necessity of doing things differently. Broadmindedness is needed.

One impetus for innovation at the institute was the harsh economic situation at the end of the 1990s. The solution was not to downsize, but to search for new ideas and to reform activities. Also an opportunity of a private organisation to use funds gives more economic flexibility in the management of the institute.

The primary method of the institute to finance the development of ideas into innovations has been the use of different project funding possibilities and subsidies. There have been many different projects at the institute and they are considered clearly to provide additional resources for developing new activities. The projects have been implemented flexibly and creatively. Some projects have been used to generate new ideas and some to test ideas and develop them further. The development of ideas has at times been divided into different projects. Project financing is also considered to help in reducing the risks associated with innovation. Projects also increase the possibilities to find new cooperation possibilities.

The principal points out that the atmosphere at the institute is entrepreneurial and the staff is willing to make the effort and work long hours, if needed. Developing something new usually requires additional work and also tasks that are not familiar. According to the principal, such readiness can be found at the institute. The institute's outlook towards the future is also important. The principal suggests that one element of innovativeness may be the aim to go forward continually. In addition, efforts are made to combine activities creatively and effectively. Ideas or projects are designed to promote many aspects simultaneously. The idea of entrepreneurship is present in the interview of the principal:

I have never thought that I couldn't buy something. Instead, I've always have tried to come up with ways to make extra money. In this way, we have entrepreneurial activity. The secretary and I have talked about us being little entrepreneurs in the region.

The benefits of innovation

The interviewees state that the innovativeness of the institute has been beneficial for the activities of the institute, the work of teachers and the region. New forms of cooperation have been developed, the numbers of teaching hours, students and partners have increased, the institute has received much positive publicity, the staff and the partners have had many positive experiences together, the staff has learned new working methods and mobility in the region has increased. In particular, the innovative theatre production by several municipalities

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brought a great deal of positive nationwide publicity through a large number of newspaper articles. The interviewees feel that innovation has also generated new enthusiasm and joy for work.

> *Maybe it spices up the work. Each job has boring times and routines. But when something new occurs, it may give you a spark of inspiration and excitement. ... And because you are free to do things in different ways, you are able to implement your own ambitions in many ways.*

An interviewed part-time teacher stated that if a teacher runs out of ideas, he or she may also run out of students and work opportunities. Innovative projects have also provided additional financial resources that have been used to expand basic activities. The designer analyses the effect of scarce resources on innovation:

> *The dilemma is that if you have scarce resources then you have to be effectively innovative. On the other hand, if there are enough resources, it does not exclude innovation. I do not want to say that one must have scarce resources to be innovative. Although it has always been [...] that when there has been lack and scarcity, the development of new ideas has started. [...] On the other hand, there should be enough human resources to enable generating new ideas or doing something different. Otherwise, the time is spent on basic activities, and it certainly will take an enormous amount of time. Human resources are need.*

The principal also considered the negative side of innovation. According to him, the "playground" reserved for innovative activities is crucial. Excessively innovative activity can lead to chaos. Emphasising innovation may also disturb the staff and students. Some teachers and students prefer to work as before – it is safe and convenient. The principal finds that it is his duty to:

> *Measure out innovativeness to the right people and in right proportions, and the administration should support the changes.*

4.2.2 Case institute B

Case institute B is a municipal AEC founded in 1969 and operating in two municipalities. The institute is a bilingual: 25% of students are Swedish-speaking and 20% of the lessons are arranged in Swedish language or are bilingual. The region where the institute operates is home to many young families. The largest age group of the students is 40-46 years, whereas at most AECs it is typically older. Approximately 9 000 students attend courses annually, and the annual number of teaching hours is approximately 12 000. The courses are divided into four nearly equal blocks: physical education and well-being, languages, arts and crafts and other disciplines. It is also possible to study open university courses at the institute. A summer term is held between April and June. The institute has three full-time teachers and roughly 130 part-time teachers. All full-time teachers are young and have been working at the institute for only a few years. The institute does not have its own main building, but its office is located in a building of basic education. The courses are held in rented premises in 50

locations in the region. The interviewed persons for this study were the principal and the three full-time teachers.

Organisation culture in Case B

The characteristic of the culture

In its vision statement, the institute emphasises that it strives to be a current and flexible adult education organisation, the values of which are adulthood, democracy and community spirit. The values of the organisation have been discussed together with the staff in 2010. As a result, the most important values in education were selected to be the promotion of community spirit, pluralism and democracy, critical thinking and quality of life. According to the three full-time teachers, the written values are very visible in the operations of the institute. The principal describes the values from his point of view:

> *For example, democracy is self-evident (at an AEC); you must recognise these different target groups and think about them. It is my opinion that democracy means that we operate around the city, even if it is more expensive – this is democracy. Critical thinking – I think all learning, whether it is cooking or language learning or physical education, leads to critical thinking; why it is important to me that I excercise, why I need to eat more soups. A sense of community is now the biggest change in my period, its importance is growing.*

The principal and one teacher describe the institute on one hand as a very traditional organisation, but on the other hand as very innovative. The principal also uses the word puritan when describing the organisation. Important elements according to the interviewees are social responsibility and a student-centred approach. The institute wants to keep a low profile in marketing, trusting that the high-quality activities speak for themselves, as the principal points out:

> *I think that this institute is by no means a very media sexy organisation. It's not a priority for me. It is not part of the institute. As long as we find students without any aggressive marketing, I'm happy. When we cannot find students anymore, I quit.*

Social responsibility is understood as taking into account the environmental issues, sustainable development and immigrants in developing the activities of the institute. It also means that the institute is critical in choosing courses into the curriculum. The idea of "letting all the flowers bloom", which is applied in many AECs, is not used in Case B.

Each of the interviewed teachers strongly emphasised flexibility as one main characteristic of the institute. It is associated with active monitoring of the environment, the ability to react and to start new activities (courses) quickly and the ability to take a new focus and concentrate on new issues. The action plan or curriculum can be changed during the semester and even the content of a course can be changed during the course, if needed. Emerging ideas will not be saved for the following semester or courses, but are tested quickly, as the teachers relate:

> *We're really flexible, we are constantly exploring and putting out feelers to find out what is in demand. It is such a balancing act. And on the other hand, the world is changing and the city is growing and changing.*

There will always be changes, which I think is good. [...] As I'm new and I'll try a lot of things, it is good that when I try and it does not work, it will be stopped immediately and tomorrow I will do it in a different way.

The other frequently mentioned characteristics of Case B are words that are used to describe the working community: open, interactive, active, and a good place to work. Enthusiasm for the work and for the development of the institute seems to be essential for the full-time staff. They have been active and made efforts to reach new target groups, "searching by walking and talking" without marketing, for example. The principal describes the good and open atmosphere as follows:

I do not permit rudeness. Everyone gets frustrated sometimes, but none of the staff will escape unscathed, if I hear of rudeness. [...] We are a cultural institution. You can see it in the openness and trust, and in our dialogue. And we know each other so well that when we have a meeting [...] it is time for proper work, and you do not have to think about what you can say and how.

Although the interviewees underline flexibility, the institute is also described as effective, accurate, clear and exact. Different issues are agreed on properly, and they will be applied to the entire staff. The principal says:

I do not think about success or risks. In principle, I am a very careful with the budget. [...]. We screen the courses rather carefully. As we have quite a small full-time staff, the courses which are offered in our curriculum, we are committed to them. The goal is that as few as possible of the planned courses are cancelled. It's just a waste of human labour, as teachers are recruited and a full-time teacher uses his time, and I use my time, and you may already know that the course will not be held.

The institute is also described as current. The full-time teachers are young and new at the institute. All of the interviewees also mention freedom as an important issue. Full-time teachers feel that the principal gives them freedom to operate as they see fit. In the same way, the full-time teachers give freedom to part-time teachers to choose their teaching methods. Students also have the freedom to choose the group and the level at which they want to study. A new language teacher describes how he finds the idea of freedom at the institute:

I feel that I'm in my dream job. This is like a playground. Whatever comes to mind, I can go to class and do it and see if it works, and it's so good. [...] I get the feeling that I can do what I want. I do not have a job description that tells me what I have to do. I just came and started doing what I am interested in and it works.

I think that I know how to design a good lesson and how to teach. But I never tell our part-time teachers that at this institute languages are taught in this way [...]. They have the freedom to do what they consider is best.

Once a student came to both levels one and six (levels of language courses) at the same time and said that it doesn't matter if it is too easy or too difficult. That's why I think that if someone has attended the same course for ten years, perhaps it is important for him, and if it also serves the group, that's how it should be.

The management of the institute

The principal describes his relationship with the administrator as official and maybe also distant. He states, however, that among municipal decision-makers the institute has always been received very well, and the activities of the institute have not been called into question. The institute's strategy work is based on the strategies of the municipality. The institute brings its own perspective to the municipal strategies, and the action plan of the institute is elaborated based on those strategies. According to the action plan of 2011-201, the institute emphasises the following aspects of the municipal strategy: 1. developing the city and the quality of life of the residents, 2. reforming the service network, customer-focused and effective facilities, committed and skilled staff, 3. a staff committed to the objectives and cooperation and 4. the functioning of the municipal organisation and the workplace.

The aim is to keep the number of teaching hours at the current level. The institute does not want to compete but pursues cooperation and networking with all education sectors. One major part of the teaching is immigrants' language and cultural training because the number of immigrants has increased rapidly in the region of the institute. One main aim is to improve the quality of Finnish language education so that it serves flexibly the basic education of Finnish language at the institute and further education in other education organisations. An important objective is to integrate the immigrant training as a permanent part of the institute's activities.

As growth is not a main goal in Case institute B, and according to the principal, it is not even possible for the AEC to grow continually, it is important to frequently revise the priorities of the institute. One priority in recent years has been sustainable development. At the time of the interviews, the main priority was to integrate immigrants into the activities of the institute. The principal hopes that all teachers would apply the priorities somehow in their teaching, but wants to respect the personal thoughts of the teachers:

> But you have to be awfully careful. Some of our teachers may have a completely different view on sustainable development and it is allowed. I'm not going to tell anyone how they have to teach [...] since the topic will be dealt with in the groups. It is a dialog, and in a group five or six different thoughts will pop up, for sure. The fact that the topic will be discussed is sufficient for our goals.

The strategy of health and physical education has been completed in 2009. According to it, one main target group for the activities of the institute are people with low physical activity. The other goal is to cooperate actively with other actors in the region. The sustainable development strategy was completed in 2009, as well. It emphasises that sustainable development is included in all activities at the institute. There is a possibility that in the near future, the institute will be merged with another adult education organisation in the region. The principal finds the current investigation into the matter a positive thing.

The principal says that he enjoys his work because it allows him to challenge himself to do new things in the same way as the students challenge themselves in their studies. He wants to be an approachable person. The principal is interested in what students and student groups

think and how they work. That is why he often visits the study groups. The interviewed teachers state that the principal is an encouraging and caring person:

> *The principal takes time to come to our workplace, and he is present and always approachable, and we can always phone him and ask questions.*

It is mentioned many times during the interviews that the principal gives the teachers the freedom to work and to decide how the activities are developed. However, the principal feels that he has not been able to develop human resources sufficiently, but the interviewed teachers do not seem to agree. The principal emphasises that he greatly appreciates the teachers and their work. He feels that both the full-time and part-time teachers of the institute are dedicated, enthusiastic and responsible: *They all do a great job. Our teachers do not work just to put food on the table, but they are enthusiastic year after year.* According to him, the existence of full-time teachers, their knowledge and networks is of particular importance for the development of the institute. Full-time teachers work at the institute as leading teachers for part-time teachers. The interviewees point out that the teachers' pedagogical ideas are listened to and respected.

The institute uses rented premises with high-quality, modern teaching equipment. It has organised online courses on the English language which have been very popular. It also uses Facebook and aims to increase the use of social media in teaching, marketing and in other activities (action plan 2011-2012).

<u>Development projects</u>
Both the principal and the teachers find that it is important to use project funding and subsidies to develop the activities at the institute. The institute has obtained both domestic and foreign project funding with which it has acquired additional resources and more freedom to implement different and new ideas, as one full-time teacher says:

> *It is meaningful and important that when I get external financing, I get the chance to organise theme days and the opportunity to experiment with something new. Then I have the opportunity to do my job and develop it, and create innovations that are not always possible because of the municipality's budget. I have more freedom.*

<u>The organisation culture type in Case B</u>
The values and characteristics of Case institute B based on the data are summarised in Table 18. Values and characteristics found in written documents (e.g. strategy, mission statement and values) are presented in the left column and values and characteristics mentioned by three to four interviewees are presented in the right column. The text in brackets indicates if a value was mentioned only by one person. The total number of interviewees was four. Courage, systematic planning and future orientation were not actually mentioned as concepts in the written or interview data but the systems, processes and innovation stories showed that these issues are strongly valued in the institute.

Table 18. The characteristics of the organisation culture in Case B

Characteristics and values describing the culture in Case B	
Written values and characteristics: • Flexibility • Modern • Adulthood • Democracy and pluralism • Community spirit • Critical thinking • Quality of life • Principle of local services • Focus of regional development • Sustainable development • Active use of project funding and subsidies	Interview data: • Traditional • Innovative • Flexible • Open and interactive • Active and courage • Freedom • Cooperation • Customer orientation • Enthusiasm for development • Social responsibility • Current and future orientation • Effective, functionality and clarity (principal) • Appreciation of planning and for the staff and networking

The results of the survey linked to the Competing Values Framework are summarised in Figure 20 and in Table 19. The red line describes the thoughts of the principal and the blue line is a mean value of the responses of other interviewees.

CULTURE PROFILE FOR CASE B
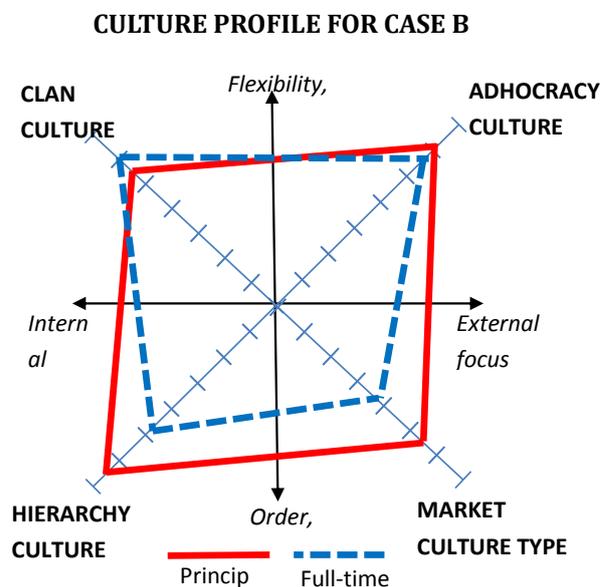
Figure 20. The culture profile in Case B according to the Competing Values Framework

According to Figure and Table, the most dominant culture types of Case B are adhocratic (mean value of the principal 6.17 and of the staff 5.67) and clan culture (mean value of the principal 5.5, staff 6.06).

Table 19. The scores of different culture types in Case B

Type of the culture	Principal		Other staff		
	Scores	Order	Mean	SD	Order
Clan culture	5.5	3-4	6.06	0.42	1
Adhocratic culture	6.17	2	5.67	0.29	2
Hierarchy culture	6.5	1	4.88	0.10	3
Market culture	5.5	3-4	3.89	0.67	4

The principal finds the culture more hierarchical (mean 6.5) and market oriented (mean 5.5) than the full-time teachers (corresponding mean values 5.22 and 3.89). This can also be found in the interview data of the principal as an emphasis on critical thinking, preciseness and active goal-setting.

The organisational culture profile of the principal is extensive and highlights the contrasting types of cultures; adhocratic on the one hand, but on the other, hierarchical. The full-time teachers emphasise clan culture more than the principal, while the value of other culture types is lower.

In the interview data, the characteristics of the adhocratic culture type can easily be identified; freedom, enthusiasm in development, flexibility and rapid response, courage, future orientation, and searching for additional resources using extra funding. The characteristics of the clan culture at the institute found in data are openness, participation, team work and cooperation, a sense of community, democracy, and a strong customer orientation. The hierarchical and formal features of the culture can be found mainly in the principal's interview when he describes his relationship with the administrator and also in clear principles of operation and critical thinking and preciseness despite of the quite low emphasis on written strategies. The characteristics of a market culture include, for example, the emphasis on effectiveness which is realised in curriculum planning where the goal is to avoid organising courses that will not be carried out but have to be cancelled because of a small number of students.

The characteristics of cooperation and social networks
Internal cooperation practices
The full-time teacher's lounge is located in the AEC office, but because the teaching is organised in many locations in the municipality, the teachers do not meet often there. The

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teachers' regular meetings are in practice the places where they are easily able to meet each other. However, the interviewees describe their institute as very conversational. The full-time staff has meetings approximately once a week and they are considered very important.

The principal describes the internal cooperation in the institute as a loose network. Official teachers' meetings for both full-time and part-time teachers are organised twice a year, in the spring and autumn. The main goal of the meetings is planning the activities, but the aim is also to have a nice time together. Participation has been reasonably high. At the Christmas party, teachers share their knowledge with each other and the programme has included some arts and crafts or fitness activities, for example. The spring meeting is for planning the following year, its priorities and themes.

The full-time teachers usually work in close cooperation with the part-time teachers. In addition, part-time teachers are quite well networked with each other, for example in health and physical education. This also allows the teachers to substitute each other, if needed, and exchange information without the full-time teachers' involvement. The institute also organises internal training for part-time teachers. The internal networking is, however, a challenge because a large proportion of the part-time teachers teach in several other institutes, live quite far away and visit the municipality only to teach. A full-time teacher describes his attitude towards the part-time teachers of his discipline:

> *I feel that my role is to look after them. And listen, because they are working all alone out there. Sometimes I phone and ask them how they are doing.*

External cooperation practices

The institute has large external networks, and they are considered very important for the development of the institute. Both the principal and the full-time teachers are active in building new networks. Also the administrator has stated that the institute should emphasise the importance of cooperation. The new full-time teacher of health and physical education tells that he has been active and determined in building new networks from the beginning. The interviewees suggest that operating in quite a small municipality helps networking substantially. On the one hand, it is easier to get to know people, and on the other, some of the partners also work as part-time teachers at the institute and in that way know the institute's activities more closely. The full-time teacher finds also that the projects organised by the Finnish Association of Adult Education Centres have helped him to build networks with other AECs. The interviewees especially emphasise the importance of personal relationships. The institute also wants to show to its partners that they are valuable to the institute:

> *We get together and talk, and at least once a month or once a year, I offer them lunch and they like it. [...] And yes, it works with personal relationships.*

The institute B has actively built cooperation networks, but it has also been a desired partner in other networks in the city, especially in the field of health and physical education and language education for immigrants.

Innovation in Case B

<u>Innovation as a concept</u>

The teachers interviewed feel that innovation is certainly a positive element and an essential part of their teaching work. The definition of the concept was not, however, easy and the interviewees defined innovation mainly using examples. The data suggests that innovation and innovation capability are linked with the concepts of novelty, creativity, ingenuity, an ability to see things from different points of view, perhaps not always accepting the first choice/option, non-typical, freedom, an ability to think "outside the box", trying new things, and seeing something that is not usually seen in everyday life and work. One full-time language teacher explains his thoughts about innovation:

> *Something new and creative: It is basically the very reason why I want to teach.*

The principal links innovation with flexibility and openness to change. It is related to continually renewing working methods and routines. He states that an AEC can either keep its curriculum the same every year or renew it in a flexible and innovative way.

While innovation as a concept is considered strongly positive, the interviewees also repeatedly emphasise the additional work and effort that is easily related to innovation. The full-time language teacher feels that both teachers and students sometimes have to leave their "comfort zone":

> *Right now we have a situation that when an immigrant student comes to the office, he or she can start the course the very next day. It is a bit difficult for teachers, but that's what innovativeness is. It's actually what we do and what I will defend, even if the teachers disagree because it is difficult.*

Innovation is considered as an important issue at the institute in order to develop the organisation continually. The interviewees also feel that their AEC is very innovative. In everyday life, money and human resources, however, limit innovative efforts to a certain extent. The basic idea is that the traditional activities have a key role in the institute's activities and innovation is supplementary. The interviewees describe the innovativeness of the institute as follows:

> *We are as innovative as our resources allows us to be.*

> *We think that as long as it is not broken, we won't fix it. It means that when an old product is good, it will stay in the curriculum.*

> *Without innovation, the institute will fall asleep and the results will show in a few years.*

According to the principal, many new ideas are created at the institute, and many of them are developed into new innovations. The principal states that generated innovations are mainly related to new education products, new ways of working, new teaching systems and new customer groups. The interviewed teachers understand the innovations in practice, for example, as new kinds of teaching methods, new kinds of courses, new ways of action and marketing, or new customer groups. Innovations at the institute are usually incremental. Each

interviewee told many innovation stories and found many examples of different innovative courses and teaching methods. In addition, the Finnish AEC system itself was considered an example of a great innovation.

> *This system dates back a century and it is still alive and well. It tells its ability to reform and innovate. It is a part of this Nordic democracy. That's how I experience it. It is also innovativeness that makes all AECs in Finland different.*

Ideas may rise spontaneously, but innovations are developed also consciously as new solutions to problems. The institute uses its own money as well as external funding for development work. Innovations are developed by experimenting with teacher' news ideas or trying current systems or products in new ways or with new groups. The management and processes are developed continually, and new technologies are employed at the institute extensively.

Two significant examples of innovations that were mentioned by all interviewees were the institute's way to integrate immigrants into the other education activities, and the development of health and physical education. Immigrant education has been part of the activities for a long time but has now quickly developed into new forms. The number of immigrants has doubled in recent years in the region and the need to reorganise the immigrants' education has driven the institute to develop activities in a completely new way:

> *We no longer think that this is language training for immigrants. Instead, it is training that must be integrated with our practical work. And now we are trying to find out our own role and what we are like. It is now time to find a new identity.*

Also the health and physical education project for men and special creative courses and workshops for children and families were mentioned often as well as extensive networks of cooperation and retired teachers' voluntary involvement in teaching activities.

From an idea to an innovation
The interviewed teachers feel that they are full of ideas. They say that their ideas are generated from their past experience and education and their own situation in life, for example. Also partners and students give ideas for innovations, and ideas also emerge when new solutions for emerging issues are needed. The principal states that the institute uses a method called "a rapid response – from words to deeds". By that he means that they try to find quick solutions to difficult issues. Thus, the problem at the institute is not a lack of ideas, but limited resources to develop and implement these ideas. No shared systems for idea generation, evaluation, development and implementation are used. Brainstorming is informal and the generated ideas are put into practice rapidly. In the data, this fast response is mentioned frequently. The principal emphasises that screening the environment and keeping track of current developments and needs are the basis for innovation. Each interviewee evaluates the usability of the ideas in their own way. The evaluation criteria used are the availability of resources and the usefulness of an idea in relation to the AEC's mission and goals. Furthermore, when an idea is accepted, the second phase is to decide if the institute

wants to develop and implement it alone and what the role of cooperation is. I some cases, another organisation could implement the idea better. Piloting is also one method for the evaluation of new ideas. The principal states that they actively try new things. He uses the phrase "test laboratory" a few times during the interview in describing how they generate ideas:

> *I've said in some meetings in the municipality that this immigrant education could be considered as test laboratory. Now all the new elements are in place. Why can't we think outside the box and do something completely different. Sometimes it works and sometimes it doesn't, but we have the opportunity to try no matter what. It's about relationships and the willingness of people.*

The drivers of innovation

The main drivers of innovation mentioned in the data are the attitude of the principal towards new ideas and the teachers' way of thinking creatively. Teachers perceive the principal as active, enthusiastic, and up-to-date, giving teachers opportunities and freedom and encouraging them to come up with new ideas:

> *Management is fuelling innovation. We have an innovative manager, who sets an example. We can say this: he is very active, he visits the student groups, and has ideas – it is important. He knows what is happening everywhere. It triggers the sharing of ideas, which we do a lot.*

> *I tell him (the principal), and usually it's "yes". And I'll tell him and I'll have a pretty big chance to implement my idea. Then my mind and my brain are constantly working and coming up with something new. [...]. It is the environment which helps a lot.*

According to the data, the young and enthusiastic full-time teaching staff is an important promoter of innovation. New teachers bring new and fresh ideas. The principal praises the teachers and says that they are professionals and interested in the development of their disciplines. The high level of knowledge brings sensitivity to new ideas, and thus it is possible to notice new needs and opportunities. The principal links innovation also with pride in one's work. The data indicates that the staff strongly believes in the importance of liberal education and they have a desire to show it. A barrier to innovation is, however, the workload of the full-time teachers, which may in the long run or occasionally limit the willingness to actively develop new issues.

> *I believe that generally at AECs people feel that we're only an AEC. But I do not think we have anyone who thinks that way. We are the teachers of this AEC and we are proud of what we do. And it's the same with innovation. .*

The knowhow on the needs and opportunities of the region is also an important contributor to innovation. It is possible to meet the needs of the customers if the institute is able to identify those needs and knows the special characteristics of the region. Also former successes encourage further innovation. The principal states that innovation at AECs, in general, is linked to the goals and dreams of the institute. Impulses from training, new environments and a peaceful sense of community have been experienced as particularly rewarding:

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We were all there in the seminar in Lapland. We also had a meeting dealing with an international project. And we had such an innovative meeting. First, we had been in a seminar and then downhill skiing or cross-country skiing, and next morning we sat at the meeting, and the ideas just started to come and kept coming and coming. If it had been a typical Monday meeting, the ideas would not have come so easily. Sometimes when you're in another environment, new ideas may be created because you have spent time with your co-workers in a different context. I recommend it.

Cost-effectiveness is not a key issue at the meetings and discussions at the institute. This is mentioned as a driver of innovation, as sufficient financing is not the primary criteria in developing and piloting new ideas. Also the fact that the institute does not continually have possibilities to increase the volume of teaching hours forces to think about new priorities each year.

The interviewees say that they discuss many issues at the institute. Critical thinking, which is one of basic values, means calling issues into question and desiring to do things differently. In that way, critical thinking acts as a breeding ground for new ideas. According to the interviews, cooperation is of great importance to innovativeness at the institute. Networks and many cooperation projects drive innovation, as they contribute novel ideas and information. Cooperation with different people helps when one's own creativity and ideas are not enough. The principal and the full-time teacher of health and physical education relate:

When you just think alone, the ideas do not come so well. And in fact, I feel that I'm not a terribly innovative person. At times, I anguish over with that and when I'm in a hurry, nothing comes to mind.

I would encourage the teachers of physical education also to look outside their discipline. They do not need to go to dance class in order to get ideas. They can visit a painting group. A person is an entity; all their own hobbies and trips have an effect.

The benefits of innovation

The principal describes an innovative AEC as a current institute where the curriculum varies in content each year and which continuously attracts new students. He states that changes that are results of innovation make the atmosphere of the institute refreshing. One teacher points out that doing new things brings joy and fun into the work. Innovation also brings determination into institute's activities, as it forces to think about priorities. The principal also considers the impact of innovation on the image of the institute and finds that the institute may not have sufficiently utilized its innovations in marketing its courses.

4.2.3 Case institute C

Case C is a municipal and regional institute founded in 2003 when two local AECs merged into one. The institute employs nine full-time employees, in addition to approximately 130 part-time teachers. The annual number of teaching hours is nearly 18 700 and the number of students attending the courses is nearly 13 500. The largest discipline measured in teaching hours and in the number of students is music. Other important disciplines include languages,

arts and crafts, visual arts, performing arts and literature. The student-centred and locally oriented nature of the services is greatly emphasised. The institute organises courses in over 140 locations. The institute is also establishing its role as a provider of continuing education for the city staff (Annual report 2010). The municipality has renovated a former school as the main building of the institute, where the office and teachers' lounge for full-time staff was situated at time of interviews. However, changes are taking place and the institute will move to new rented facilities in the near future. The institute has received a quality award in 2010. The interviewees were the principal, four leading teachers and the office secretary.

Organisational culture in Case C
<u>The characteristic of the culture</u>
The written values of the institute are equal learning opportunities, the principle of lifelong learning, a customer-oriented attitude and cooperation. According to the principal, the values strongly guide the activities at the institute: "*Our values and processes are not just clichés, but we really operate according to them.*" The evaluation report of the quality award describes the institute as follows: The strength of the institute is the fact that its activities are in balance in all areas of assessment. The management has been able to create a good working atmosphere at the institute and an attractive place to study for customers. In addition, the institute's activities are flexible and react quickly to challenges.

Flexibility and enthusiasm are also mentioned often during the interviews. Based on the interviews, the institute's slogan, "bringing joy and energy to your life", is realised in Case C: "*we don't mess around*". Other characteristics that are used to describe the institute are active, open, courageous, and developing. The principal describes the staff:

> *You know that this is a great staff, so flexible and eager to take part in different activities.*

Flexibility can also be seen in relation to the guidelines and rules. The institute has clear written quidelines for the staff. The principal stresses, however, that the guidelines and rules have been made to facilitate everyday work and to prevent conflicts and misunderstandings, not to restrict operation. Instructions will be developed as situations change:

> *After all, they (rules) are not permanent, so that we are forced to live like this, but if something changes, for example in cooperation with partners, we operate according to the developments.*

Also cheerfulness is associated with the institute's atmosphere. The principal describes the full-time staff with the words "wild group and laughter". An open attitude and actively seizing new possibilities describe the operation, and the interviewees emphasise that they do not want to keep new ideas and innovations to themselves but divide them, as one interviewee relates:

> *Openness and actively seizing new opportunities describe the atmosphere as well as the other activities, such as sharing information and ideas and the diffusion of ideas and innovations. We have the idea that everything can be shared and we share ideas with everyone. It is something I appreciate.*

Student-centredness is one of the most important values at the institute. The strong student-centred approach to operation grows from the institute's own mission as well as from the city's strategy, which states that the citizen is King. The institute carefully analyses how different target groups can be served and what is good at the institute from the perspective of different target groups. The staff wants to point out that the institute serves all of the residents in the region. The principal finds that the greatest mistake one could make at the institute is for a teacher not to listen to students. According to the interviews, also the principle of local services is realised in the institute's activities as well as in written materials.

> *We specifically serve our students – they are the kings who vote with their feet, and which we serve. Their wishes are heard.*

> *First, I will tell (a new employee) that the customer is lifted on a pedestal. It is our main process. The customer is served. We are not needed if we do not have students.*

> *We do not think so that people need to drive here to the city centre to get services. Instead, we offer courses and services in rural areas as much as possible.*

The institute has a clear goal to serve and develop both individuals and the entire region. The aim is for the municipality and the institute to support each other. One example of this is "mobile library pedagogy" developed together with the municipality, organising courses in bookmobiles that visit the rural areas. The full-time music teacher talks about his experiences:

> *I have sat in a mobile library, too. In the autumn I attended two different trips. It's actually pretty nice out there and you actually meet people who would not use our services otherwise, it is quite interesting. But there were also people who had never visited a mobile library, so they came because of our services and at the same time they found out that the library has a wide selection in the car. Hopefully they will also learn to take advantage of the services of the mobile library. My opinion is that the aim is for them to support each other. It is a strong part of our activities.*

The interviewees point out that cooperation is a strong value in Case C. A good basis for that are a mutual appreciation and the development in the institute. The point is that no one does the development work alone, everyone is needed. The principal often uses phrases such as "*we plan and discuss things together*" and "*they thought about it together in small groups*". Teachers update their qualifications and are encouraged to train themselves. The idea of freedom is mentioned many times during the interviews of the teachers – "*the principal gives space and opportunities*" – and of the principal – "*I do not interfere, they take care of their work independently*" or "*I let all flowers bloom*".

The institute is also described as being on the cutting edge and future-oriented. The staff easily seizes new opportunities and emerging trends even ahead of time:

> *I have a feeling that we all want to follow development and try to peek behind the veil at what is coming in the near future. Not to do just what you currently do, but also try to experiment new trends in our courses.*

The institute actively applies new education technologies, online education, social media and cloud services, for example. The institute is also active on Facebook. Although the institute has been active in applying new education technology in its activities, the principal feels that only web-based teaching and social media should be further developed. The principal finds that it is his important tasks to encourage the staff to try new technology, be an example and build the facilities. The aim is for both the full-time and part-time teachers to be able and eager to use modern technology. The institute has also pursued the recruitment of people who already have technological know-how:

> *He came from Nokia and knew how to highlight the importance of social media properly and with humour, and get people excited about the existing options. And he was able to justify how easy it is and he was able to show how to use them.*

The management of the institute

The activities of the institute are guided by a written mission statement, vision, operating concept and a slogan. The mission statement of the institute states that they offer general adult education, including open university courses, basic art classes as well as training for companies and other organizations contributing to professional competences. They develop the education and contribute to the sub-regional inhabitants' inclusion and well-being. The institute also offers the opportunity to strengthen one's active citizenship, for instance by developing the information society competences of the sub-regional inhabitants. The vision of the institute has been formulated as follows: an open and flexible learning environment to all of the inhabitants of the municipality. The concept is formulated as follows: the institute offers the inhabitants of the municipality the opportunity for self-development, well-rounded studies and recreational activities, bringing well-being and implementing lifelong learning. In addition, the institute has an official slogan: brining joy and energy to your life and knowhow.

According to the interviews, the institute invests highly in the planning and development of its activities in order to avoid unnecessary work. The assessment report of the quality award describes that the institute is managed with determination in accordance with the strategy of both the institute and the municipality. The institute has drawn up a three-year development programme which will be reviewed twice a year. It has also prepared a stakeholder analysis, through which the identification of the operating environment and the management of partnerships have been improved. Operational objectives and a framework have been written in scorecards. The principal states, however, that he uses these only in the background and in his personal work, but rarely refers to them in the staff and teacher meetings:

> *I myself have the scorecards and such in my head, but I rarely speak of them with the staff. I feel that is the principal's responsibility to ensure that we work towards the correct objectives, and others may reap the benefits. My task is to somehow steer the discussion in that direction in order to achieve the results without pressuring the staff. It will kill creativity if we emphasise too much market leadership.*

The staff actively uses student feedback in their development work. A customer satisfaction survey is carried out every semester. The number of students and teaching hours are also

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monitored regularly, as well as the amounts of different types of student groups in relation to the population of the region. The institute also uses a stakeholder survey to monitor the cooperation networks. The target is for new courses to amount to 15% of the total number of courses. The annual themes of operation are selected in the planning meetings of the full-time staff and they are sent to the part-time teachers so that they can take the themes into account when planning their own teaching.

The importance of the development work can be seen in the way development is resourced at the institute. Full-time teachers who are willing to invest their time and energy in the renewing of activities receive a bonus. The development work is allocated a great deal of time resources, as the principal points out:

> *Now that we have been working on this project application together for three weeks, 2.5 hours is spent developing ideas every day. We probably couldn't work in any other way anymore. Two times per semester, we dedicate a whole Friday to thinking about our practices.*

The institute has also been active in developing a good performance and development discussion culture. The principal conducted performance appraisals of full-time staff and long-time part-time teachers. In addition, the leading teachers of disciplines have had group development discussions with their own part-time teachers. These discussions consist of the need for development, student feedback and common issues.

The teachers interviewed described the principal as an open, cheerful, cooperative, determined and enthusiastic person. The principal easily shows his appreciation to the staff. The interviewees describe the management at the institute:

> *The principal is very determined, and also appreciates the staff and the staff's opinions. He is very open, cooperative, and is not authoritarian. Everything is usually done together. But yes, the management must also know where you are heading.*

> *When he started as a principal, he took the place by storm. So, we began to think and we became more unified, and we also noticed development in ourselves.*

The institute operates in a city where there are many different education organisations, and also liberal adult education is offered in several institutions. The institute has sought cooperation with different actors and has assembled a course selection for students of vocational education organisations. In spite of their willingness to cooperate, the staff feels that there is competition among the various organisations. Therefore, the activities of the institute must be competitive. Nevertheless, the competition is taken as the challenge, as one teacher states: *One time we realised that they took to our idea, but we would come up with a new and better one.*

Development projects
The institute has used both national and European project funding and subsidies for the development of its activities and cooperation networks. The staff invests a great deal of time

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in the preparation of the applications. Ideas for new activities are developed with full-time as well as part-time teachers.

> *We actively seek new resources. It would probably be nice to have even more projects, but the resources of the staff are limited.*

<u>The organisation culture type in Case C</u>
The values and characteristics of Case institute C based on the data are summarised in Table 20. Values and characteristics found in written documents (e.g. strategy, mission statement and values and quality award evaluation report) are presented in the left column and values and characteristics mentioned by four to six interviewees are presented in the right column. The total number of interviewees was six.

Table 20. The characteristics of the organisation culture in Case C

Characteristics and values describing the culture in Case C	
Written data • Equal learning opportunities • Student-centred approach • Cooperation • Flexibility and quickness to react • Principle of local services • Regional development perspective • Appreciation of networking • Growth orientaiton	Interview data • Flexibility • Enthusiasm, cheerfulness and community spirit • Activity • Openness • Courage • Development • Freedom • Current interest and orientation to the future • Dynamism • Appreciation for the staff • Systematic planning and determination • Active use of project financing • Tolerance of mistakes • Appreciation of networking

The results of the survey linked to the Competing Values Framework are summarised in Figure 21. The red line describes the thoughts of the principal and the blue line is a mean value of the responses of other interviewees. According to the Competing Values Framework, the thoughts of the principal and the other interviewees concerning the organisational culture are very similar (Figure 21 and Table 21).

The culture of the institute can be described as multidimensional, as all four types of culture seem to be quite strong. However, the two most dominant culture types according to both the principal's and staff's responses are the adhocratic (6.33 and 5.80) and clan culture types (6.33 and 5.80).

CULTURE PROFILE FOR CASE C
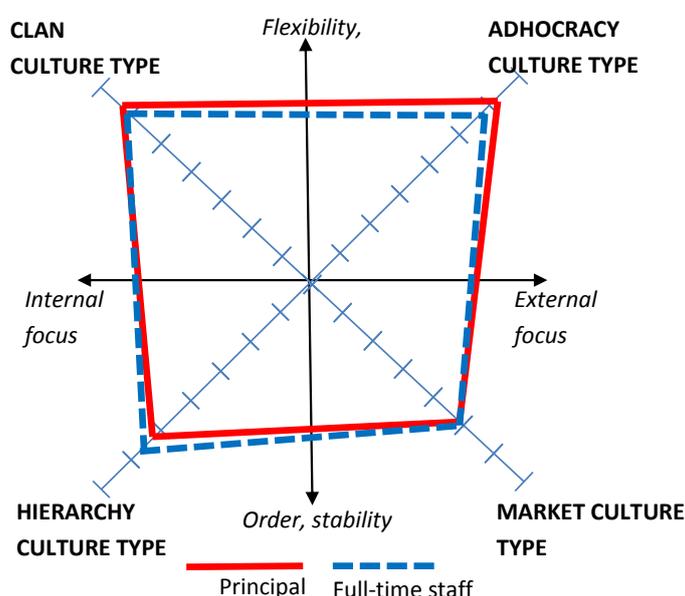
Figure 21. The culture profile in Case C according to the Competing Values Framework

The adhocratic features of the culture mentioned in the interviews are freedom, enthusiasm for development, flexibility, dynamism, courage, future orientation, and using project funding to obtain additional resources. The characteristics of clan culture at the institute are openness, cooperation, student-centredness and a strong appreciation of the staff. Hierarchic features can be found especially in strong quality assurance work. The characteristics of the market culture type are determination, goal orientation and emphasis on planning.

Table 21. The scores of different culture types in Case C

	Principal		Other staff		
Type of the culture	**Score**	**Order**	**Mean**	**SD**	**Order**
Clan culture	6.33	1	6.20	0.70	1
Adhocratic culture	6.33	1	5.80	0.65	2
Hierarchy culture	5.17	3	5.59	0.43	3
Market culture	4.83	4	4.97	0.71	4

Cooperation and social networks

In the institute B both internal and external cooperation are regarded very important. The improvement of the networks has been a particular aim of the present principal, and the number of partners has increased significantly during the past few years. The institute received a quality reward because of its large networks. The evaluation report of the quality award points out especially new target groups, an innovative way to use the premises of the partners, a new way to organise training for the staff of the city, mobile library lessons and a new way to cooperate with partners in marketing the activities of the institute.

Internal cooperation practices

The staff tries actively to ensure that the cooperation between the teachers would be as good as possible. Important factors in unifying the teaching staff are different gatherings, meetings and parties. The full-time staff meets on a weekly basis. The agenda includes practical issues and the development of new activities. The atmosphere is described to be open and informal.

> *Our team meetings are just lovely, they are chaotic but lovely. At the beginning, each of us always tells what he or she is working on at the moment.*

The full-time staff works in the same premises, which helps communication. The aim is also to focus the teaching into certain buildings so that also part-time teachers could meet each other more easily. Also group trips are organised for full-time staff to improve cooperation. Meetings for both full-time and part-time teachers are organised twice a year. The participation rate is very good, about 80% of the teachers, which is not common in Finnish AECs. The aim is that the meetings have an interesting programme, discussions on the teachers' work and on the activities of the institute, and some informal and fun activities. Most of the teachers also have discipline-specific informal meetings with the leading full-time teachers once a month. The interviewees state that most of the teachers are very committed to the institute. In addition, the institute has opened an electronic teachers' room on the web, where the teachers can find information and forms, for example. Teachers' meetings are described as open and conversational, as the principal and one teacher tell:

> *Perhaps we have succeeded in building a good team spirit. I have the feeling that when the teachers come to the meetings, they feel that we belong together at the institute.*

> *The teachers' meetings are very conversational. That, I think, is one way to make the loose ties stronger.*

> *Our language teachers' team is super if you consider the commitment to the institute. They are always involved in everything. If something happens in our institute, the language teachers have something to do with it, even those with just a few teaching hours per week.*

Although the internal cooperation seems to be quite good, the principal finds that new possibilities should be sought especially for the part-time teachers to meet with their colleagues. To this end, the institute has already started to arrange "morning coffee breaks" once a week. These coffee breaks have been well received, as one teacher describes: *Last time*

the coffee room was full, a cosy atmosphere, and chatter. One interviewed teacher stated that at AECs there may be some internal competition for students between different teachers. He pointed out that they want to prevent this competition with appropriate timing and location arrangements, organising parallel courses at different times and different locations. This is also seen to improve the interaction of teachers, as they do not find themselves as competitors.

External cooperation practices

The institute has large, diverse, and active cooperation networks, especially within the municipality, but also with other education organisations, other AECs and different associations. In addition to receiving the national quality award for networking, the institute was given an honourable mention for innovativeness in networking. The active networking of the principal and teachers has helped the institute to continuously develop and expand its activities. The teachers stated:

> *Compared to other AECs, we have quite a lot of partners, and the number is constantly growing. Many groups and organisations have realized that they could ask for any cooperation.*

> *We have good cooperation networks, our principal is pretty great that way. He has created these networks for cooperation, and it is just magnificent. When he's asked, he goes there himself and also initiates contact himself. He immediately grabs the opportunity if someone asks whether we could work together.*

> *Without cooperation our activities would not be as widespread as they are. Cooperation is a very important part.*

The principal says that he has actively tried to find various working groups which have helped him to meet new people and establish new partnerships. As a result, the institute has become an attractive partner in a variety of contexts. The principal finds that a small city is ideal for cooperation. The principal has also been working temporarily as a manager of spare time activities in the municipality. This has been considered a positive matter at the institute from the point of view of increased cooperation. The institute also wants to show to the partners that they are important to the institute. For example the annual reports include a list of all partners, and the report is sent to each partner individually. The principal describes his "methods":

> *As a new principal, I joined various working groups. This is how the working relationships have been born,[...]. So, when we are having coffee in the working groups, I can tell them about what we are doing. And that's how they have found us. It has required the courage to put myself on the line.*

> *The partners can see that they (the annual reports) mention how they are cooperating with us. I feel that follow-up is also extremely important. And then again the following year, it is real easy to cooperate when they can see that we have acknowledged them. [...] It takes time, but it's worth the investment. As children, we have been taught good manners and that*

you have to take other people into consideration, as well. It also works at a professional level if the partners feel they are highly valued.

Innovation in Case C

<u>Innovation as a concept</u>

Although the majority of the interviewees felt that innovation as a concept is positive, some felt that it was also irritating and confusing. However, even those to whom the word itself was negative saw that the phenomenon itself was good. The negative attitudes are partly due to the fact that some teachers fear that the current good and successful practices will be stopped in the name of innovation. The teachers describe their negative attitudes in this way:

> *The word itself is probably not positive, but when you begin to think about the content, it starts to become positive.*

> *In that sense, innovation is now talked about an awful lot. A traditional good and well-established practice which works will satisfy people. When everything nowadays is changing, the students want to stay somewhere where you do not need to invent anything new. This is a lifeline for them.*

The interviewees defined the term innovation in different ways: something new, what is needed, but does not yet exist, something new that has been invented and will be developed further, or something existing which is being developed further in order to better serve the students, completely new structures, new systems and new issues, a driving force behind actions, the initial idea, fresh and new ideas not necessarily invented by the institute but invented that can be applied at the institute. The interviewed teachers linked innovation mainly with new courses and their planning and implementation, but also with new kinds of practices and processes. A teacher who had been working at the institute already for many years stated that some of the currently tried and tested new courses and practices have, in fact, existed at the level of ideas and discussions for years, but they have been implemented only by the current principal. The principal himself points out that he finds that the new course ideas are not, however, the actual sources of innovation. He understands the innovations as new kinds of structures and processes which help the institute to operate in a better way, as he states: *Single stitches are not durable. Good innovations are larger structures. They carry.*

Innovativeness was understood also in many ways: seizing new things, inventing, creating and combining things, introducing new practices and partnerships, a positive attitude towards development, seeing new things, or old things in new ways, and "being like a pioneer". Teachers also discussed their own teaching methods in relation to innovation. They felt that innovativeness depends mainly on the attitude and personality of the teacher rather than the discipline taught.

The interviewees regarded innovation on the one hand as an additional activity of the institute and on the other hand a basic element of all activities:

> *I think that we should have a good basic curriculum and operations first. Otherwise, it will be too confusing. However, quite a big part of the students are relatively old. [...]And it is*

good to find new markets and reach out to young people, who have not traditionally been our students. But because of them, we should not eliminate the traditional activities completely.

As such, when you think about innovation in our work, it is quite an essential, basic part of our work. If you are not ready to develop this work, then you may not want to do this work at all. Otherwise you walk blindfolded, you do not take anything into account or think about how you could make it work.

The interviewees consider their own institute as an innovative organisation. They easily found examples of innovations and told many innovation stories of new kinds of courses and new forms of activity. The most innovative activity has probably been a memory-school product, which has already spread also to many other AECs in Finland. Many innovative ways to teach information technology to senior citizens, an unconventional use of facilities, networking structures and the organisation of teaching in rural areas (such as mobile library courses) were most often mentioned. The quality assessment report states that the customer-oriented activities of the institute and its open-minded desire to develop its activities in a modern way have led to innovations that could be examples also to other AECs. Fine yet simple inventions are slowly progressing courses and a choir for people who have trouble carrying a tune. The institute's nationally award-winning memory school model is an innovation which many other institutes have taken up.

From an idea to innovation

Many new ideas are generated in formal and informal meetings and gatherings. Part-time teachers and students can present their ideas directly to the principal or to the full-time staff or with a course proposal form or "feedback box on the homepage". Also, various associations and organisations have increasingly presented new ideas. Some ideas are found from the curricula of other AECs. Also the principal proposes new ideas to the institute. The staff finds that the feedback system is one of the institute's strengths. Ideas are also fuelled by the goals of the institute, environmental monitoring, and an interest in the work and the development: *Ideas can be found anywhere if you just follow what happens in Finland or abroad. Then, you have to think about how this could be implemented in our institute.*

Successful innovations can also be a result of the need to find new pedagogical solutions to teaching. The idea of memory school developed at the institute is used in many ways in teaching and is continually generating new ideas. A teacher tells:

And also the idea for a memory game: I had searched on the Internet for something like this. I thought that some activity is needed in these memory groups. So, we developed a memory game, and I told our textile teacher and he also became interested and we developed it using old tablecloths and such. Innovations can be something that when you notice that something does not exist.

For actual new types of operating models, i.e. for structural innovations, ideas are generated by searching for solutions to problems and challenges that emerge. The institute analyses and plans activities on a regular basis and emerging problems, shortcomings, challenges and

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opportunities are addressed actively. The environmental analysis is considered to be a very important tool for developing new ideas. Also, scarce resources force to seek new practices, as the principal states: *renewal is necessary even if the resources are shrinking these days. It creates completely new models*. The principal would like to use new tools for idea generation. He feels, however, that "*ideas do not always come when you sit at your desk*". The solution which has been discussed, for example, is so-called "walking meetings". In addition, the interviewees emphasise that a good foundation for ideas are the discussions of teachers with different competences. The teachers' lounge is a good place for such discussions. Teachers also get new ideas when they study a discipline other than their own at the institute.

The principal emphasises that he wants the staff to know that he responds positively to new ideas and does not want to discourage anyone: *I never shoot anything down.* Also, the teachers feel that they are likely to have their ideas implemented and tested. Although sometimes ideas need time to "brew", the institute emphasises a rapid response to new ideas and environmental changes. Ideas are not systematically collected and stored for the future, but the ideas generated are mainly developed and experimented with immediately:

> *When you get an idea or hear of a new opportunity, you should start to develop it soon in order not to forget. I have the bad habit that if I do not immediately seize an issue or idea, it will be forgotten pretty quickly. The ideas are developed quite quickly.*

> *We have the courage to boldly grasp new ideas and we are willing to take those issues forward instead of discussing and considering them for years.*

The resulting ideas are generally evaluated together with full-time teachers. The evaluation criteria may consist of the feasibility of ideas and need of resources, how an idea fits with the idea of liberal adult education and if it is an idea on a course, how it can be studied and so on.

The principal points out that innovations are typically developed through pilots and piloting creates learning. One teacher states that when a good idea does not work in practice, more innovation is needed in order to find a better solution. The principal lists three key dangers on the way from idea to innovation: 1) good ideas are developed into such a large entity that they are no longer manageable, 2) the implementation method is too complex and 3) teachers think too much about the barriers of innovation. The principal finds that it is his task to remove such obstacles and to find the funding for idea development, for example.

<u>The drivers of innovation</u>
The interviewees told a lot of factors that affect the institute's innovation capability. Openness, which is one goal and value at the institute, encourages bringing up ideas. It also leads to cooperation in further developing the ideas. Openness enables the teachers to dare to propose ideas to other teachers. The institute is also very open in telling and training the invented ideas and innovations to other AECs. "*Everybody can use our ideas*" was stated in several interviews. The aim is not to belittle the ideas of other teachers because it can be easily experienced as a personal insult:

When someone opens his mouth and says that this is a good thing. If it is immediately torpedoed by saying that it can't be done, it does not work here, or it has been tried in the past and it didn't work, then the person who told the idea and found it good, it is a bit like a personal insult because the idea is kind of like your own baby.

Also the courage to seize ideas and challenges and to test and pilot them is an essential part of the innovation capability of the institute. The principal states that he tries to encourage the staff not to fear mistakes and to experiment even with impossible ideas. Errors are taken as opportunities to learn and acquire experience:

Not afraid of mistakes, what if no students come, what if it's a disaster, it does not work at all, and it requires money. It is just another experience, and then we report that it has been tried and that it is not, at least at this point, worth pursuing. There is nothing like mistakes to help you learn. I always say that even if we make a mistake twice, so what!

One of the drivers of the innovations at the institute is, according to the principal, the fact that the best innovations are not personal issues but take root in the practices of the institute. The memory-school idea currently brings the institute also financial resources and has also attracted much attention from other AECs. It was first the principal's own course idea, but today memory school is developed with several full-time teachers:

So maybe the memory school is the best example. It has already started to live its own life, I am no longer really involved in it. Teachers are developing it. Letting go is probably one thing we know how to do. Others will develop it and have new insights.

The positive and appreciative attitude of the local administrator of the institute has a great impact on the innovative approach at the institute. The institute has received plenty of support for its activities from the administrator and the local authority works closely with the institute. In addition, the municipality strives to find resources for the development of the institute. The principal is a member of several teams in the municipality and the institute takes care of the computer training of city officials, for example. The principal does not consider that the municipal administrator limits the development of the institute. He points out that as the institute is one organisation in the municipality, it has better opportunities for cooperation with the municipality.

The principal also states that it is possible to support innovative activities if the management is participative and the principal knows what is happening at the institute in practice. He feels that one of his tasks is to show that new activities are possible. He wants to give space and opportunities to test new ideas and to trust in the expertise and competence of the teachers. His attitude to new ideas and the staff is described in the following quotes of the principal:

I am not the only one who can, but I have to keep in mind the fact that the others can also generate ideas, and, above all, that others may enjoy the fact that they can try new things. That the principal's task is to allow the others to experience new things. Although their wings might not bear, they have even gotten the possibility.

I feel that the principal may be the energizer and initiator, but that's where it ends. In the practical implementation, the personnel is required. I feel that I am able to tell these ideas and then to watch if the staff gets excited, and then to encourage the enthusiasm.

Our staff has the right kind of foresight, a broad scope of the expertise and a wide perspective, and then, enthusiasm.

The principal mentions the value and the commitment of the staff on several occasions during the interview. Also the interviewed teachers emphasise the meaning of the encouragement and appreciation which they receive from the principal and the fact that the principal listens and welcomes ideas. The importance of appreciation is crucial especially during the changes when the teachers have to "*put themselves on the line*". It is also important that the full-time teachers support the part-time teachers in improving, developing and innovating. One teacher tells:

Such verbal encouragement is really important. That you get feedback if you have done something or even tried. It is the key to renewing yourself if the atmosphere is accepting and encouraging. We do not expect monetary rewards. Appreciation is the most important.

The institute supports innovation and development also by providing personal help and guidance for teachers who want to test and learn something new. For example, when a teacher wants to use modern education technology, he or she is not only trained but can also have an expert present at the beginning in the classroom. Funding for such personal support services comes from different projects. Important drivers of innovation mentioned frequently in the data are also the principal's presence and easy approachability and a "*low threshold*" to discuss matters with the principal.

All forms of cooperation were seen as central elements in the development of innovations. The principal considers active networks a critical issue in the fact that institute has become so innovative. Cooperation feeds innovation according to the interviewees in many ways: in the birth of ideas, in developing them and in the phases of piloting and implementing. It helps that you do not have to fight setbacks alone. A good community spirit is mentioned several times. Meetings are held often and the teachers feel that informal brainstorming happens continually in the meetings. The creation of new ideas is seen as rewarding in itself. Similarly, the development of teacher's expertise and skills through training, proper premises and common rooms of teachers support the development of innovations by giving possibilities to informal discussions.

One of the practices at the institute that also drives innovation is that the staff analyses different problems, challenges and opportunities accurately and searches for solutions together. The use of environmental analysis and stakeholder analysis helps to understand the situation and prioritise the activities. Also, quite intense competition in the region increases the need of innovation. The principal points out that the staff knows the target of new courses (15% of all courses), and therefore, new ideas must be generated although resources are

shrinking. The principal states that, consequently, necessity is also a factor in forcing to generate innovation.

Project funding and different subsidies have had a significant role in the institute's innovativeness. They make it possible to pilot new activities and processes quite risk-freely. It also enables acquiring additional resources. A key principle in applying for project funding is that the tested activities should generally become normal operations at the institute. All of the interviewees find the project funding essential, but the teachers feel that the projects can be very stressful because of the additional work they require. Also the planning of project funding applications is seen as a demanding challenge:

> Sometimes it gets so hectic. And we were just talking about that producing these applications for subsidies makes you run out of breath. You should come up with something new all the time to get extra money for development. It is quite ruthless.

One full-time teacher lists also former success and resilience as the drivers of innovation. According to all interviewees, an innovator should have time to think and plan without any hurry. The development at the institute has been quite fast in recent years and the principal states that now is the time to take a break and enjoy the results. Also some interviewed teachers point out that they are quite tired especially at the end of the spring semester, also having to plan intensively the curriculum for the next school year. Especially at the time of the interviews, in the early spring, the curriculum for the following year had to be planned without knowing what facilities would be available to the institute. Many decisions were still in process in the municipality. Uncertainty and a great workload seemed to diminish the willingness to plan and innovate new activities. To avoid the feeling of exhaustion and haste, the institute has tried to find new solutions for rest during the working days:

> Really, we dream of having a divan. We already have an old divan that our teachers are restoring when they have time. We've already made a rug, as well. We got an old coat and our teacher tore it up and we wove it into a rug, it was a good place to air your thoughts. Creativity and innovation are not possible if you are always in a hurry and you have tough performance objectives and money is involved.

Also the status of part-time teachers in AECs is a challenge for innovation. If a new course idea does not interest students, the course will be cancelled and the teacher will be left without financial compensation. It depends partly on the part-time teacher's willingness to take risks if the institute wants to have new kinds of courses.

The benefits of innovation

The benefits of innovation are considered pivotal. Innovation is what keeps the institute in operation and is essential for the existence of the institute. Innovative activities attract new students and the institute can promote the vitality, high spirits and participation of local residents when they can deal with and learn new, challenging and enjoyable issues. Also the current students have "*comprehensive possibilities to improve their well-being through recreation*" as one interviewee states. The number of students has increased significantly in

recent years. This is seen as a result of the continuous innovative development of the institute. Through innovation, the institute has gained visibility, a good reputation and prestige in the city. Such a boost of the institute's prestige and visibility has improved teachers' working efficiency and motivation. Innovations also fuel new innovations. An important benefit is the renewal of the teachers themselves. The reputation of an innovative organisation also attracts new partners. The interviewees tell about the benefits of innovation:

> *It will have a positive effect that when people find out we have a new curriculum and it is not always the same from year to year, it will maintain the customers' interests. It helps that they always look at that curriculum, wonder if we have something new in store for them and boldly try new activities which they have never tried before.*

> *When you find that you are valued, it is uplifting. Our AEC here has not been much appreciated – not here and not in many other places – and if you realise that you are valued, it promotes the willingness to develop further.*

Innovation has also given to the institute additional financial resources – not only through additional financing but also through new business, such as the memory school innovation. In addition, a reputation for being active, cooperative, high-quality and innovative helps to keep the attitude of the administrator positive towards the institute. The interviewees state that innovation will certainly be needed in the future for upcoming challenges. However, one full-time teacher notes that in practice, when innovations would be most useful it is especially difficult to find new solutions, particularly in stressful situations: *I do not feel very innovative now – now that it would be the most useful*. In such situations, also the significance of cooperation in finding new solutions is emphasised.

4.2.4 Case institute D

Case institute D is a municipal organisation - old and one of the largest AECs in Finland. The management group includes the principal, the vice principal and the head of the office. There are ten full-time teachers or education designers in the institute and approximately 210 part-time teachers. The institute has one office with three office secretaries. Courses are organised in 35 locations in the city. The number of teaching hours per year is roughly 27 500 and the number of students in the courses is approximately 11 750. The goal of the institute is to offer a broad range of courses. The most extensive knowledge areas measured in teaching hours and in the number of students are language and life management courses. Also arts and crafts courses attract many students. Moreover, the institute offers so-called free advisory services. The interviewees for the study were the principal, three leading teachers, three designers and one part-time teacher.

The vice principal wrote in the annual report of 2010 that in turn of the millennium and even in the early years of this decade the institute lived an active and innovative period. The institute received a quality award among the first AECs in Finland in 2006. However, in 2007 the situation began to change for many reasons. A special version of a public-private

partnership used in the Finnish public sector was introduced and the principals of the institute changed. At the same time, the planning of a complete renovation of the institute's main building started and also the planning for a new regional institute, the idea of which was to merge a few local and regional institutions. According to the vice principal, these significant changes contributed to the fact that the planning and renewing of operations in Case D became very difficult. The strict monitoring of the institute's finances and the focus on cost-effectiveness forced to de-emphasise innovation. The vice principal writes that continuous balancing and "belt tightening" have meant that non-productive operations have been considered with a critical eye. That is why some activities of the institute have been cut back. During recent years, the institute has focused strictly on its primary mission of providing education and cultural services for citizens. During the time of the interviews, both the renovation project and the planning of the merger were in progress.

Organisational culture in Case D
<u>The characteristics of the culture</u>

The values of the institute were recorded in connection with the institute's strategy work roughly ten years before the interviews. The values were freedom, equality and a sense of community. In this context, freedom means that a student is free to choose his or her learning objectives and decide how actively he or she will study. The institute has the freedom to choose the curriculum and courses that it offers. Freedom also came up in the interviews in many forms. The principal used the concept "liberal" often and strongly emphasised that he wants to give the staff the freedom to act as they see is best: "*I want the people to be as free as possible to express themselves*". The principal feels that the also the local administrator gives them freedom to operate. The administrator determines the amount of education provided every year and monitors the operations of the institute using different figures, but gives the institute the freedom to decide how it operates.

Equality as a value includes the idea that the institute does not choose its students; everybody is welcome. The threshold of the institute is kept low, which means that the course fees are at a low level. Equality also means that the teachers treat all students equally. "It is easy to come to the institute" is mentioned often in the interviews. That is why the institute wants to offer a broad and diverse range of courses both in content, locations and time.

The written material often mentions the community spirit as a basic value, which the interviewees do not mention. However, the principal emphasises the importance of confidence and respect. The principal is clearly respectful of other people. This comes up several times during the interview. He states that respect for students is essential in a teacher's work, and the greatest mistake a teacher can make is to hurt a student or another teacher. The principal wants to set an example of this as he states: "*I'm never mean to anybody.*"

A calm and comfortable learning environment is also mentioned both in the interviews and in the written material. The principal would like to see the institute as an informal and warm community where students enjoy learning. Education is offered on the students' terms. A full-

time teacher states that the institute does not want to be too goal-oriented in teaching. Instead, students are given room to develop. The principal would like to connect the word "calm" also to the development of the institute.

> *If we pressured people to show results, I think it would be terribly distressing if I was continually required to strive for better achievements and performance. Why can't I be happy with the current situation?*

Also the students seem to value the informal atmosphere at the institute. In 2010, the institute elected the teacher of the year. The winning teacher was described as inspiring, competent, fun, nice and friendly, with a good sense of humour.

Many of the interviewees describe the institute primarily as a traditional Finnish AEC. The institute's long traditions are valued and the staff is proud of them. The interviewees do not, however, feel that the traditions should complicate the operation because the organisational structure is low and lean and rapid changes are possible. There seems to be some willingness to reform the activities, but as one interviewee stated, reforms start very slowly:

> *On the one hand, we are strongly traditional, but we also want to be positive towards reform so that we can stay on the cutting edge and see what new is going on at the moment.*

> *Maybe sometimes our traditional character can be a bit of a burden; we may also think that we're a little old-fashioned. Yes, I think that. However, it is considered positive that we are so old and have such a strong history.*

The value of social responsibility can best be seen in the free-of-charge counselling services for students with learning disabilities. Customer orientation is emphasised strongly in the interviews. However, the data suggests that customers' needs are sometimes taken into account only if they can be easily met. For example, students have asked for e-learning possibilities, but on the basis of the interviews, the institute does not intend to invest in e-learning development because it requires extensive additional resources. Some pilot courses have, however, been offered. The institute has a Facebook page which is maintained by the vice principal, but the use of other social media or new education technology is insignificant. The institute will have access to a new main building with modern facilities and the latest education in the near future. Thus the teachers will have better possibilities to develop new teaching methods if they so desire.

The institute wants to provide students with the opportunity for long-term self-development. In many disciplines, such as languages or different skills, the students seek results that can be achieved only after long-term study. That is why courses are offered at many different levels. Cost-effectiveness is frequently mentioned in most of the interviewees as a very important issue which affect all activities, although it is not mentioned in the written values. Costs, the number of students and teaching hours are strictly monitored and the full-time staff has meetings mainly to discuss financial issues two to three times a semester. The institute has been evaluated as an example of a highly cost-effective unit in the municipality. Despite the fact that cost-consciousness seems clearly to guide the activities of the institute, the principal

does not want to see it as a key value. According to the interviewees, also students and some of the teachers are quite annoyed by the growth of cost-consciousness at the institute. However, the institute has not been active in applying for project funding or subsidies for developing the institute. The data suggests that the staff would be more eager to use additional funding and cooperation networks than the management. Part of the interviewees would also accept the increased workload that projects usually require and would like more actively to take part in the development work together with other teachers and the management.

<u>The management of the institute</u>
According to its mission statement, the institute primarily provides a wide range of liberal education and cultural services. The services aim to promote the residents' ability and willingness for lifelong learning, the adoption of new ideas and self-development (Annual report 2009). The vision of the institute was written in 2002 and according to it, the institute wants to be a leader in liberal education in Finland – creative, brave, skilled, and continually renewing. The management report of 2009 states that the vision can be reached through the strengths of the institute, such as a good image, a wide range of courses, a constantly evolving high level of professionalism and long traditions. The vision has, however, in recent years been put to the test because of the great changes.

The attitude of the principal to the management of the institute is liberal. The role of the vice principal is to be stricter in monitoring and controlling costs and activities. The principal states that the development of the institute does not take place in workshops and meetings, but should continuously be present as an underlying, intuitive intent. The strategic objectives were ten years old at the time of the interviews. No strategy work has subsequently been conducted, most likely because of the possible merger of local institutes. The designer notes that the common strategies, values and visions have faded into the background and do not guide practical everyday decisions and the planning of activities. Some interviewees, however, wish for a more strict approach and strategic tools for development. The uncertain and expectant situation at the institute can easily be recognised in the interviews.

The institute has received a quality award and has created guidelines for work. The principal does not, however, want to emphasise the rules of operation, but the emphasis is on freedom, as the ideology of liberal education entails. The idea of the guidelines is rather to facilitate the activities and not to emphasise congruent or systematised operations. The principal states that the administrator has a positive attitude toward the institute. However, the administrator sees the institute perhaps more as an organisation of recreation and leisure than of education because in the organisation chart of the city the institute belongs to the culture and recreation services instead of education services.

Although the institute is situated in a large city where there are also many other adult education organisations and organisations that offer recreational activities, the institute does not want to compete, but to cooperate. The principal explains that the heads of these education organisations are like colleagues; they "*compete in a good spirit of cooperation*", as

one interviewee states. The institute competes more with other recreational activities and entertainment media, such as television or the Internet.

The institute states in its vision that it aims to be one of the leading AECs in Finland. The current principal, however, does not consider being the largest and best very important. It is more important to have a nice place to work and a relaxed atmosphere. One should not be a "megalomaniac" in any respect. Being located in a large city gives the institute the advantage that there is no lack of students, as in smaller municipalities. This may also affect the strategy work, as the principal points out:

> *We have no problems in getting students. So, we do not need to think about creating a strategy to crush the competitors. After all, it is not that type of operation. If the numbers should go down terribly and all of the students should vanish, then it would be time to start to think about what to do.*

The principal feels that his main task is to delegate or share the authority and responsibility, encouragement, appreciation and openness to different people and issues. One must tolerate uncertainty and be realistic in relation to the world as well as to people. The principal must give space to other people. He describes himself as a "super optimistic Danish-style principal".

The principal enjoys interacting with people and is very appreciative of his staff and students, which he emphasises many times during the interview:

> *The staff consists of intelligent people who know what they want.*

> *I like people, I find them nice.*

> *And I think our staff will do their best at all time.*

> *I think people should be respected.*

> *The idea is that when you see a student, you treat them kindly and greet them. And if possible, so you exchange a word or two. People do like it.*

The principal's perception of people is also reflected in the way he organises the teachers' meetings and other meetings. He says that he wants to give praise, encouragement positive feedback and share the success of the institute with the entire staff. Other interviewees describe the principal with, for example, the following words: a positive attitude, open, in a good mood, happy, listening skills, empathy, encouraging and inspiring. The principal deals mainly with external relationships and the vice principal who acts as a "counterforce," takes care of internal cooperation and of controlling the activities. The vice principal did not want to be interviewed, but he clearly has a strong effect on the operations at the institute. He is more connected with the staff, knows what happens in the organisation, and focuses strongly on cost-effectiveness. The data suggests that neither of the current principals seems to be as clearly innovation-oriented as the former principal was, probably because of the uncertain situation of the institute. Also investments in development activities are currently quite low and the institute has not been very active in finding more resources through external funding.

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The organisation culture type of Case D

Table 22 summarises the values and characteristics of Case institute D based on the data. Values and characteristics found in written documents (annual reports, values) are presented in the left column and values and characteristics also mentioned by four to eight interviewees are presented in the right column. The text in brackets indicates if a value was mentioned only by one person. The total number of interviewees was eight.

Table 22. The characteristics of the organisation culture in Case D

Characteristics and values describing the culture in Case C	
Written data • Freedom • Equality • Sense of community • Comfortable learning environment • Self-development	Interview data • Freedom • Equality and democracy • Traditional • Customer-orientation • Cost-effectiveness • Social responsibility • Risk-taking (principal)

The results of the survey linked to the Competing Values Framework are summarised in Table 22 and Figure 22. The red line describes the thoughts of the principal and the blue line is the mean value of the responses of other interviewees.
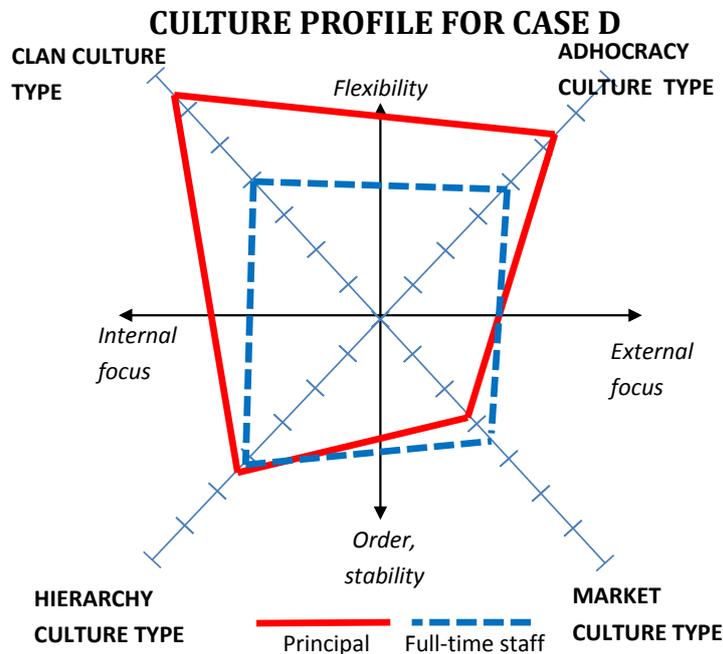
Figure 22. The culture profile in Case D according to the Competing Values Framework

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On the basis of Table 23, the principal experiences the culture as strongly cooperative (mean 6.5), and adhocratic (mean 5.33).

Table 23. The scores of different culture types in Case D

The type of the culture	Principal		Other interviewees		
	Mean	Order	Mean	SD	Order
Clan	6.5	1	4.00	1.46	2
Adhocratic	5.33	2	3.78	1.28	3
Hierarchy	4.33	3	4.22	1.26	1
Market	2.83	4	3.33	1.00	4

Both aspects were raised also in the interviews. Although the principal is a supporter of freedom and does not want to emphasise the rules and guidelines, the emphasis on cost-effectiveness can be seen in the score value of the hierarchical culture type (mean 4.33). The market culture scored low probably because the institute has no need to compete and no wish to grow (mean 2.89).

The interviewees see the culture types quite differently and more narrowly than the principal. The clan culture (mean 4.39) has a much lower score, most likely due to the confusing situation at the institute. The strongest culture type according to the staff is the hierarchy culture (mean 4.69), probably because of the strong emphasis on cost-effectiveness. The market (mean 3.3) and adhocratic (mean 3.89) culture types have lower values. Based on the figures and interviews, it seems that the current situation at the institute has diminished the feeling of cohesiveness, renewal and cooperation at the institute.

Characteristics of cooperation and social networks
Internal cooperation
The management team consists of the principal, vice principal and head of the office. The principal states: *We have an awfully good team, the vice principal and office manager and I. We work together a lot and we have many discussions.*

Because the institute is a large organisation, different meetings are very important for communication and atmosphere, especially when the people are working in different locations. The relationships between full-time staff are good, according to the interviewees. The planning and organisation of the teaching is divided into five multi-disciplinary teams, including the leading teachers, the designers, the vice principal and the office manager. The aim is twofold: to provide teachers the freedom to plan activities independently, and on the other hand, to encourage teams to look at matters more broadly than from the perspective of

only one discipline. The teams are independent and they have meetings approximately three times per semester. The main topics in the teams are teaching hours and costs, rather than the development of activities. In addition, the institute holds meetings for the full-time staff and the principal on everyday matters and meetings of a communications committee of four members.

The joint meetings for all teachers are held twice a year, and also a Christmas party is arranged annually. The purpose of these sessions is to create a sense of community and the feeling that also part-time teachers belong to the staff. The teachers' meetings include training and informal discussions. According to the principal, the participation rate has been high and the atmosphere has been pleasant. Different main disciplines have their own leading teachers or designers who maintain contact with the part-time teachers of their subject as they see the best. The principal and one designer relate:

> *It depends largely on the leading teacher or designer; they herd their own flock and organise various meetings. So, we do have cooperation, but I do not know how much, as they handle their own issues independently.*

> *Under my leadership, there are more than 50 lecturers. We meet if they contact me and want to come to talk to me. And then when we start planning, we meet and sit down and look at the next semester. If I want to talk with the teachers about something, I usually pop in before the start of the lesson and share my news. I may also do it over the phone and by e-mail; with some more than with others. It depends on the teachers, what they are like, what they need and whether they have questions.*

The interviewees emphasise that they want to show to the part-time teachers how important they are for the institute and that they also understand the situation of the part-time teachers:

> *How do we show to the part-time teachers that they are important to us and we appreciate them, even if they have pretty miserable working conditions, are low-paid and all that?*

The interviewees considered the sense of community at the institute from different perspectives. The main building of the institute has a spacious teachers' lounge were also part-time teachers can meet each other. The atmosphere there is assessed to be very good. However, the teachers who work in other locations do not have this possibility, and the connection with the institute is weak. On the other hand, one leading teacher stated that the part-time teachers who teach in many AECs may not even want to belong to any institute's staff but wish to be independent entrepreneurs. Two interviewees describe the matter as follows:

> *Of course, it depends on the part-time teacher, in how many organisations he or she teaches and how many lessons he or she has. I would see that for a teacher of a short course, his or her relationship with the institute is terribly loose. Or he or she may teach in many institutes and each institute has its own administration. [...] So, it is quite different from a teacher who has been teaching in the same institute for decades and has long courses to teach. I guess that kind of a teacher has a feeling of belonging.*

Why should there be a common spirit and feeling of togetherness, does there need to be? At least in my opinion, as a part-time teacher I'm selling a course to the institute; it doesn't matter to which institute I'm selling it. [...] It's nice to visit different institutes; each of them is always a little bit different. Why should I feel that one of these institutes is mine?

As many part-time teachers have a permanent job in another organisation, the tie that binds them to the institute is working with pleasant and inspiring students. One teacher describes his attitude to the work at the institute: "*you are like a missionary or a preacher and bring glad tidings.*" The work with adult students is experienced as rewarding, and also the teacher learns something new continually. Students give positive feedback and friendships are established with students over the years.

Professional meetings and training are the best possibilities for teachers to meet each other. For new teachers, the institute organises a special orientation course which helps them to learn the practices and teachers' rights and obligations at the institute. In addition, training is arranged for teachers on topics of interest. For part-time teachers, the institute also organises coffee break meetings (Open cafes) approximately once a month. The objective is to share experience and ideas:

We organise training on topics they are interested in. The one which is arranged on a regular basis deals with challenging teaching situations. [...] We take into account their ideas, understand that there are challenging and difficult situations, and offer to help.

When they (part-time teachers) work alone in a classroom, they do not meet colleagues. The coffee break meeting provides peer support, empowerment and consolidation just for them. It is a forum provided by the employer where they can air their thoughts and meet the others, as everyone does not visit the teachers' lounge.

During the former principal's term, the institute had annual themes that were used for example in marketing the courses and in organising public lecture series. These themes were considered to unify activities and connect the staff. Some interviewees wanted them to be reinstated. They also hoped that quality management meetings which had previously been held every two weeks would start again. The interviewees wanted the possibility to be more actively involved in the planning of the entire institute's processes and activities. Because there are quite a few formal structures for the joint planning of activities, some full-time teachers and designers meet informally to find new ideas and develop the activities.

External cooperation practices
According to the interviewees, external networking is not a priority at the institute. The principal himself has quite many external partners. Many of these partners and networks are related to the organisation of public lectures. This cooperation is characterised by a strong informal and relaxed atmosphere. The principal also has good and active personal relationships with the representatives of the administrator. Designers seem to have larger external networks than the interviewed leading teachers because the disciplines of the designers are different and maybe also because the designers do not teach, leaving more time

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resources to build networks. These networks help the designers' work, bring new perspectives, joy and expertise:

> *We should have such cooperation. And when you have networks, you can always hear what is happening elsewhere. We can't just work internally. We have to take into account what is happening around us.*

One designer describes the external networks of the institute as "*functioning below capacity*". He believes that the institute could have a wide range of cooperative partnerships both with local authorities and other education and cultural organisations.

Innovation in Case D
<u>Innovation as a concept</u>
Innovation as a concept is understood in a controversial way among the interviewees. Some of those interviewed see the concept as positive and some of them experience it as embarrassing, irritating, or even very negative. The concept of innovation was seen as confusing because in the media the image of innovation is something admirable, but at the institute's level innovations are mostly smaller improvements to everyday issues. In the data, innovation was seen both as a result and a process. The principal considers innovation as an organisation's strategic intent. The other interviewees mentioned such definitions as the creation of something new, a novel and different way of doing things, a creative solution to everyday problems, identifying new opportunities and combining existing solutions in a new way, something new that is successful, new and old in parallel, crossing borders, or creativity and individuality. As two interviewees suggests:

> *I think that it is a combination of existing activities. Not all of them are invented by us, but the result of that combination is completely new.*

> *What comes to my mind is that innovation crosses the boundaries of disciplines and is something like comprehensive training courses or teaching.*

The concept of innovation gave two interviewees the feeling that someone higher in the organisation orders teachers to work in a more innovative way. This was experienced as very negative. On the other hand, innovation was also taken for granted and considered normal at the institute and could not be distinguished from other activities. One teacher who had been working at the institute for many years and remembered the time when he thought the institute was innovative describes innovation as courage to use the freedom the institute has.

> *What we had earlier in this institute, it was courage. We do have a lot of freedom, but we do not use it [...] We can operate freely. No one says that we're not allowed to do something.*

One teacher states that there are two types of innovation at the institute from the perspective of teaching. One is the way a single teacher acts in the classroom and the teaching methods and materials he or she uses. The other involves the curriculum: innovative courses, structures and services the institute offers. One interviewee also considered what the opposite of innovation might be. If the institute is not innovative, what is it?

It (innovation) is a positive thing, but what is the opposite? I'd rather be innovative than the opposite. Creating something new and new opportunities – I looked at what Google says. I like to be involved in the spirit of the time and [...]and listen to what happens around me, draw inspiration from the environment.

The principal has a realistic attitude to innovation. Most of the activities of the institute are the same or very similar every year. According to the principal, the majority of the students wish for safe and familiar courses. New kinds of services are an addition to the traditional supply. The principal states his opinion: *Our innovations are at a sound level. But I do not see innovation as a criterion for success. You should not overdo it but be reasonable.*

The organisation's low and lean structure would allow the institute quickly and with small arrangements to try something new. However, the data suggests that at the time of the interviews, the staff did not feel that the way the institute operated encouraged innovation and development. Nevertheless, if the institute as an organisation does not emphasise innovation, an individual teacher can always be innovative in his or her own teaching. The innovativeness of Case D is largely based on the innovativeness of the staff. The interviewees suggest that there is actually a great deal of creativity at the institute, but both courage and even willingness are lacking. Experiments are conducted on a small scale and rather rarely; only some teachers or a group of teachers and designers pilot new activities. Operations are carried out traditionally on a small scale. Also projects could be used more in the development of the institute, according to the interviewees. One interviewee points out, however, that enthusiasm can be found even if the initial reaction to new possibilities is reserved:

It is this current situation. Then I began to think that maybe it's just my own interpretation of what innovation is. After all, in my work I am able to be innovative in a certain range.

I believe that there are teachers who are willing. Many teachers would not want to do something new. It would be boring always to do things the same way.

Finding examples of innovations at the institute seemed to be difficult for the interviewees, and some were not able to mention any activities that could have been regarded as innovative. However, gradually the interviewees were able to mention some significant innovations in the history of the institute and a wide range of innovative and surprising courses and events and ideas, which, however, had mostly taken place several years earlier. The most significant innovations are the institute itself, a degree programme and a network of creative writing, and counselling for students with learning disabilities.

Now, these counselling services serve the same purpose as the institute did when it was founded over 100 years ago – to help people. But it is just an updated version. Now we will help those with a little more difficulties. Everybody is expected to study, but not everyone has a similar background and learning skills. Some people need more help.

From an idea to an innovation
There are no special practices or tools to create new ideas at the institute. The principal justifies this with his own personality and that he is not willing to control but wants to let

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people work in peace. Idea generation is described as informally "throwing ideas around" and collecting different course ideas from part-time teachers and customers. The students have the opportunity to give new ideas on courses on the home page of the institute, but the amount of ideas from the students is not very significant. Also the curricula of other AECs are examined to find new ideas. The principal states that he has the possibility to obtain new ideas in cooperation with his partners. Also different associations and other organisations, partners and visitors provide their own ideas for courses. The leading teachers and designers dedicate a day for curriculum planning every spring. One of the leading teachers says that new young teachers who would like to work at the institute often present new ideas, but the leading teacher feels that these ideas are often too unrealistic.. He feels that the problem is that young teachers are not familiar with the age structure or background of the students or the premises and equipment of the institute. The designers describe their work as follows:

> *In our work, it's great that the world has a lot of interesting things that people should know about. We designers are rather free to make choices.*

> *From time to time, we try different themes and contents, depending on how they interest people. Living and following the times, exploration of what appears to currently interest people is part of the designer's work.*

Some interviewees feel that long traditions and careers can inhibit idea generation, as new ideas are belittled based on former experiences: "*it has already been tried and found impractical*". One interviewee notes that even if the ideas are not implemented, the idea development is valuable and it should not be prevented:

> *Sometimes ideas are seized quickly and developed further until we come to a point where we realise that it costs too much and is not worth the trouble. But we had a good time innovating! Or we generate ideas but they are left to incubate.*

The drivers and barriers of innovation
The greatest challenge at the institute may not be finding new ideas but developing and implementing them. The interviewees list some shortcomings that inhibit the development work: a lack of teachers and a lack of suitable premises or equipment.

Cooperation has great importance in generating and developing the ideas. One designer tells that many ideas have been found in cooperation and training projects and with the help of different people, but more cooperation is still needed. Cooperation in the development of ideas is also rewarding, and the interviewees state that they would appreciate it if the institute arranged more possibilities to develop ideas further together with other staff members. The interviewees describe the link between cooperation and innovation many times during the interviews and also their desire to work more in interaction with each other and create ideas and develop them in cooperation:

> *The initial idea may have come from one person, but it is adapted and refined in interaction with others.*

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In fact, you do not make great innovations yourself, but in a group when you meet part-time teachers. Then the brainstorming starts and different perspectives feed each other, and then the inventing starts.

Cooperation and community spirit create synergies that you wouldn't have imagined.

You have all kinds of ideas, but they cannot be heard if nobody organises situations and opportunities to share them. Cooperation makes them real.

They have always needed a starting point, project or training where people are gathered together and ideas generated. The real ideas and innovations start in such groups and are developed further together. But not when I get a great idea on my own and try to find support for it and somebody says to me what a fine idea, develop it further. Then you have to do everything alone and don't have enough resources. But if you have enthusiastic people with you it energises you.

Brainstorming is awfully fun, but the work will actually be done when the idea is developed and implemented. If you have enough people who are committed to it and work together, it is really nice and rewarding.

But taking part in something that makes you come out of your comfort zone can promote and feed something new. It is terribly important.

I think that brainstorming and idea generation should take place at all levels of the organizational hierarchy; more thatn one person can come up with ideas. This (current situation with many changes) is also a big opportunity, not only a threat. You shuld look at both sides.

The principal states that his current great workload has an impact on the possibilities to promote innovation at the institute. He describes the time before computers, e-mails and mobile phones, when one had time to think about things in peace and go to the neighbouring room just to innovate. There was time to call people and talk on the phone. Now, the organisational changes, renovation projects and other large-scale reforms which come from outside the organisation have changed the situation. The principal, however, wants to encourage trying out new things and even taking risks, as he himself and another interviewee mention:

I think that we should boldly respond to the demand of our customers. Also take risks and experiment with different things. If it does not interest people, it doesn't matter. But the risk should be taken. Playing it safe sets limitations.

In our institute, the principal encourages taking part in anything you are interested in. I think that the principal will probably not say no.

In contrast, cost-effectiveness is monitored very closely at the institute, which may restrict innovations. The leading teachers and designers have economic responsibility of their discipline and the autonomy to design the courses and to price them, thus carrying the economic risks of their substance area. This gives them freedom to test new and maybe less profitable activities if the other courses are profitable enough. One interviewee emphasises

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that all teachers have the freedom to teach in the way they wish and that innovations are created more easily when a person enjoys his or her work.

> *Innovativeness is linked with your attitude to your work. If you like what you do, you will invent new things. If you are just doing the motions, you will not even want to invent anything. I like to work in projects, they are innovative. We start to do something, we have objectives, and there are no everyday routines which seem to reduce innovativeness.*

Support for discovering and testing new things generates enthusiasm and courage. One interviewee stated that enthusiasm will even bring a great deal of "additional resources" to the work. However, some interviewees also said that enthusiasm is easy to belittle even with small words. One full-time teacher feels that in the autumn when a large number of inspired part-time teachers start their work, they spread their enthusiasm around at the institute and bring energy also to the over-worked full-time staff. Thus the energy of part-time teachers could support the innovativeness of the institute.

> *I think that if I am really enthusiastic so my energy for work is double compared with the situation when I am flattened.*

> *If you are really over-worked and stressed, you will not come up with any ideas, but fortunately, we have part-time teachers who may be up to the task after the summer. The benefit of this kind of a network organisation is that when those inspired and enthusiastic people come, you will also be inspired to contribute even if you are kind of a cynic.*

The interviewees also state that the sense of responsibility, independence and capacity to make the effort are associated with the willingness to look for new solutions. New experiments at the institute can often be implemented with small financial resources, but they require additional work and effort. A full-time teacher notes that the institute has usually no possibilities to pay for that additional work. It is easier, less stressful and safer to keep the familiar groups where the students are like friends than to start developing something new. This seems to be one reason why, for example, the use of the Internet in teaching has not been developed. It would easily mean more work with no additional compensation. The additional effort for innovative activities is sometimes also linked with the risk of fatigue and frustration. That is why the interviewees point out that the management should somehow show their support for innovators.

> *If you do not succeed, it would be nice if somebody said that it's OK, it happens to everybody.*

> *Even a tiny smile at the right time can help and give you the strength to go on.*

> *My colleague was not enthusiastic, but I would have needed some support. If the other person clearly shows that he or she does not like your idea, it also crushes your own enthusiasm.*

The principal points out that he cannot find any other obstacles for innovation than money. The other interviewees do not emphasise the positive or negative effects of scarce resources on innovation. Limited resources are mentioned once as a factor in increasing creativity, when

a full-time teacher recalls the recession in the early 1990s and how at the time solutions were found to avoid cutting the teaching hours of the institute.

Although the principal encourages taking risks and experimenting and regards the institute as innovative, he does not see that he himself has acted purposefully in an innovative way. Also the interviewees state that the management does not, in practice, initiate innovative activities. The data suggests that mere words of encouragement and freedom provided by the management are not always enough for creating and developing new ideas and innovations. Sometimes teachers also need the participation and concrete help of management. Some interviewees also feel that idea generation is undermined because of strict economic thinking and rigid organisational structures.

One interviewee states that innovativeness could increase at the institute if it had a goal and direction, and he suggests that participation in cultural and education discussions in the city could perhaps help to identify the direction for innovation. It could also help to seize the right opportunities.

> *It would be important to discuss with the help of values and strategies; in what direction the ship on the ocean of innovativeness is steered. So that it wouldn't just be reforms for the sake of reforms but that our innovating would be based on internal and maybe societal and regional dialogue. As the society is full of possibilities and different projects and networks, how could we know what the right thing is? I understand that people are tired and you can't seize every opportunity that comes your way, but we shouldn't stand still and not do anything. How we could find the suitable path and way to divide the work? We must have a shared idea of what is important, who innovates and in which direction – we need a common foundation.*

One full-time teacher describes repeatedly during the interview the status, employment characteristics and situation of part-time teachers in relation to innovation opportunities. One key issue is economic security. The salary of part-time teachers is linked to their teaching hours. If a new idea for a course does not attract students, the teacher is not paid for those planned lessons. If the teacher had chosen the tried and true courses, this would probably not have happened. Thus, new courses and teaching arrangements are often a risk for part-time teachers. If the teacher is willing to take the risk, then it is easier for the institute to accept the new ideas. A full-time teacher is also annoyed by the fact that young teachers are eager to come to work at the institute as part-time teachers, but when they secure regular employment in a primary or upper secondary school, they leave the institute. This makes sustainable development work difficult. Also the attitude of leading teachers has a strong effect on the development of the courses under their responsibility. As they have to plan the curriculum and teach, their resources for renewal may be low.

The interviewees frequently mention the current situation at the institute with a wide range of recent and upcoming changes and challenges. These changes have stopped the strategic work and the active development at the institute. The tightened economy has resulted in strict

financial control, the new purchaser-provider model with the administrator has made the planning of activities difficult, and the renovation has brought difficulties in operation in temporary premises. The coming merger is raising many questions, and the staff members fear for their own position. In the background, there is also a fear whether the voice of the institute will be adequately heard and considered in all changes. In spite of these threats, some interviewees suggest that this situation could be a positive challenge that creates something new and gives possibilities to think in a new way.

The institute has not used many subsidies or international project funding possibilities for the development of the activities. The reasons mentioned in the interviews, are on the one hand, the need for additional work and resources, and on the other, the fact that project funding is meant only for experimenting with new ideas, not for implementing them in the long run. Many interviewees seem, however, to be eager to take part in additional projects and find them useful.

The benefits of innovation

The most important benefits, according to the data, are the better image and attractiveness of the institute, which would improve also the financial resources of the institute.

> *We need new ideas so that the Everyman would find our institute interesting and would eagerly take our curriculum and see what he could find.*

Many interviewees feel that an innovative atmosphere and cooperation would bring new joy and motivation to work and improve the quality of the work, and innovation could generate a positive self-perpetuating cycle. Also customer satisfaction could be improved.

> *If a person is able to fulfil himself at many levels and succeeds, so it starts to grow and diffuse.*

> *It gives us joy, it improves the quality and content of our work. When we have a lot of everyday routines to take care of, the shared innovativeness brings us joy in our work.*

> *Creating something new is so much fun and when you get results and you succeed in it, it is really wonderful.*

> *It would be so nice to do something new and start something we haven't done before.*

> *When you create something new, you feel energised and you see different places and people – it is so interesting. Innovativeness makes life a little bit richer.*

4.2.5 Cross case analysis

This section summarises the studied cases by comparing them with each other from a point of view research questions; characteristics of innovation, organisational culture type and social networking and cooperation practices. The aim of the cross analysis is to compare the findings in the case institutes. The comparison aims to focus on elements may explain the level of innovation in these institutes. Because there are only four cases representing innovative institutions (total number of AEC was 206 at time of the research) the results may

not be generalisable. The case insitutes were selected to represent innovative AECs during the pre-study phase. The innovativeness of these institutes was not measured but the principals assessed the innovativeness of their organisation with a score of five on the scale 1 = not at all innovative and 5 = very innovative.

Innovation and innovation capability in case institutes
Innovation is an abstract and difficult concept and phenomenon to define. For this reason, the first aim of this study was to find out how the interviewees understood it. All of the principals had a positive attitude to innovation and their interviews indicated that the concept of innovation was included in their vocabulary. In contrast, many of the other interviewees suspected already when they were asked to be interviewed that they could not discuss innovation because they do not actually know what it means. The interviews then revealed that teachers and other staff had varying attitudes towards innovation as a concept (very positive and very critical), but mainly a positive attitude toward innovation as a phenomenon, at least in the context of adult education centres.

The interviewees defined the concept in very different ways. In institutes innovation was understood either as new kinds of improvements and combinations of existing matters, something applied at the institute in a new way, or completely new kinds of activities. Examples of innovations mentioned were new courses or improved education programmes, new structures, processes and practices of the institute, customer groups and forms of cooperation and partnership. Innovation is linked with the ability to see existing matters from a new perspective, "thinking outside the box" and ingenuity in generating ideas. Innovation was also linked with searching for new ideas, testing and piloting, combining things in new ways, individualism, courage, flexibility and the willingness to renew.

No institute questioned the need for innovation, but its role was described in somewhat different ways. The principals of institutes A, B and C saw its importance as renewing the overall operation at the institute, both products and processes, as the staff linked innovation more with new courses and teaching methods. The place of innovation is seen in parallel with the basic activities. In Case D, innovation is linked mainly with the work of individual teachers, not the entire organisation. The management of Case D feels that current extensive changes in the institution do not allow the management to develop innovations and innovation capability at the institute.

The interviews showed that the drivers of innovation in institutions A, B and C are cooperative, active and enthusiastic management, the attitude of the staff towards the development of the institute, active use of project funding, courage, risk taking and accepting mistakes, a safe and informal atmosphere, strategic thinking and orientation in the planning of activities, extensive and comprehensive external networks, the support and positive attitude of the administrator, seizing new ideas and opportunities quickly, actively testing and piloting ideas and being cost-conscious without having cost-effectiveness present in meetings and everyday discussions.

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The leadership style in the institutions A, B and C can be described in terms of strong staff appreciation, encouragement and support for new issues and ideas, a wealth of ideas and activities, easy availability and approachability, and enthusiasm. In these cases the principal is an active builder of networks of cooperation and is aware of what happens at the institute. In addition, in these institutes, the full-time staff is enthusiastic about and committed to developing and trying new ideas, ready to make the effort, open-minded, responsible, future-oriented and rich with ideas. The importance of cooperation is high in all phases of the innovation process.

The findings regarding Case D suggest that the large and comprehensive organisational changes may be significant challenges for an innovative atmosphere and the attitudes of the principals and the staff at the institutes. A great workload, uncertainty, tiredness and confusion do not promote creativity and a development-oriented attitude. However, regardless of the situation at the institutes, an individual teacher at AECs is always able to act in a creative and innovative way. Most of the new teaching methods or course ideas and pilots are not very risky and do not need much money.

Respondents were asked from whom or where they source ideas for innovation. It was found that innovative ideas come from a range of internal and external sources. In all cases, the amounts of new ideas seem to be good although no special brainstorming tools are used on regular basis. A variety of formal and informal meetings and networks are important for idea generation. In practice, most of the new course ideas come from the teachers and some from the students. Especially in innovative case institutions, ideas, new practices and processes are generated in solving everyday problems, using environment or stakeholder analyses, planning activities together and during project work or drawing up applications for project funding. Also the diversity of teams and in teams is utilised actively in idea generation. In case institutes A, B and C, the staff aims not to undermine the generated ideas but find ways to test them. No specific tools for analysing or storing the generated ideas are applied at the case institutes. Every person evaluates the ideas in their own way. At innovative institutes, ideas were usually seized rapidly. Developing smaller ideas further means in innovative institutes piloting the idea quickly in practice. More significant new products, processes and practices are developed using project funding and in cooperation networks.

The most frequently mentioned factor affecting innovation was resources. The lack of resources may either drive or stop/limit innovation in the AECs. The institutes A, B and C have actively used subsidies, external project funding and networked with external and internal partners to obtain additional resources. Also the positive attitude and support of the principal and the local authorities, a good atmosphere, working together and the joy of work seem to bring more resources. The cases A, B and C want to develop not only individual students but also the region, which is most likely one reason for the positive attitude of the municipal administrators.

Organisational culture in the case organisations

The values and characteristics of the cultures of the institutions were examined using interviews as well as the Competing Values Framework. Table 24 shows the characteristics and values shared by most of the interviewees from the case institutes.

All of the studied institutes wanted to emphasise traditional liberal education values: freedom and equality. Customer focus and a sense of community were also important issues in all institutes. In addition, the three institutes A, B and C share certain characteristics that they do not share with Case D. These are enthusiasm, openness, flexibility, dynamism, future orientation, up-to-dateness, focus on planning the activities, strong external networks, using external project funding and principle providing services locally. Also courage and risk taking and a wish to take part in regional development were highlighted only in institutes A, B and C. The emphasis on regional development may be due to the operating environment because the innovative institutes are situated in smaller municipalities where the operational area includes also the rural areas far from the city centre. In contrast, the fourth institute operates in a large Finnish city where also another large AEC is operating.

According to the data, all institutes appreciate the traditional activities of AECs as a key form of their basic operations. A strong emphasis on cost-effectiveness came up only in Case D. Cost-effectiveness seems to be important also in institutions A, B and C, but their principals do not bring it up constantly in everyday work and meetings. All of the institutes operate in municipalities where the administrator and the local authorities have a positive attitude towards the institute.

The institutes differ in strategic management issues. Case C is managed by clear strategies and on the basis of written values, which are based on the municipal strategies. The development plan is updated on a regular basis every three years and a range of strategic tools are actively used. Similarly, Case A has invested in strategy work in recent years. Case A has recorded a goal: a vibrant, interactive institute, the success factors of which are customers, the operation environment, processes and resources. This goal is reminiscent of the slogan of Case C. Also the strategy work of Case B is related to municipal strategies, and the written goals and policies are actively applied by full-time teachers. In contrast, Case D is managed in a very relaxed way, yet very cost-consciously. The institute has no active strategies at the moment because of the possible upcoming merger with a few local institutes. The data suggests that the lack of strategies is constraining development work and innovative activities in Case D. The principals of institutions A, B and C were described as enthusiastic, active, accessible and approachable, cooperative and networked. The principals of all four institutes seemed to appreciate their staff very highly.

Table 24. The characteristics of institutes according to the data

Value/characteristic of culture	Case A	Case B	Case C	Case D
Freedom	x	x	x	x
Enthusiasm	x	x	x	
Openness	x	x	x	
Appreciation of creativity and innovativeness	x	x	x	
Flexibility	x	x	x	
Dynamism, activity	x	x	x	
Courage	x	x	x	x (principal)
Cooperation, sense of community	x	x	x	x
Current, forward looking, future orientation	x	x	x	
Appreciation of networking	x	x	x	
Appreciation of planning and determination	x	x	x	
Principle of local services	x	x	x	
Customer/student-orientation	x	x	x	x
Acquiring additional resources through external funding	x	x	x	
Strong appreciation for the staff	x	x	x	x
Positive attitude and support of the administrator to the institute	x	x	x	x
Equality	x		x	x
Growth-orientation	x		x	
Focus on regional development	x		x	
Democracy		x		x
Self development	x			x
Developing		x	x	
Traditional		x		x
Confortable learning environment				x
Sustainable development		x		
Tolerance of mistakes			x	
Active emphasis on cost-effectiveness				x
Critical thinking		x		
Active citizenship	x			
Voluntariness	x			
Quality of life		x		

All of the studied institutes aim to avoid competition in the region and would rather seek good cooperation with other organisations. The institutes A, B and C actively utilise a wide range

of national and European project funding possibilities and different subsidies for obtaining additional resources and generating, developing and implementing new ideas and innovations.

The type of the organisational culture in the case institutes was studied also using the Competing Values Framework. It looks at organisations in two dimensions: whether they are oriented towards stability or change, and on the other hand, towards internal or external factors. A cultural profile score for each case was obtained by averaging the respondents' rating for each cultural type across the six characteristics. This provided an indication of the cultural orientation of the sample cases based on the four cultural types. The average scores for all of the participating institutes are shown in Figures 23 and 24 and in Tables 25 and 26. Figure 26 first reports the answers of principals, and the second part illustrates the answers of the interviewed staff.

A close look at Figure 23 and Table 25 shows that there are similarities and differences between the responses of the principals of the case institutes. The figure and the table of the principals demonstrate that both clan and adhocratic cultures are strongly present in the responses of the principals of all four institutes. The differences can be found in scores of the market and hierarchy culture types. The cases A, B and C have higher market culture scores than case D. In the hierarchy type, there were no clear differences between four case AECs. The highest score for the hierarchy culture type belonged to Case B. All of the principals regarded their institute as innovative.

CULTURE PROFILES OF PRINCIPAL*S*
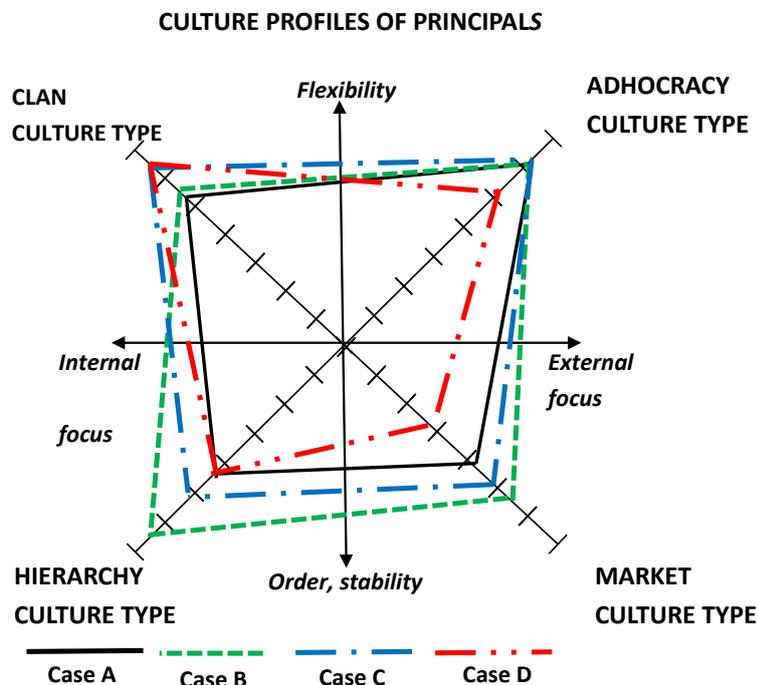
Figure 23. The culture profiles of principals in studied case institutes

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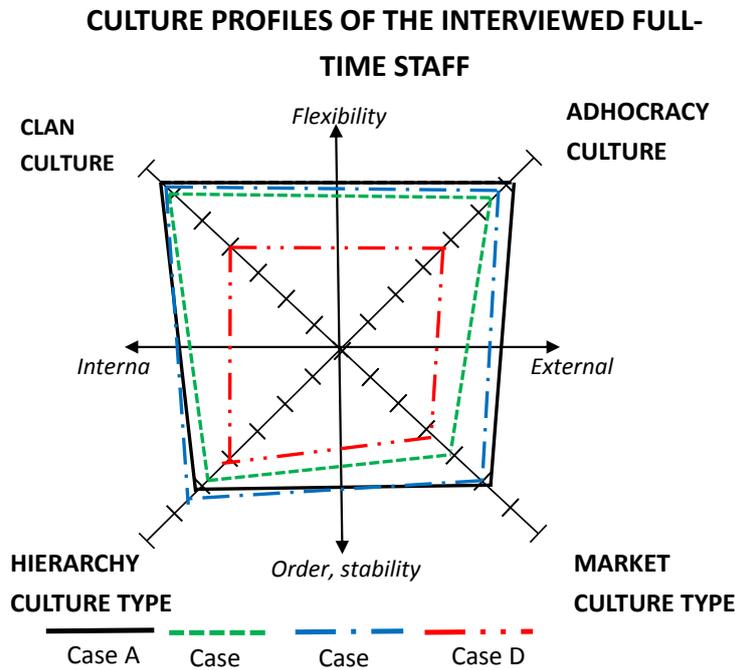
Figure 24. The culture profiles of full-time staff in studied case institutes

Figure 24 and Table 26 and show that the full-time staff of institutes A, B and C finds the clan culture type strongest and the achocrat culture second strongest. In the case D, the strongest type is hierarchy and the second strongest is clan culture. All of the scores in Case D are lower than in Cases A, B and C. There are also differences in distribution values between the case institutes. In institutes A, B and C, the distribution values were between 0.1-0.87, as distribution of the mean values in Case D was 1.01-1.46. Thus the data suggest that in cases A, B and C the consensus among the staff is higher than in Case D.

Table 25. Culture type in case institutes: the principals

	PRINCIPALS							
	Case A		Case B		Case C		Case D	
Culture type	Mean	Order	Mean	Order	Mean	Order	Mean	Order
Clan culture	5.33	2	5.50	4	6.33	1	6.5	1
Adhocratic culture	6.17	1	6.17	2	6.33	1	5.33	2
Hierarchy culture	4.33	3	6.50	1	5.17	4	4.33	3
Market culture	4.17	4	5.50	4	4.83	3	2.83	4

Table 26. Culture type in case institutes: full time staff, M=Mean, O=Order

FULL-TIME STAFF												
	Case A			Case B			Case C			Case D		
Culture type	M	O	D	M	O	D	M	O	D	M	O	D
Clan culture	6.42	1	0.50	6.06	1	0.42	6.20	1	0.70	4.00	2	1.46
Adhocratic culture	6.21	2	0.70	5.67	2	0.29	5.80	2	0.65	3.78	3	1.28
Hierarchy culture	5.25	4	0,87	4.88	3	0.10	5.59	3	0.71	4.22	1	1.01
Market culture	5.29	3	1,14	3.89	4	0.67	4.97	4	0.43	3.33	4	1.26

Cooperating networks at case institutes

The internal cooperation and sense of community in all cases is based on full-time staff meetings, discipline-specific meetings, teachers' meetings, parties and facilities-related solutions that contribute to communication and teachers' sense of community. Institutes A, B and C frequently have formal and informal meetings where the activities are planned and developed actively together. The full-time staff feels that they are listened to and they are able to make an impact on what happens at the institute. Various types of meetings are organised also in Case D, but the interviews suggest that there may be a shortage of common and also informal planning and developing meetings which both principals and full-time teachers and designers could attend. In institutes A, B and C good and very close cooperation between management and the staff was emphasised more than in Case D where the teachers and designers hoped to have better opportunities for cooperation and participation in developing the institute. Common to all institutes were informal teachers' meetings with diverse programme. However, a strong sense of community at AECs is challenging and perhaps even impossible because of the personnel strucuture of the insitutes.

Discipline-specific meetings for part-time teachers take place to varying degrees in all institutes, and usually the full-time teachers are responsible for organising them. In addition, two institutes C and D have organised special coffee meetings to improve the networking of part-time teachers. All institutes value the work of part-time teachers highly and want to show it to them. Due to the nature of the institutes, the work of part-time teachers has an entrepreneurial quality and some part-time teachers may never meet their colleagues. Sometimes they do not even want to meet them or be committed to the institute's development. They are bound to the institute through meaningful work and active and inspired students.

Th three institutes A, B and C have active, large and comprehensive external cooperation networks. Their partners include other local or regional education organisations, municipal

organisations, associations, companies and other AECs. Collaborative networks are mainly born as a result of the active and determined work of the principal and/or full-time teachers and designers. These institutes are also desired partners in their region. Two institutes annually record their number of partners. In these institutes, the principals tend to work in close cooperation with the partners and participate in their various events in order to market the activities of their own institute and gather information. The principals also seek different ways to show to the partners that they are important to the institute. The benefits of networks in institutes A, B and C are considered very significant. Active cooperation expands the activities, increases the innovative capability, is used for marketing and makes the institute better known. The enthusiasm and energy of the principal and the staff for their work is also increased.

Case D has cooperation networks to some extent, too. The principal's networks are largely related to organising open lectures. Some designers also have good networks. However, the same kind of active approach to build new networks and new partnerships as in other three institutes cannot be found in Case D. Project cooperation is also very low in Case D compared with the other institutions.

5 DISCUSSION

The overall objective of this study was to increase the understanding of innovation in non-formal adult education organisations and identify the characteristics of such innovative institutes. The characteristics of an innovative organisation have been examined through the lenses of organisational culture and cooperation. Thus the main research question was: *What are the characteristics of an innovative non-formal adult education organisation?* In pursuance of the main research question, three sub-questions were addressed: 1) What are the meanings and drivers of innovation in these organisations and what types of innovations are generated in AECs and how? 2) What type of culture supports innovation in innovative AECs? and 3) What cooperation practices and social networks support innovation in innovative AECs? The research questions have been answered by reviewing former literature on the topics, conducting a pre-study survey and studying four case AECs.

In this chapter, first the characteristics of an innovative adult education organisation are described. Then the key findings are discussed in the light of previous studies, the research questions are answered and the main contributions of the study are presented. Also the research process and its outcomes are evaluated and the limitations of the research are pointed out. In this connection, the generalisation of the results is also discussed.

5.1 Discussion of the findings and theoretical contributions

This research has identified the nature, importance and drivers of innovation and key factors of organisational culture and networking practices in four AECs. The preliminary object of the case selection was that all four cases should represent innovative institutes. In the course of this study, however, it became apparent that the situation in Case D had changed very much after the case selection process and its interviewed staff no longer found the institute innovative. The data suggests that the principal and the staff had a different understanding of the situation in the institute. Maybe this is why the findings in Case D differ in many ways from the findings in the other three cases. For these reasons, this chapter describes the findings of all four cases, but the characteristics of an innovative non-formal adult education insitutute are described here using only the findings on Cases A, B and C.

Figure 25 summarises the findings of the three Case insitutes A, B and C with the aim to describe the defining characteristics of an innovative AEC. The figure presents first the benefits of innovation at AECs. According to the results, the benefits of innovation are linked with a positive image, dynamic and positive atmosphere, additional resources, the development of the organisation and the region, the growth of cooperation and the number of students. The findings suggest that innovations in AECs are small improvements or new combinations of existing products or processes or completely new ones. At best innovations

can be significant structural and/or pedagogical innovations that have a great effect on the products or processes and revenue models of the organisation.

AN INNOVATIVE ADULT EDUCATION ORGANIZATION
Based on the freedom and mission provided by law

THE BENEFITS OF INNOVATION
1. Through innovation the institute gets positive publicity and a positive image, and awareness and appreciation of the institute grows.
2. The curriculum is varied, comprehensive and surprising.
3. An innovative atmosphere brings vitality, new energy, joy and motivation.
4. Innovation gives teachers the opportunity for renewal.
5. Innovation is an extra resource for an institute.
6. New forms of cooperation can be generated.
7. An institute gets new students and the volumes of an institute grow.
8. Also the region of an innovative institute gets benefits by new cooperation and new activities, for example.

CHARACTERISTICS OF INNOVATION PROCESSES
1. Rich and informal brainstorming
2. Ideas are experimented with boldly and quickly
3. Cooperation during different phases of the process and the use of diversity in teams
4. Financing and risk management through external project funding

INNOVATIONS
5. Small improvements
6. New courses or processes
7. New combination of existing practices/services
8. Structural educational innovations

ORGANISATIONAL CULTURE
1. Multidimensional organisational culture, emphasis on clan and adhocracy culture types
2. Characteristics of the culture: open, flexible, participative, courageous, risk-taking, accepts mistakes, quick to seize new opportunities, safe and good community spirit.
3. Strong customer orientation.

NETWORKING
1. Cooperation and networking highly valued
2. Comprehensive external networks
3. Activity in network building, both internal and external
4. Innovativeness in networking

MANAGEMENT STYLE:
1. Strong staff appreciation and principal's approachability.
2. Building an enthusiastic atmosphere and encouragement and support for trying new ideas.
3. Support and positive attitude of the administrator.
4. Active and comprehensive cooperation and use of external funding
5. Emphasis on planning activities and use of strategies
6. Principal's awareness of what is happening and thought in the institute
7. Principal's own enthusiasm, a wealth of ideas and activity.
8. Aim in efficiency and effectivity in operations but cost orientation not actively held in every day discussions
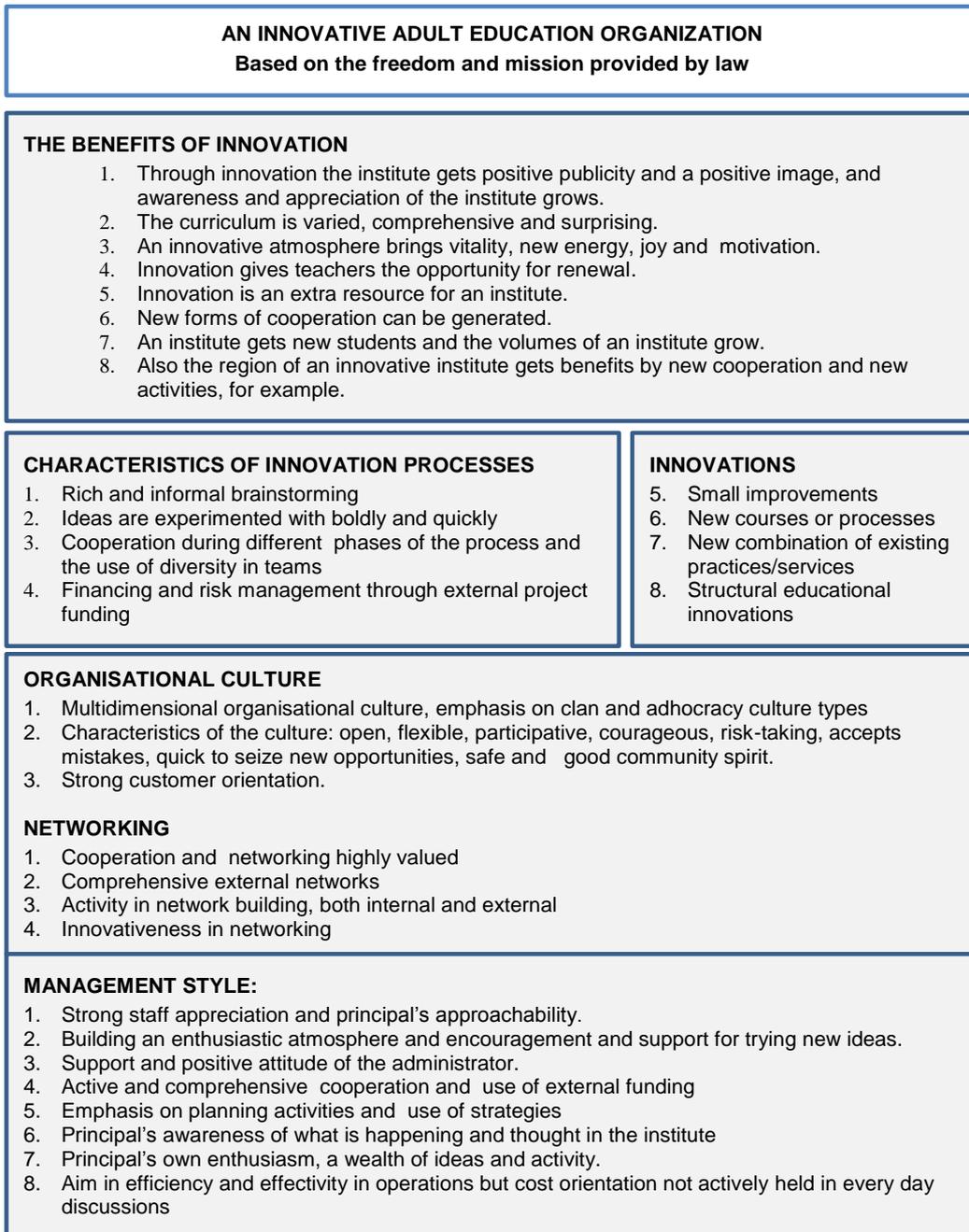
Figure 25. A description of an innovative non-formal adult education organisation

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According to the research results, the characteristics of innovation processes in an innovative AEC typically consist of rich and informal idea generation, the bold and quick piloting of the new ideas and opportunities, extensive cooperation and the active use of external project funding. On the basis of the analysis, the organisation culture type that promotes innovation seems to be a multidimensional culture with an emphasis on the clan and adhocracy culture types. The characteristic values of an innovative AEC are openness, flexibility, participatitiveness, boldness, risk-taking and accepting mistakes. Internal and external cooperation and networking are highly valued and the innovative AECs seem actively and innovately to build comprehensive networks. The findings also suggest that the management style of an innovative AEC has such characteristics as strong staff appreciation, an approachable principal, an enthustiastic and encouraging atmosphere, support for generating and testing new ideas, the principal's awareness of what is happening and thought in the institute, the principal's own enthustiasm and wealth of ideas, efficiency and effectivity in operations and in strategic planning and cost orientation which is, however, not actively discussed on a daily basis. These findings are discussed in detail and based on the literature in sections 5.1.1-5.1.3.

5.1.1 Innovation at AECs

According to a broad definition, the entire AEC system in Finland can be considered as an example of a social innovation over 110 years ago (cf. Hämäläinen & Heiskala 2004): "Social innovations are reforms related to regulation (legislative, regulatory control, etc.), politics and organisational structures and models that improve the performance of a society". Finnish liberal adult education affects positively, for instance, one's enthusiasm to learn new skills and knowledge, well-being, social relationships and active citizenship at a personal level. As the number of students is large, over 630 000 yearly, the individual benefits probably have repercussions in families and more broadly in the society in reduced social and health expenditure, for example (cf. Manninen & Luukannel 2008).

Innovation in the case AECs is perceived primarily as a novelty and change as in public sector (cf. Valovirta and Hyvönen 2009). The data suggests that the staff finds it quite difficult to define innovation, and especially the teachers link it easily with any novelty that changes or improves the activities at the institute. The studied data showed that the need of innovation is considered very strong at AECs. The findings revealed that innovation is at the heart of the institute's primary mission mentioned in the Act on Liberal Adult Education, it is vital for the institute and may prevent its decline. It makes the institutes more attractive, promotes entry into new market areas, increases customer satisfaction and keeps them on the cutting edge. Innovation is also seen as a solution to the shortage of resources. Benefits that are usually mentioned in connection with private sector innovation, such as building and maintaining competitive advantages, were not mentioned in the data. The findings suggest that in the recruitment of students, the AECs compete more with television and the Internet and other recreational activities than with other education organisations. However, when receiving

funding from the municipality, the AECs may compete with other municipal organisations and functions.

Innovations in studied case AECs are, in the first place, intangible new ideas or combinations of existing ideas or services (sometimes in combination with physical objects) or changes made to the processes of the institutes. According to the research results, the variety of innovations in AECs is very wide. On the one hand, they are new kinds of small and effective incremental improvements to existing activities, such as a new type of exercise in a language course or the use of the Internet in the teaching, and on the other hand, they are significant new structures and pedagogical approaches and revenue models which have an effect on all operations of the institute and on the well-being of the customers. These innovations may also have some regional effects. The findings suggest that the innovation in the studied innovative case organisations possesses all five dimensions of service innovation presented by den Hertog (2010). The first dimension, a new service concept, means in the case institutes both completely new courses or structures, new courses or services to the specific case institution, new distribution processes, service modifications, service line additions and re-positioning of existing services. The second dimension, new customer interaction, has not always meant only the new application of ICT. The analysis showed that also an innovative way to utilise media (e.g. newspaper columns) and different premises (e.g. mobile libraries) are used to contact customers. On the basis of the analysis, new forms of networking – the third dimension – mean at innovative AECs new partners, new ways to use networks and new ways to organise the networking. New revenue models (fourth dimension) are mainly linked with new pedagogical methods ("memory school") or using modern information technology (online learning). The fifth dimension, a new service delivery system, concerns the personnel, organisation and culture. Especially Cases A., B and C have a lean, flexible and unbureaucratic organisation where the principals and full-time staff are strongly committed to developing and renewing activities and the principals work in close cooperation with the teachers and other staff.

Researchers suggest that a service innovation should be produced in close interaction with customers (adult students in this study) and not simply as a result of the organisation's own development work. However, the data suggests that in AECs, students are not involved in the innovation process as often as they perhaps could be. They may present ideas or needs, and ideas are usually developed further by piloting them with students, but the findings suggest that involving customers in an innovation process is not very systematic. These findings are similar to those in the literature (cf. Kinnunen 2003) which presents that in spite of the importance of customers in the development of service innovation, the innovation service development has primarily been organisation driven and customers' real needs and wishes have hardly been studied when searching for new ideas. It could be claimed that in AECs, customers are asked to present new ideas, but their needs are not examined more deeply.

Nevertheless, on the basis of the analysis, some AECs operate in quite an innovative way and they do not usually have any specific innovation management or innovation strategy that would create direction and purpose for innovation activities (cf. Edvardsson et al. 2000). The interview data suggests that the main phases of innovation processes at innovative AECs are idea generation, piloting and implementing, which are typical in a service innovation process (cf. for example Apilo and Taskinen 2007, Toivonen and Tuominen 2009, Miles 2008). None of the case institutes had, however, any formal processes for innovation generation. The idea generation and piloting phases are emphasised, and concept creation or design phases were not mentioned often in the data. It could be claimed that the lack of a systematic innovation process can, however, been seen more as a positive aspect because a systematic approach would probably be unappealing to most innovative people (cf. Clair 2008). The findings of this study also show that at least some teachers are against the idea that the principal or management of an AEC would require the teachers to be innovative. Also principals of innovative AECs consider it their duty to encourage and support rather than require innovation. Thus freedom is strongly emphasised also in innovation management.

According to the research results, in innovative AECs, a variety of ideas spring from all over the organisation – and also outside of it. Many innovations emerge in an unintentional and unplanned way when existing services are gradually adapted to new problems. One of the frequently mentioned characteristics of the development of ideas was quickness. Many innovations emerge in an unintentional and unplanned way when existing services are gradually adapted to new problems. Also planned and project-based innovation efforts and externally funded innovation projects are carried out deliberately. Their focus is usually on improving the processes of the institute, developing new structures or solving some problems or challenges of the region or municipality or seizing new opportunities.

As the findings show that there are no formal innovation processes in AECs, the creation of innovations is largely dependent on individual performance, as is typical in the public sector (cf. Valovirta and Hyvönen 2009). The innovation champions or brokers who bring people together and nurture and protect a new innovation from idea generation to commercialisation can at AECs be principals, designers, full-time teachers or part-time teachers. In every AEC, part-time teachers may act innovatively regardless of the situation at the institute, and thus their role in developing and nurturing new innovations is important. In the innovative case AECs, it was found that the performance of the management team (the principal and full-time staff) has, however, a crucial role in promoting innovation in the AEC.

On the basis of the analysis the barriers to innovations at AECs can be divided into resource, attitude, organisational and other barriers. The resource barriers include a lack of funding and/or full-time staff. The attitude barriers consist of the attitudes of the administrator, principal, staff and also customers. The organisational barriers include the management style, strategic factors, and cultural and cooperation practices. Other barriers refer, for example, to a lack of know-how on technological options.

The interview data suggest that case institutes A, B and C have several service innovation capabilities (cf. den Hertog 2010). These case institutes were active in signalling new needs and opportunities. The findings also suggest that the difference between cases A, B and C and case D is in the attitude towards new technological options and in applying for external project funding. Case institutes A, B and C had already used and/or trained teachers to use ICT tools for teaching and were active to create new possibilities for their use. In contrast, on the basis of the analysis, Case D showed no significant attempt either to use ICT or to train the staff to use it. Maybe one of the most important capabilities in the Case institutes A, B and C was the capability to conceptualise, design and test. These institutes seized and tested new ideas actively and quickly, which was not as obvious in the fourth institute. The support from the principal in the cases A, B and C was easy to obtain. The findings suggest that the cases A, B and C had the capability to nurture entrepreneurship and create an open innovation culture that values experimentation, prototyping and thinking outside the box. One difference between cases A, B and C and case D was the capability of co-producing and orchestrating. The cases A, B and C were strongly active in networking and finding new partners. In Case D, networking was not significantly purposeful and present in the activities. The data did not show any specific activities that would have emphasised the fifth of the den Hertog's innovation capabilities: scaling and stretching. The data did not show any formal processes for documenting "the lessons learned" in innovation processes in any of the cases. The focus in learning was not to pay attention to the failures or mistakes but more to improve an innovation and make another attempt at some point.

Especially the findings on Case D, but also the other data indicate that large and complicated organisational and environmental changes may have a strong negative effect on the orientation for innovation. Possible mergers in the future, changes in managing staff and changes in the main premises are sources of uncertainty, fear and additional work. All of these cause fatigue and reluctance towards development. The data of Case D suggests that willingness to innovate may change quite quickly.

The findings of this study are similar to those of studies (cf. Grawe and Chen 2009) that have focused on the relationship between strategic orientation (customer orientation, competitor orientation, and cost orientation) and service innovation. This study suggests that cost orientation which is internally focused is not a direct driver of service innovation capability. In the case institutes, the cost orientation was strong only in the case D, whereas the other cases did not emphasise costs in daily life, although the meaning of effective and efficient operations was important.

The findings strongly indicate that resources play a crucial role in the innovation of AECs. Resource allocation contributes to the innovative capability of the organisation (cf. Jaakson 2011, Schein 2004). Resource allocation can be divided into three main areas: the allocation of time and space so that people can experiment, creating incentives and providing resources to innovate, and allocating resources for constant learning. These are especially relevant for

innovation implementation. It is also important that an organisation has some slack resources that enable it to adapt to changes (cf. Judge et al. 2000). The findings of this study show that a lack of resources is found to be a critical obstacle for innovation at AECs, although it also is considered to be a significant driver. Project funding and additional subsidies seem to be important factors in increasing the resources in AECs. The findings of this study indicate that an essential characteristic of an innovative organisation is the active, bold and creative use of a variety of different external funding possibilities.

Using the findings of this study, innovation in the context of a non-formal adult education organisation – more specifically in a Finnish AEC – can be described. The definition of service innovation by Toivonen and Tuominen (2009) can be used as a basis for the description of innovation in AECs. Modifying it slightly, the description of innovation in AECs is: *An innovation in an AEC is a new service product, a new pedagogical approach*, *a new process, or a renewal of an existing one, which is put into practice and which provides benefits and added value to the institute itself and its customers and partners. In addition, to be an innovation, the renewal should be new not only to its developer, but in a broader context, and it must involve some element(s) that can be repeated in new situations, i.e. it must show some generalisable feature(s). An innovation in an AEC can be pioneering or incremental and continuous or discontinuous.*

5.1.2 Organisational culture and innovation

This study provides empirical evidence that organisational culture may affect the innovation in an AEC. An interesting finding of this research is that the dominant organisational culture type in innovative AECs was not unequivocally adhocracy, as the innovation literature has often suggested, but more a combination of multiple culture types. According to the findings, innovative institutes are relatively strong in all four culture types. Mostly emphasised are the values of adhocracy and clan culture: dynamism, future orientation, acquiring new resources, tolerance of mistakes, openness, flexibility, customer-orientation, risk-taking, cooperation networks and community spirit. The values of clan culture lead to more open communication channels which promote innovation. Nevertheless, also hierarchical and market values, such as the quality of internal processes and avoidance of unnecessary work, are important. This finding is consistent with those of Obendhain (2004) and Caccia-Bava et al. (2006), mentioned in chapter 2.2. Obendhein suggests that the balance among the four quadrants within an organisation has a major impact on how its members view an innovation, its intended outcomes and how it is implemented. Some innovative institutions require a culture emphasising multiple and perhaps competing culture types with built-in capabilities for efficiency and consistency on one hand and experimentation and improvisation on the other. Also Caccia-Bava et al. suggest that a culture that values both an external focus (i.e. the improvement of its competitive position) and an internal focus (i.e. the maintenance of its sociotechnical system) may maximise its efficient application of innovation.

The findings also suggest that the culture in AECs can be characterised as weak, as it does not put great pressure on the staff to behave in certain ways, but simply offer guidelines for their behaviour, instead. AECs include a mix of different groups: functional roles such as administration, full-time teachers and part-time teachers of different disciplines, and different municipalities and locations which all may have different subcultures. This, and the fact that cultural artifacts cannot support the common culture at AECs because the institutes operate in so many rented premises, is a challenge for innovation management. However, because of the fragmentation, there are many structural holes (cf. Burt 2004) at AECs that could be used in promoting innovation. Such holes exist especially between different geographical locations and disciplines.

According to the literature, innovation orientation refers to the fact that the organisation has a strategy for developing and introducing innovative new products or services into the market, and innovation should be mentioned in the mission statement of an innovation-oriented organisation. The innovative case institutions in this study, however, had no written strategies regarding innovation. Innovation was not mentioned in the visions of cases A, B and C, either, but issues that can be linked to innovation were mentioned in the visions: open-minded and flexible (Case A), up-to-date and flexible (Case B), open and flexible (Case C) and creative (Case D). In previous studies, the vision and mission of a creative and innovative organisation have been found to focus on the future, the customer and the market. Although according to the findings, the visions of two innovative case AECs were clearly customer-oriented and all visions included some links to innovation, it cannot be concluded that the visions have had a key role in promoting the innovative activities in the case institutes.

The results of this study strongly support the theoretical literature and are consistent with previous empirical studies that emphasise the positive relationship between management support and innovation in companies but also in education organisations (cf. Wong 2009, Rhodes 2011, Pyhältö 2011, Hargreaves 2011, Gejsel et al. 1999, Daly). This study indicates that principals at innovative case AECs affect innovation through their personal and positional characteristics, functional and general management expertise, and attitude toward change. It seems that an important driver of innovation at the case institutes has been the principal's proactive approach, willingness to take risks, dynamic attitude towards taking and keeping the initiative, giving time and encouraging the development and implementation of new ideas and processes. Also the three dimensions of transformational leadership presented in the literature which appear to be most relevant were recognised in the innovative case institutes: 1) charisma/inspiration/vision, which means inspiring teachers to be engaged in their work by developing, identifying, and articulating a particular vision, 2) individual consideration, which means concern and respect for the personal feelings and needs of teachers and 3) intellectual stimulation, which means challenging teachers to professionalise themselves in such a manner that the organisation is learning as a whole.

This study also supports the literature that states that school heads play a relatively essential part especially at the initiation stage of an innovation. The findings showed that the principals in the innovative case institutes actively empowered the staff to innovate, so mobilising the energies of people to be creative. In addition, this study suggests that the active involvement of a principal also in other phases of the innovation process promotes innovations in AECs. Especially through finding additional resources and listening, the principals seem to encourage the staff to find new solutions or activities.

5.1.3 Cooperation and social networks and innovation

The findings of this study contribute to the innovation literature, which emphasises the importance of social networks and cooperation in enhancing innovation activities. Networking in the studied three innovative AECs was valued, active and even systematic and was considered to be one of the main focuses of the operations. This study emphasises the importance of both internal and external networking and both organisational and individual cooperation. It was found that institutions had both closed and open innovation activities. The findings of this study also suggest that the three innovative AECs have a high level of network competence, which is assumed to be related to the richness of social interactions and the ability to handle these relationships. Of four organisational antecedents of network competence mentioned in the literautre, at least two can easily be found at innovative case AECs: the network orientation of human resource management and a corporate culture supportive of the networking. An integrated communication structure is a challenge in AECs, but the innovative AECs have actively been working to improve the possibilities of interaction at the institutes. Also the availability of resources is a challenge. There are a large number of teachers working at the institutes, but the availability of these teachers for cooperative activities is not a foregone conclusion because most of them are part-time teachers. The innovative organisations, however, have actively acquired additional resources using project funding. The innovative institutes have also emphasised sharing information internally and externally and ensuring that people enjoy working together especially in internal networks. The findings also show that there are both instrumental and expressive relationships in innovative organisations. Especially the support of the principals for the teachers was strongly emphasised in the data.

Cooperation with different partners and belonging to different networks seems to promote innovation in innovative AECs. The findings show that the innovative AECs actively take advantage of diversity in their relationships both with internal and external partners. The findings also suggest that the innovative organisations have a somewhat central position in their networks. Either they have been the initiators of networking or a salient actor in some way. In teachers' internal networking, the full-time teachers are highly central actors in promoting innovation and disseminating knowledge and practice throughout the system. These highly central actors also serve as points of contact to lesser-connected part-time teachers, perhaps building the social capital of the entire system. However, it must be

highlighted that the innovative case organisations in this study did not represent small organisations with no full-time staff or large organisations with a variety of full-time teachers.

Teachers reported some elements that supported their ability to successfully interact formally or informally: different meetings, the teachers' lounge and parties. Working in cooperation, teachers are potentially able to access and make use of the individual and collective resources embedded in their network. When teachers design and plan together, new ideas may be shared and developed through their discussion, which in turn are applied in the classroom.

The study indicates that especially the principals of innovative case AECs have strong social capital. Collaboration with different partners and belonging to different networks seems to be natural for all three principals.

The features of the organisation structure that promote innovation through cooperation can be found in some form in all four case AECs. Freedom was emphasised at all institutes, and they all aimed to use inter-disciplinary teams and to break down departmental barriers. Also the goal of an informal atmosphere could be found in the four cases. Maybe the most obvious difference between innovative and traditional cases can be found in a participative way of working. The innovative AECs were very conversational and face-to-face communication was important, but they were smaller organisations, which may have made participation easier.

5.1.4 Theoretical contributions of the study

The findings of this study, integrating innovation, organisational culture and social networking, may be presented as the theoretical contribution of this research (Figure 25, page 188). This research supports the importance and benefits of innovation for a non-formal adult education organisation. This study suggests how AECs innovate, both at a general level in AECs and more deeply in innovative organisations, and what obstacles AECs consider to prevent the promotion of innovation most. The description of an innovative AEC increases understanding of innovation in non-formal adult education organisations and it can be recommended to be utilised and further developed in studying innovation especially in education organisations but also in the public and service sector in general.

This research also makes an important contribution to innovation culture research. The findings of this study contribute to the discussion on the suitable culture type for innovation, stressing the importance of a strong multidimensional culture in order to promote innovation at AECs. Especially the value of the adhocratic and clan culture types was emphasised. Also the lack of discussion on cost-effectiveness in everyday operations was found to promote innovation although all principals of innovative AECs emphasised the importance of efficiency in operations. However, they did not consider these issues in meetings or informal discussions. This study also suggests that the Competing Values Framework is a suitable method to analyse organisational culture types in non-formal adult education organisations. It can be used to identify the areas that an organisation should emphasise when developing the processes and products of the organisation.

According to the researcher's interpretation, an interesting empirical finding of this study is also the way innovative organisations acquire additional resources for their development work. They search actively for additional resources through project funding and subsidiaries, cooperation networks and creating a conversational and joyful atmosphere in the institute. This finding contributes especially to innovation literature on educational organisations.

The finding concerning drivers for innovation makes an important contribution to the innovation literature on educational organisations, especially the attitude, behaviour and support of the principal and the administrator. The principal's way to encourage, support and appreciate the staff, his or her approachability and concrete participation in innovation activities seem to have a strong effect on innovation attitudes and activities at the AEC. This finding also supports common innovation management literature.

The study also contributes to the innovation literature on educational organisations that emphasises the link between innovation and social networking. The findings show that in innovative AECs, the amount and diversity of both internal and external cooperation is great and valued. Innovative AECs search actively for new partners and use the diversity in teams to generate and develop innovations.

It is this researcher's belief that the value of the results is also in their practical usefulness, and many of the findings of this study can be applied to other AECs and maybe also other education organisations.

5.2 Evaluation of the study

The study, its conclusions, the effect of the researcher, the research process and the procedures, and the documentation of the study can be evaluated from a number of viewpoints. The key question is to what extent the findings of the study are truthful.

5.2.1 Validity and reliability of the study

Qualitative research can be evaluated using the traditional terms of validity and reliability or the criteria proposed by Lincoln and Denzin (2005): credibility, transferability, dependability and confirmability. Yin (2009) proposes that four tests – construct validity, internal validity, external validity and reliability – are relevant to confirm the quality of the research. This study is evaluated using these four criteria. Construct validity refers to establishing the correct operational measures for the concepts being studied. Internal validity refers to establishing a causal relationship, whereby certain conditions are shown to lead to other conditions, as distinguished from spurious relationships. External validity relates to establishing the domain to which a study's findings can be generalised, and reliability relates to demonstrating that the operations of a study – such as the data collection procedures - can be repeated with the same results (Yin 2009).

Triangulation

The purpose of triangulation in qualitative research is to increase the credibility and validity of the results. Triangulation in qualitative research refers commonly to the use of multiple methods in the study of the same phenomenon (Silverman, 2006). The reason for applying triangulation in this research was to produce a wider scope of coverage and a fuller picture of the phenomena under study and thus to become more confident about the results. Denzin and Lincoln (1994) identify four types of triangulation: data triangulation, where a variety of data sources must be used, investigator triangulation, where several researchers or evaluators are used, theory triangulation, where multiple perspectives are used to interpret a single set of data, and methodological triangulation, where other disciplines are used in order to broaden the understanding of the method or substance. Stake (1995) suggests that case study triangulation mainly consists of data source evidence, where different data sources are utilised.

In this study, most of the data were collected by interviews from the case institutes. At least four people were interviewed from each case institute. Data was also collected from publicly available sources, for example annual reports and curricula, home pages and newspapers. In studying the organisational culture, also survey data was collected. In the pre-study phase, data was collected by sending a survey to all full-time principals of AECs in Finland. This data was used to build the preunderstanding for the multi-case study.

Establishing a chain of evidence

The validity of this study was increased also by establishing a chain of evidence and using key informants' feedback. Establishing the chain of evidence is related to the reader's ability to follow the different phases of the research from the beginning to the final conclusions (Yin 2009). This report is organised based on the topic areas and chronologically to make it easy to trace all of the steps from the research questions to the evidence and conclusions. The report drafts of each case were sent to the principals of the institutes in question who were then asked to comment on the case descriptions and analysis. Two of the principals wanted to make slight changes to the facts on the institute.

Research's role and status

Validity was improved also through the researcher's participation in all research stages: interview and survey design, data collection and analysis. The researcher is a principal of an AEC. Thus the education system of AECs, the terms and concepts and partly also the interviewees were already familiar to the researcher in advance. This was likely to improve trust and openness during the interviews. Although the attempt was to minimise the influence of the researcher, the researcher's assumptions may have had some effect on the questions and interpretations. However, this is acceptable in qualitative research (Gummesson 1991, Hirsjärvi & Hurme 2008, Stake 1995). The researcher's own attitude to innovation is positive, which means that the researcher regards innovation as a positive phenomenon.

Generalisation and replication

The external validity concerns the generalisability of the research findings: whether the conclusions of the study have any larger import, whether they are transferable to other contexts and how far they can be generalised. In qualitative research, studies are normally based on a limited amount of research data, for example on one or a few studied cases, usually because of limited time and resources. Thus the selection of the case study design brings forth limitations as far as the generalisation of the results of this thesis is concerned. Yin (2009) states that the logic of the generalisation from case studies is replication and suggests that if two or more cases are shown to support the same theory, replication may be claimed. Stake (1995) presents that a particular case is chosen to study what it is and what is does and not how it is different from others. Also Hirsjärvi et al. (2004) state that the generalisation of the results achieved is risky when analysing human behaviour in a certain environment, and therefore, the researcher cannot but recognise that external validity is difficult to obtain.

In this study, the focus has been on investigating innovation in four AECs especially from the point of view of organisational culture and cooperation. Even though these institutes vary in many respects, there may be some findings that can be used in developing innovation capability also in other AECs. Although some general conclusions and recommendations are drawn according to the findings, the conclusions must be viewed more as a probability than as an absolute truth.

The characteristics of the original samples and interviewees were described so that adequate comparisons with other samples could be made. The cases were described to the extent permitted by confidentiality. Also the detailed description of the entire research process in chapter three was intended to provide the reader a possibility to assess the process and to consider different possibilities for generalisation. The process included three learning cycles (theory, pre-study survey and multi-case study) during which an understanding of innovation in a non-formal adult education organisation was constructed. This report also contains many direct quotations from the interviewees. They may contribute to the readers' interest and ability to interpret the results and to apply them in practice in their own settings (Hirsjärvi et al. 2004).

Important for the replication procedures is the development of a theoretical framework, which should state the conditions under which a particular phenomenon is likely to be found (Yin 2009). In this study, a preliminary description of the phenomenon was first produced after the pre-study phase and the final decription after the multiple-case study.

Reliability

Reliability means that if the research is repeated by the researcher or someone else, the results should be similar. In this study, the aim was that each case description should provide a picture of the innovation, culture and cooperation practices implemented in the case institutes to justify the interpretations made.

It is important to acknowledge that as human behaviour is contextual, the researcher is unlikely to acquire identical results if the data collection was repeated. Silverman (2006) states that trying to produce a more true representation of the object by looking at it from more than one standpoint makes sense in natural sciences but not in social sciences. He justifies this by pointing out that in research which focuses on social reality, the object of knowledge is different from different perspectives. In addition, different points of view cannot be merged into a single true and certain representation of the object. This should not be merited as a weakness in the methodology of this study but rather as a fact of life. In this study, the primary data was collected by interviews and the secondary data consisted of written material, which was consistent with the interview data.

Absolute reliability in analyses of employee perceptions and interpretations is difficult to achieve, as the opinions are subjective and may even change over time. Therefore, in this research reliability cannot be understood as identical results obtained through two successive studies or through two researchers conducting the same survey.

A case study database is about organising and documenting the data collection, containing case study notes and documents, tabular materials and narratives (Yin 2009). In this study, all interviews were tape-recorded and reported carefully by the researcher, which increases the reliability of the study. Also the careful reporting contributes to the reliability of this study.

Validity and reliability of OCAI and prestudy questionnaire
The validity of a questionnaire relies first and foremost on reliability. Validity refers to whether the questionnaire or survey measures what it intends to measure. Reliability is a characteristic of the instrument itself, but validity comes from the way the instrument is employed.

The developers of CVF and OCAI (Cameron and Quinn 1999, 2006) have administered the OCAI to thousands of managers in many different organisations (e.g. commercial, nonprofit and governmental) to establish its validity and reliability. Kwan and Walker (2004) point out that CVF has become one of the dominant models in quantitative research on organisational culture (Yu and Wu 2009). According to different empirical studies, CVF and OCAI have been found to predict organisational performance and have both face and empirical validity (e.g. Kwan and Walker 2004, Cameron and Quinn 2006). E.g. Howard (1998) in his study concludes that the CVF perspective provides a valid metric for understanding organisational cultures. Howard states that this instrument differs significantly from the majority of other instruments intended for the assessment of organisational culture, considering that it provides descriptions or affirmations to respondents, and not questions, with respondents assessing the extent to which their organisation corresponds to the given description. This means that such an instrument is internally quite consistent (reliable), considering that the answers reflect the respondents' personal attitude to a lesser degree.

In the pre-study questionnaire, the questions were based on the results of former innovation management research. The questionnaire consisted of five themes, which included quantitative and qualitative questions in order to improve the validity of the instrument. The questions were designed by the researcher and another researcher reviewed them and made some changes. The questionnaire was piloted by four principals, two of whom also suggested some changes.

5.2.2 Limitations of the study

Some weak points were identified in this research. One is related to the case and informant selection in the multi-case study. This was the first more extensive research on innovation in Finnish AECs. Thus the main goal was, on the one hand, to obtain a broad and comprehensive understanding of the topic by conducting a pre-study survey, and on the other, to develop a deeper understanding through a multi-case study. The case selection was mainly based on the pre-study, where the principals' subjective interpretations of the innovation capability of their institute were collected. These interpretations may be rooted in the principals' personality, and perhaps in their wishes. To avoid an unsuitable case selection, also the executive director of The Finnish Association of Adult Education Centres was asked for recommendations. Despite the careful case selection, the situation in one case institute (D) changed after the pre-study. It had undergone and was still undergoing great changes impacting the organisational atmosphere and attitudes toward innovation. Although the institute could no longer be considered as an innovative AEC, it was, nevertheless, included in the research for reflection of the results of other cases and to represent a different case. The situation in Case D probably affected the willingness of respondents to contribute to the research and attitudes at the moment of answering.

In addition, only the full-time teachers, with some exceptions, were interviewed, whereas the large number of part-time teachers was not. This may affect the results and should be considered when designing further research on the topic. The reason why the part-time teachers were not included in the study was the lack of time and resources and the idea that the full-time staff has a key role in affecting the culture and innovation in AECs. Moreover, no students or partners were interviewed.

It is also possible that the current situation and recent incidents in the innovative case institutes have affected the respondents' answers. The interviews were conducted in winter and early spring when the teachers were both teaching and planning the curriculum for the following semester and their workload was great. However, no one respondent had a dominating influence on the outcome because a minimum of four people were interviewed from each case institute. The information from different sources was triangulated and no inconsistencies were found.

Another limitation was related to the process of interpretation. As the findings are grounded on the interviewees' life-world experiences, one of the main questions is the method of

interpretation. The interpretation also inevitably becomes doubled as the participants first interpret and express their own experiences, after which the researcher interprets these interpretations. However, while the interpretations may seem plausible to a certain degree, the interpretative element is unavoidable in human sciences. Perceptions are subjective and may even change over time. It should also be noted that the questions posed during the interviews might have guided the informants in their responses at least to some extent. Furthermore, there is always a risk that people tend to remember and interpret events differently. It is also worth considering whether the questions were articulated clearly enough to eliminate possible misinterpretations. Therefore, in this research reliability cannot be understood as identical results obtained through two successive studies or through two researchers conducting the same survey.

One limitation is related to the researcher. The researcher's own experiences are prevailing fact and have certainly affected the way this research has been conducted. It is usually beneficial if the researcher has experience in the everyday life of his or her research environment. Knowing the AEC system and working as a principal in an AEC has been useful for the researcher when conducting interviews in this study. Naturally, it has an impact on how the researcher interprets the findings of this study. The aim has been to avoid the researcher's impact on the interpretations by conducting a careful analysis of the data and by employing different categorisation methods.

The theoretical approach of this study deserves also critical evaluation. The underlying assumption behind the entire study was that innovation is a positive phenomenon and helps organisations to gain positive benefits. It must also be born in mind that this study was carried out in Finnish adult education centres and may therefore carry national or cultural biases that can cause these results to be inapplicable in other geographical regions and cultures.

This research process has not been pre-planned with detailed research questions from the beginning. The initial wish of the researcher was to find out how AECs innovate and whether they need innovation. As the pre-study phase and literature review increased the understanding of the phenomena, the research plan was readjusted and the perspectives (culture and cooperation) from which the innovation was studied were defined. However, the overall objective of the research has been the same from the beginning: to understand innovation in AECs.

6 CONCLUSIONS

In this chapter practical implications and suggestions for future research are presented.

6.1 Practical implications

More than ever, education organisations are experiencing the need to develop new services to satisfy expanding and changing customer requirements and needs and to adapt to the environmental changes and to the continually tightening economic situation. Innovation has been found in many studies to have a crucial role in the success of an organisation, both in the private and public sectors, in education, in manufacturing and in services. However, there is still a lack of studies concerning innovation in non-formal adult education organisations. In Finland, the adult education centre system is very old, over 100 years, and the number of students in these institutes is very high. Nevertheless, there are almost no studies concerning how these institutes operate. In addition, although the Act on Liberal Adult Education in Finland gives these institutes great freedom to decide on their goals, activities and procedures, giving them ample possibilities to act innovatively, the institutes often have an image of an old-fashioned organisation offering courses mainly for senior citizens. In recent years, the discussion on innovation has, however, started also in AECs, and the very first quality award for innovative activities was given to an AEC in 2010. As, on one hand, AECs in Finland currently face many challenges mainly because of mergers and decreasing resources, and on the other hand, the AECs offer services that have a positive effect on students' physical and mental well-being and thus indirectly perhaps on the well-being of families and the entire society, research on these organisations and issues that have effect on them is crucial.

The data of this study suggests that the role of innovation in the search for better performance in AECs is great. Although there seems to be many innovative activities at Finnish AECs, there is still significant room for improvement before innovation becomes a rooted and sustainable practice in Finnish AECs. From a practical point of view, the results of this study have some implications particularly for the principals and administrators of non-formal adult education organisations, but also for teachers working in the institutes.

The first decision that AECs should make is what the role of innovation in the institutions is. Is it just a way to occasionally find new ideas for new courses at the individual (teacher) level or is it a strategic tool to reform the activities of the entire organisation as "a purposeful and continuous innovation"? The attitudes of the administrator, the principal and full-time teachers towards innovation are crucial.

If an AEC wants to be active in innovating, it should define its innovation strategy which shows the direction and purpose for innovation activity. To ensure that the institute achieves its strategic goals, it must determine its destination and some key points along the way and

adopt some practices to reach the goals. Especially very large AECs should pay special attention to the definition of their innovation strategy and to its dissemination across the organisation in order to guide the search for, development and piloting of new ideas effectively. In the case of small and medium-sized AECs, however, generating a favourable organisational culture for innovation may be enough to promote innovation with the development of a functional IT infrastructure. Nevertheless, also in these institutes the goals of innovation should be stated.

One important step is to define together what the concept of innovation means in that specific institute. One key element of the innovation process is to organise the activity of searching for new ideas and novel knowledge that have commercial potential. The attitude to those who suggest new ideas is crucial. A positive and encouraging attitude makes it possible to create something new. Formal innovation processes may be usable in some situations, but the rapid piloting of new ideas may be more important.

Having independent creative and competitive key persons (full-time teachers and designers) who also have social capital and networking competence helps the institute to improve its innovation capability. If the institute wants to promote innovation, it should take this into consideration when recruiting new staff, especially full-time teachers.

Hopefully the findings of this study will help and encourage AECs to identify their own organisational culture type and understand the relationship of the culture type and the performance of the organisation. By identifying the current culture type and the expectations of stakeholders and challenges of the future, the AECs could direct the developmental activities more properly.

As Trivellas and Dargenidou (2009) suggest, that it may be possible to predict in what area an education institute will excel based on the type of culture that it possesses. To foster new ideas and encourage their development and implementation, a flexible, open, active, experimenting, dynamic, current, cooperative, and creative culture that is oriented toward development and the future and tolerates mistakes should be promoted. This study suggests that the CVF is probably a suitable tool for assessing the culture of adult education centres. According to this study, the culture type promoting innovation is multidimensional with an emphasis on clan and adhocratic elements.

Principals should take advantage of potential synergies between innovativeness and the institute's existing skills, capabilities, and resources. AECs have a large variety of different skills that should be utilised to their full extent. Development of a common culture in AECs is a great challenge because the activities are very scattered in terms of locations and disciplines, and in addition, the amount of full-time staff is very limited. Thus, the possibilities of informal communication, cooperation, meetings and discussions should be increased in an innovative way using also the possibilities of information technology. This is also important for promoting social networking at the institute. Social networks have an important role in the

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innovation performance of an organisation. Typically, Finnish AECs are internally loosely networked organisations. According to the literature review, an organisation that wants to improve its innovation capabilities should find a balance between dense and sparse social networks. Improving relationships between the full-time staff and less connected part-time teachers may be of prime importance to the success of the innovation. Consequently, the principals should actively improve the social interaction mechanisms among the teachers within and across disciplines to stimulate innovation. Using e.g. different training opportunities, the principals may link the teachers to diverse knowledge. In addition, the principal should be active in different external networks and also courage and support the teachers to find external partners.

The AECs may have a reputation of an old-fashioned organisation that offers services mainly for elderly people. As Junarsin (2010) states, the customers may in the decision-making process judge the service quality based on the physical evidence configured by the service provider. The promotion of innovation and an innovative learning environment could be a significant tool for changing the old-fashioned image. In addition, the administrators of the AECs should understand that it is difficult for AECs to promote the innovative performance without their support.

To increase innovation, AECs should also involve customers more actively in innovation development. In AECs, teachers are in this respect in a crucial position because they have close contacts with the customers. The AECs should find the ways to use this resource more efficiently.

6.2 Suggestion for future research

Being the first empirical research that studies especially innovation but also organisational culture and networking activities in AECs, this thesis opens up new perspectives for future research possibilities. Also the limitations of the study indicate opportunities for additional areas.

All three studied phenomena need further and more accurate study in order to obtain a deeper understanding of the relationships between innovation, culture and social networks in AECs. Future studies might gain additional insights into innovation in AECs also by exploring different organisational factors or knowledge management processes in relation to innovation performance. Moreover, institutional variables such as size, age, the institutional mission, characteristics of the region, type of students, and so on, which could play important roles in defining the institutional culture and innovation were not considered in this study. Future studies should account for these variables.

This study is based on a quality approach and self-reported assessments. This prevented drawing causalities concerning the studied issues. Future research is suggested to benefit from

using objective measures for both innovation performance, cultural factors and networking that can be independently verified.

This study provides empirical evidence that organisational culture may affect innovation at an AEC. In particular, the findings suggest that multiple types of the culture and especially adhocracy and clan cultures fit into an innovation orientation. However, this applies only to the culture type of the core organisation (full-time staff) of the studied AECs. It may be that AECs are quite fragmented horizontally and vertically and, if also the part-time teachers are included, the findings could be different. There may be different subcultures between different disciplines (functional areas) and different locations because of geographic distance. It would be interesting to know what types of subcultures there are, what the effect of such subcultures is on innovation and especially what the effect of the AEC's management is on those subcultures. Furthermore, as the sample size was small, there is a need for large-scale empirical studies that can substantiate these findings in larger and more diverse samples.

This study suggests the importance of large and rich social networks. Relatively little is still known about the influence of network structure and content on the innovation process. Understanding network structures more deeply could be useful for adult education organisations in order to manage the reform of their activities and attempt to meet future needs. What types of networks the part-time teachers have and how they affect innovation would be an interesting area for future research. It could be possible to acquire a deeper understanding of social networks and innovation performance using social network analysis as a research method, for example.

The pre-study survey included only AECs that have a full-time principal. However, approximately one third of AECs are managed by a part-time principal whose primary job often involves management duties in another organisation or unit in a municipality. How innovative these institutes are and how innovation is managed in them would be another topic for future research. The situation in Finland is, however, quite rapidly changing and these small AECs are merging into larger entities. In consequence, it would be interesting to study how the innovativeness grows or decreases in such merged institutions. This study suggests, on one hand, that mergers have a "stopping effect" on innovation activities before and immediately after the mergers, but on the other hand, two of the innovative case institutes in this study were merged some years before the interviews. A merger may promote innovation because it usually starts strategy work where the new goals and strategies are constructed. A merger also integrates different resources, practices and thinking, which could promote innovation.

In addition, this study was conducted by empirically investigating only Finnish adult education organisations. Potential cultural limitations should be taken into account and further research is proposed in different cultural contexts to generalise or modify the concepts.

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7 APPENDICES

7.1 Appendix 1: OCAI questionnaires of a principal and teachers and designers

Answer the following questions describing the situation in the institute now.	
Principal	**Situation in the institute**
1	The organisation is a very personal place. It is like an extended family. People seem to share a lot of themselves.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
2	We share common practices and guidelines at the insitute.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
3	As a manager, I am decisive and result oriented.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
4	We value innovativeness and freedom to act at the insitute.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
5	We emphasize human development, wellfare, openness and participation.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
6	We value continous strive to better achievements and making results.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
7	Our criteria of success are new products and services.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
8	We value uniform, safe and predictable operations.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
9	The institute is a dynamic and enthustiastic place. People are willing to experiment new things and take risks.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
10	The criteria of success are reliability and cost efficiency.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
11	Our goal is to develop competitive activity towards a better market leadership.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
12	My management style is mentoring, facilitating and nurturing.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
13	The glue that holds the organisation together is clear quantified objectives and their achievement.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
14	Our institute emphasises acquiring new resources, developing innovativeness, growth and staying on the cutting edge.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
15	We have clear rules, policies and guidelines so that we can act in a similar way	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
16	Our criteria of success is to get a better market share and to find new markets.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree

17	The institute supports teamwork and participation in common decision making.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
18	Our goal is to develop the activities so that the work is smooth and trouble-free.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
19	The glue that holds the organisation together is loyalty and mutual trust.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
20	As a manager I am an organiser and coordinator and efficiency oriented.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
21	People in our organisation are competitve and achievement oriented.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
22	As a manager I act like an entrepreneur. I am innovative and I am ready to take risks.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
23	Our criteria of success are teamwork and concern for people and the development of human resources.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
24	The glue that holds the organisation together is commitment to innovation and development.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Answer the following questions describing the situation in the institute now.	
Teachers and designers	**Situation in the institute**
1 The organisation is a very personal place. It is like an extended family. People seem to share a lot of themselves.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
2 We share common practices and guidelines at the insitute.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
3 The principal is decisive and result oriented.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
4 We value innovativeness and freedom to act at the insitute.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
5 We emphasize human development, wellfare, openness and participation.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
6 We value continous strive to better achievements and making results.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
7 Our criteria of success are new products and services.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
8 We value uniform, safe and predictable operations.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
9 The institute is a dynamic and enthustiastic place. People are willing to experiment new things and take risks.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
10 The criteria of success are reliability and cost efficiency.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree

11	Our goal is to develop competitive activity towards a better market leadership.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
12	The principal's management style is mentoring, facilitating and nurturing.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
13	The glue that holds the organisation together is clear quantified objectives and their achievement.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
14	Our institute emphasises acquiring new resources, developing innovativeness, growth and staying on the cutting edge.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
15	We have clear rules, policies and guidelines so that we can act in a similar way	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
16	Our criteria of success is to get a better market share and to find new markets.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
17	The institute supports teamwork and participation in common decision making.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
18	Our goal is to develop the activities so that the work is smooth and trouble-free.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
19	The glue that holds the organisation together is loyalty and mutual trust.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
20	The principal is an organiser and coordinator and efficiency oriented.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
21	People in our organisation are competitve and achievement oriented.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
22	The principal acts like an entrepreneur. He is innovative and he is ready to take risks.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
23	Our criteria of success are teamwork and concern for people and the development of human resources.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree
24	The glue that holds the organisation together is commitment to innovation and development.	Strongly disagree 1 2 3 4 5 6 7 Strongly agree

7.2 Appendix 2: Questionnairre of the pre-study phase

THE POSSIBILITIES OF INNOVATION AT ADULT EDUCATION CENTRES

Innovativeness is defined in this research as an ability of a leader, employees,a team or an organisation to produce and apply new ideas and develop them into new or improved products, services, working methods, technology or markets.

---

1. Name of AEC

2. Gender

○ Male

○ Female

3. Age

○ under 30 years

○ 30 - 39 years

○ 40 - 49 years

○ 50 - 60 years

○ 60 years ->

4. Respondent's work experience as a principal of an AEC

○ under 5 years

○ 5-10 years

○ 10-15 years

○ 15-20 years

○ over 20 years

5. The number of state subsidy teaching hours

6. The number of full-time teachers, designers and designing teachers

7. Location of the AEC, (province)

○ Southern Finland

○ Eastern Finland

○ Western Finland

○ Oulu

○ Lapland

○ Åland

8. Do AECs need innovation?

○ Not at all

○ A little

○ Somewhat

○ Much

○ Very Much

9. Comments to the previous question

Your thoughts on the need for innovation in AECs

☐

10. Please describe an innovative AEC

☐

11. How does innovativeness benefit AECs? Choose the three most important benefits

☐ The institute benefits economically

☐ The image of the institute improves

☐ The attractiveness of the institute improves

☐ Recruiting skilful teachers becomes easier

☐ The skill level at the institute improves

☐ The work satisfaction of teachers improves

☐ External funding improves

☐ The institute attracts more partners

☐ Work satisfaction in the institute improves

☐ Customer satisfaction improves

☐ Other (specify)

12. Comments to the previous question Your thoughts about the benefits of innovation for the institute

13. What obstacles hinder innovativeness at AECs? Choose the three most important benefits

☐ Lack of economic resources

☐ Lack of human resources

☐ Lack of creativity

☐ Customers' negative attitudes towards new ideas

☐ Teachers' negative attitudes towards new ideas

☐ Lack of time

☐ New ideas are not collected

☐ New ideas are not experimented with

☐ Organisational changes

☐ Other (specify)

14. Comments to the previous question Your thoughts about the benefits of innovation for the institute

15. What drivers promote innovativeness at AECs? Choose the three most important benefits

☐ Principal's innovation capability

☐ Teachers' innovation capability

☐ Good economic situation at the institute

☐ Highly competitive market in the institute's operating environment

☐ External project funding

☐ Size of the institute

☐ Good internal cooperation

☐ Development of new teaching technology

☐ Institute's good cooperation networks

☐ Innovative partners

☐ Other (specify)

16. Comments to the previous question Your thoughts about the drivers of innovation at the institute

17. What are the strengths of the AEC system in terms of innovation way compared with other educational organisations?

18. How can a principal affect innovation at the institute?

19. How innovative is your own institute?

	1	2	3	4	5	
Not at all	○	○	○	○	○	Very innovative

20. In what disciplines is your institute the most innovative? Choose one option

☐ Languages

☐ Arts

☐ Crafts

☐ Music

☐ Physical education

☐ Society

☐ Information technology

☐ Other (specify)

21. Which personel group is the most innovative in your institute? Choose one option

☐ Principal

☐ Full-time teachers

☐ Part-time teachers

☐ Designing teachers

☐ Designers

☐ Office staff

☐ Other (specify)

22. Are you innovative yourself?

	1	2	3	4	5	
Not at all	○	○	○	○	○	Very much

23. How many new ideas are generated in your institute?

	1	2	3	4	5	
None	○	○	○	○	○	Very many

24. What types of innovations have been generated at your institute?

☐ New educational products

☐ Other new services

☐ New working methods

☐ New working arrangements

☐ New target groups

☐ New teaching arrangements

☐ New ways to use teaching technology

☐ Other (specify)

25. Please estimate how many new implemented innovations your institute develops annually or during a five years period, for example.

[   ]

26. How new innovations in your institute are generated?

☐ Spontaneously through insights

☐ As a result of development work using the institute's own funding

☐ As a result of development work using external project funding

☐ As a by-product of other development work

☐ Experimenting with teachers' ideas

☐ In cooperation networks

☐ Other (specify)

27. Do you use any specific methods to generate and collect new ideas?

	1	2	3	4	5	
None	○	○	○	○	○	On a regular basis

28. What methods and how?

[   ]

29. How well do you think these methods work and generate new ideas?

	1	2	3	4	5	
Not at all	○	○	○	○	○	Very well

30. Comments about how the methods are working

[ ]

31. Do you experiment with the collected and generated ideas?

	1	2	3	4	5	
Not at all	○	○	○	○	○	Very much

32. How much human resources do you have to develop new things?

	1	2	3	4	5	
Not at all	○	○	○	○	○	Very good

33. What is the enthusiasm for the development in your institute like?

	1	2	3	4	5	
Not at all	○	○	○	○	○	Very good

34. Dou you value diversity in your institute?

	1	2	3	4	5	
Not at all	○	○	○	○	○	Very much

35. Do the full time and part time teachers of different substances cooperate in your institute?

	1	2	3	4	5	
Not at all	○	○	○	○	○	Very much

36. Do you need training to increase innovation capability of your institute?

	1	2	3	4	5	
Not at all	○	○	○	○	○	Very much

37. How well customers take new ideas?

	1	2	3	4	5	
Not at all	○	○	○	○	○	Very well

38. Do you value creativity in your institute?

	1	2	3	4	5	
Not at all	○	○	○	○	○	Very much

39. Do you brainstorm with your customers?

	1	2	3	4	5	
Not at all	○	○	○	○	○	Very much

40. Write here examples of those things and products what you think are innovative in your institute.

41. How could innovation capability at ACEs be measured?

42. What is the vision of your institute?

43. Write here your thoughts about innovation at AECs

7.3 Appendix 3: The qualitative data of the pre-study

Question number	Number of respondents N (%)	Question number	Number of respondents N, (%)	Question number	Number of respondents N, (%)
9	60 (66%)	16	34 (37%)	30	36 (40%)
10	78 (86%)	17	83 (91%)	41	63 (69%)
12	33 (36%)	18	83 (91%)	42	78 (86%)
14	42 (46%)	28	63 (69%)	43	51 (56%)

7.4 Appendix 4: Examples of categories of qualitative data in both phases

Example of categories of pre-study data analysis

Main theme	Subtheme	Typical characteristic	Reduced statement	Original statement
INNOVATION	The meaning and benefits of innovation	Survival	Without innovation, an institute will not survive	"We must constantly be innovative and find new roads, we can't remain in place" "Without innovation, AECs will gradually wither away"
		Better image and publicity	Image and appreciation grows	"Innovation is a key factor affecting the image, which in turn contributes to better appreciation in the region"
	The barriers of innovation	Attitudes	Sticking with the old and resistance to change	"It is always easier to find barriers than new possibilities. We need a sensitive ear and an open mind"
		Scarce resources	Not enough economic and human resources	"All the time is spent on routines; we would need empty time to think" "Economic misery doesn't give sufficient possibilities to start new experiments.
	The drivers of innovation	Attitude and support	Positive attitude of the staff to innovation	"If the principal and other staff don't have a positive attitude to innovation, then who does? "If we want to and are enthustiatic, we can do anything, but the whole staff has to be committed"
		Additional funding	Project funding provides additional resources	"External project funding has provided time and human resources to generate and test new innovations"

Example of categories of multicase study interview analysis

Main theme	Subtheme	Typical characteristic	Reduced statement	Original statement
INNOVATION	The drivers of innovation	Courage to test new things	No fear of making mistakes	"We are not afraid of mistakes such as if nobody takes a new course, if it is a fiasco and it costs money. It is an experience, and we will report that the experiment was unsuccessful and is not worth continuing. Nothing teaches us as much as mistakes."
		The approachability of the principal	Low threshold of a principal for getting ideas and feedback	"One thing may be that a principal is easily approachable. […] We are not in an ivory tower. Instead, we are close to the citizens and customers and easy for them to approach."
				"We keep the threshold low so we can be easily contacted […] and the feedback should be taken seriously"
		Good planning and processes	Active use of development discussions	"We have these development discussions just for generating new ideas. And now full-time teachers start to have development discussions with part-time teachers and I (principal) train them and they are really exited".
			Using annual themes in designing new course ideas.	"In February, we choose the main themes for the next semester around which we design new courses and innovations"
		The attitude to and know-how on modern teaching/learning technology	The principal's encouragement and example	"If I (principal) opposed, we probably wouldn't have acquired equipment. Perhaps in this way the principal is at least able to encourage and give them a framework"
				"We now have a smart board and one the music teacher uses it very skillfully. We had no social media before me and I said that I am not an expert, but I have succeeded in developing a virtual course. Maybe that has then encouraged our full-time teachers and they have encouraged our part-time teachers"
			Know-how and support	"He came from Nokia and with a good sense of humour he helped teachers and could tell the importance and meaning of social media and he got them to become enthustiastic about the easy use of social media."

7.5 Appendix 5: The themes and questions used in interviews

<u>Theme 1. Organisation culture</u>

1. What is your institute like? Describe your institute in three to five words.
2. What is valued in your institute? What is important for you in the institute?
3. What kinds of employees succeed in your institute and what mistakes are unacceptable? (Only principals)
4. What unites the staff at your institute?
5. What do you encourage people to do?
6. How do you describe management in your institute?

<u>Theme: 2 Cooperation and networking</u>

1. Describe internal and external cooperation and networking in your instutute.
2. How are the cooperation and networking linked to innovation in your institute?

<u>Theme 3: Innovation</u>

1. Define the concepts innovation and innovativeness.
2. How innovative do you think your institute is? (Only teachers and designers)
3. How has your institute become innovative?
4. How are innovations generated in your institute?
5. What are the benefits of innovation in your institute?
6. Name the most important innovations of your institute and describe how they have been generated (one innovation story or more).

ACTA UNIVERSITATIS LAPPEENRANTAENSIS

477. KALLIO, ANNE. Enhancing absorptive capacity in a non-research and development context.

   An action research approach to converting individual observations into organizational awareness. 2012. Diss.

478. LÄTTILÄ, LAURI. Improving transportation and warehousing efficiency with simulation based decision support systems. 2012. Diss.

479. OYOMNO, WERE. Usable privacy preservation in mobile electronic personality. 2012. Diss.

480. LINNALA, MIKKO. Simulation and optimization tools in paper machine concept design. 2012. Diss.

481. KORPIJÄRVI, JUHA. Aging based maintenance and reinvestment scheduling of electric distribution network. 2012. Diss.

482. KORHONEN, JUHAMATTI. Active inverter output filtering methods. 2012. Diss.

483. KLODOWSKI, ADAM. Flexible multibody approach in bone strain estimation during physical activity: quantifying osteogenic potential. 2012. Diss.

484. VUORENMAA, MARKKU. Osaamisen johtaminen pk-yrityksen kansainvälisen kasvun elinkaarella. 2012. Diss.

485. RAUTIAINEN, MARITA. Dynamic ownership in family business systems – a portfolio business approach. 2012. Diss.

486. LILIUS, REIJO. THE FINNISH IT INDUSTRIES IN TRANSITION Defining and measuring the Finnish software product and IT services industries by applying theoretical frameworks . 2012. Diss.

487. TUOMINEN, PASI. The purpose of consumer co-operation: implications for the management and governance of co-operatives. 2012. Diss.

488. SAARI, ESA. Suurnopeus-turbokoneroottoreiden termodynaaminen ja mekaaninen mallinnus sekä rakenneanalyysi. 2012. Diss.

489. PAANANEN, MIKKO. On innovative search: the use of internal and external sources of innovation among Finnish innovators. 2012. Diss.

490. BELOVA, POLINA. Quasiclassical approach to the vortex state in iron-based superconductors. 2012. Diss.

491. HIETANEN, IIRO. Design and characterization of large area position sensitive radiation detectors. 2012. Diss.

492. PÄSSILÄ, ANNE. A reflexive model of research-based theatre Processing innovation of the cross-road of theatre, reflection and practice-based innovation activities. 2012. Diss.

493. RIIPINEN, TOMI. Modeling and control of the power conversion unit in a solid oxide fuel cell environment. 2012. Diss.

494. RANTALAINEN, TUOMAS. Simulation of structural stress history based on dynamic analysis. 2012. Diss.

495. SALMIMIES, RIINA. Acidic dissolution of iron oxides and regeneration of a ceramic filter medium. 2012. Diss.

496. VAUTERIN, JOHANNA JULIA. The demand for global student talent: Capitalizing on the value of university-industry collaboration. 2012. Diss.

497. RILLA, MARKO. Design of salient pole PM synchronous machines for a vehicle traction application. 2012. Diss.

498. FEDOROVA, ELENA. Interdependence of emerging Eastern European stock markets. 2012. Diss.

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