



LAUREA
AMMATTIKORKEAKOULU

Uuden edellä

Innovation leadership in different education systems

Case: England and Germany

Kaipanen, Saana

2014 Lohja



Laurea University of Applied Sciences
Lohja

Innovation leadership in different education systems
Case: England and Germany

Saana Kaipainen
Business administration
Thesis
April, 2014

Saana Kaipainen

**Innovation leadership in different education systems
Case: England and Germany**

Year	2014	Pages	59
------	------	-------	----

The purpose of this thesis was to study whether different education systems have an effect on the state of innovation leadership in the education field. The study was build around the education systems of England and Germany alongside the leadership cultures of these two countries. The aim was to examine what innovations are, where they come from and how do they develop and with what resources in the education field of England and Germany.

The theoretical framework of this study consisted of innovation activity's main components which were innovation, innovation leadership and leadership. The education systems of England and Germany were also part of the framework. The leadership cultures of these two countries were also studied. Mexico's education system and leadership culture was also part of the theoretical framework of this thesis, but no research material was received. The chosen research method was theme interview. This ensured receiving accurate answers. In addition, electronic questionnaire was used as a research method in Germany since it was more convenient for the interviewees. Eight members of the teaching staff of the two case countries were interviewed for this study. Among the interviewees there were teachers, managers, guidance counselors and professors.

The research analysis showed that the case countries differed in terms of the open mindedness for innovation activity as well as the quality and quantity of cooperation that was done with other schools or faculties. The leader's role was also seen differently in England and Germany. Leader's role from England's point of view was to encourage and to provide resources whereas the teaching staff of Germany considered supporting, offering guidance and establishing an innovation process to be the main tasks of a leader in innovation activity alongside with offering resources. The study also showed that Germany gives moderate financial rewards for creation of innovations. In England, however the staff members receive praise and attention. Innovation activity was seen as a positive phenomenon and even as a vital part of the education field's activities by both the teaching staff and the management of England and Germany.

The results suggest that cultural differences seem to have a bigger impact on the state of innovation leadership in the education field. Characteristics of case countries' leadership cultures presented in the theory section of this thesis were visible in the research material which was collected. The effect of the education system on the innovation activity showed mainly through political decisions made by different education authorities.

The study could be continued by creating and presenting clear innovation processes to at least one case school of this thesis. After implementation a study similar to this one could be conducted again in order to compare the results. The aim would be to examine whether clear processes make innovation activity more efficient, if the resistance among staff decreases and what happens with the overall atmosphere when it comes to innovation activity.

Innovation, innovation leadership, leadership cultures, education systems

Saana Kaipanen

**Innovaatiojohtaminen eri koulutusjärjestelmissä
Case: Englanti ja Saksa**

Vuosi 2014 Sivumäärä 59

Tämän opinnäytetyön tarkoituksena oli selvittää, onko erilaisilla koulutusjärjestelmillä vaikutusta innovaatiojohtamisen tilaan opetus- ja koulutoimessa. Tutkimus rakentui Englannin ja Saksan koulutusjärjestelmien sekä johtamiskulttuurien ympärille. Tavoitteena oli selvittää mitä innovaatiot ovat, mistä ne tulevat, miten ne kehittyvät sekä mitä resursseja ne tarvitsevat Englannin ja Saksan opetus- ja koulutoimessa.

Tämän työn teoreettinen viitekehys koostui innovaatiotoiminnan keskeisimmistä elementeistä, jotka ovat johtaminen, innovaatiojohtaminen sekä innovaatio. Lisäksi Englannin ja Saksan koulutusjärjestelmät olivat osa viitekehystä ja myös näiden maiden johtamiskulttuureita tarkasteltiin teoriaosassa. Näiden ohella Meksikon koulutusjärjestelmä sekä johtamiskulttuuri olivat osa teoreettista viitekehystä, mutta tutkimusmateriaalia ei maasta saatu. Tutkimusmetodiksi valittiin teemahaastattelu, koska se varmisti tarkkojen vastausten saannin. Lisäksi tutkimuksessa käytettiin sähköistä kyselyä Saksassa, sillä se oli helpompi tapa haastateltaville. Tätä opinnäytetyötä varten haastateltiin yhteensä kahdeksaa opetushenkilökunnan jäsentä. Haastateltavat koostuivat opettajista, johtajista, opinto-ohjaajista sekä professoreista.

Tutkimusanalyysi osoitti, että kohdekoulujen välillä löytyi eroavaisuuksia avoimuudessa innovaatiotoimintaa kohtaan sekä muiden koulujen tai tiedekuntien välisen yhteistyön määrässä ja laadussa. Myös johtajan rooli nähtiin erilaisena Saksassa ja Englannissa. Englannin näkökulmasta johtajan rooli oli rohkaista ja tarjota resursseja, kun taas Saksan opetushenkilökunta näki tukemisen, ohjaamisen sekä innovaatioprosessin laatimisen johtajan tärkeimpinä tehtävinä resurssien tarjoamisen ohella. Tutkimuksesta kävi myös ilmi, että Saksa palkitsee työntekijöitä innovaatioiden syntymisestä kohtuullisella rahallisella palkkiolla, kun sitä vastoin Englannin henkilökunta palkitaan kehuilla sekä huomiolla. Innovaatiotoiminta nähtiin positiivisena ilmiönä ja jopa elintärkeänä opetus- ja koulutoimelle sekä henkilöstön että johdon toimista molemmissa kohdekouluissa.

Tutkimustuloksien perusteella kulttuurisilla eroilla vaikutti olevan isompi vaikutus innovaatiojohtamisen tilaan opetus- ja koulutustoimessa. Opinnäytetyön teoriaosassa esitellyt johtamiskulttuurien ominaisuudet olivat nähtävissä tutkimusmateriaalissa. Koulutusjärjestelmän vaikutus innovaatiotoimintaan ei ollut itsestäänselvyys tuloksia tarkasteltaessa. Tuloksissa oli kuitenkin merkkejä koulutusjärjestelmien vaikutuksesta innovaatiotoimintaan eri opetusviranomaisten poliittisten päätöksiä muodossa.

Tutkimusta voitaisiin jatkaa luomalla ja esittelemällä selkeä innovaatioprosessi ainakin toiseen tämän opinnäytetyön kohdekouluun. Käyttöönoton jälkeen tämän kaltainen tutkimus toistettaisiin, jotta tuloksia voidaan verrata. Tarkoituksena olisi selvittää, tekeekö selkeä innovaatioprosessi innovaatiotoiminnasta tehokkaampaa, väheneekö henkilökunnan vastustus ja mitä tapahtuu yleiselle ilmapiirille innovaatiotoimintaa ajatellen.

Innovaatio, innovaatiojohtaminen, johtamiskulttuurit, koulutusjärjestelmät

Content

1	Introduction	7
1.1	Framework of the thesis	7
1.2	Research problem and goals	7
2	Components of innovation activity	9
2.1	Leadership	9
2.2	Innovation leadership.....	12
2.3	Innovation	15
3	Characteristics of leadership cultures and education systems.....	18
3.1	Leadership cultures	19
3.1.1	Leadership culture of England	19
3.1.2	Leadership culture of Germany	21
3.1.3	Leadership culture of Mexico	22
3.2	Education systems	24
3.2.1	England's education system	24
3.2.2	Germany's education system.....	26
3.2.3	Mexico's education system	28
4	Research	28
4.1	Methodology.....	28
4.1.1	Research method	28
4.1.2	Reliability.....	30
4.1.3	Validity	30
4.2	Conducting the research	30
5	Research analysis	32
5.1	England.....	32
5.1.1	Concepts of innovation activity.....	32
5.1.2	Innovation examples	33
5.1.3	Birth of innovations	33
5.1.4	Development and commissioning of innovations	35
5.1.5	Requirements and promotion of innovations	36
5.1.6	Benefits of innovation activity.....	37
5.2	Germany	38
5.2.1	Concepts of innovation	38
5.2.2	Innovation examples	39
5.2.3	Birth of innovations	39
5.2.4	Development and commissioning of innovations	40
5.2.5	Requirements and promotion of innovations	41
5.2.6	Benefits of innovation activity.....	42

6	Results and conclusions	43
7	Summary	47
	References	50
	Figures	54
	Appendixes	55

1 Introduction

1.1 Framework of the thesis

According to Bason (2010, 29) managers and also the staff need to “display the courage to lead innovation at all levels” despite the everyday pressures and constraints. Innovation comes from the Latin word *innovare* which in short means ‘to make something new’. In today’s world the word has many different definitions. Innovation is often wrongly mixed up with the term invention, however innovation is more than just a good new idea, it is the whole process from inventing an idea to implementing it to practical use. (Tidd, Bessant & Pavitt 2005, 65-66.) In effect it’s a process where discovered opportunity is transformed into new ideas which then are carried out in practice (Lampikoski & Lampikoski 2004, 151). According to Lampikoski & Lampikoski (2004, 151) idea develops into innovation through many sided chain of events, that require ability to detect and analyze problems, understanding and interpreting the needs of development, trends and clues, as well as offer versatile added value to the customers in order for it to succeed. Lemola (2009, 10) on the other hand claims an invention turns into innovation only when it brings financial benefits to the inventor or its other users. On this thesis the emphasis is on public sector innovations.

This thesis is an extension of a thesis written by Anniina Ahilampi in 2012. Her thesis dealt with the state of innovation leadership in the public sector. The public sector was narrowed down to the education field and the research subjects were six primary schools in Southern Finland. The study was conducted in various schools using theme interviews as means for data collection. The study was a part of a course that was found in Laurea University of Applied Science’s (later Laurea) course offering. The course was called Johtajuus, leadership, ledarskap and the interviews were conducted together with eight other students on that course. As said in subtitle 6.1 the interview sheet (see appendix 1) was the same one that is used also in this thesis. The goals for this thesis and Ahilampi’s thesis were the same so it is natural that her work functions as a frame for this thesis. On this thesis, however the state of innovation leadership is studied more from the point of view of cultural aspects as a variable.

1.2 Research problem and goals

The purpose of this thesis is to study whether different education systems have an effect on the state of innovation leadership in the education field. The aim of the research is to look into what innovations are, where they come from and how they develop and with what resources in the education activity of England and Germany. In addition the purpose is to find out what is the role of the leader in innovation activity. The theoretical framework of the study consists of the education systems of England and Germany and also the leadership cul-

tures of these countries. Education system has a big role in producing and changing leadership cultures and methods. Education systems also function as the operational environment of innovation activity of the education field hence studying the differences of the education systems of these two case countries is important. The depiction of the education systems is based on material that contained uniform information about the systems. While looking into the state of innovation leadership in the education field of these two countries it is important to also study their leadership cultures. By studying these cultures it is possible to bring up more variables that might have an effect on the state of innovation leadership. In addition the thesis has theory concerning Mexico which was one of the original case countries. Unfortunately no research data was collected from Mexico despite numerous attempts. Contact person in Mexico did not receive any answers to the questionnaire. The university was also contacted directly via e-mail but no response was gotten. This unwillingness to cooperate might also be an indication of cultural differences between Finland and Mexico.

Leadership in the public sector is an important theme seeing that the schools that took part in this study are public schools. The research was conducted in two schools which mean that one school represents the whole country. Innovation leadership on the private school sector is not part of this thesis as well as the education systems of Great Britain as a whole. In the theoretical part of this thesis the themes are also compared with Finland's leadership culture and education system. As said earlier similar research was conducted in 2012 by Anniina Ahilampi which deals with the innovation leadership in Southern Finland's schools so adding Finland in to this thesis as a case country would not produce any new information and was therefore left out.

The study is commissioned by Laurea Lohja. The research was conducted in the spring of 2013 and in the fall of 2013-2014. Cooperation partners for this thesis were a state school called St. Marylebone C.E. School in London, England and Frankfurt University of Applied Sciences in Germany. Saana Kaipainen was in charge of gathering the research material of England. Important partner in cooperation was also the exchange student called Benjamin Scholz who played a major role in getting the research data that represents Germany.

2 Components of innovation activity

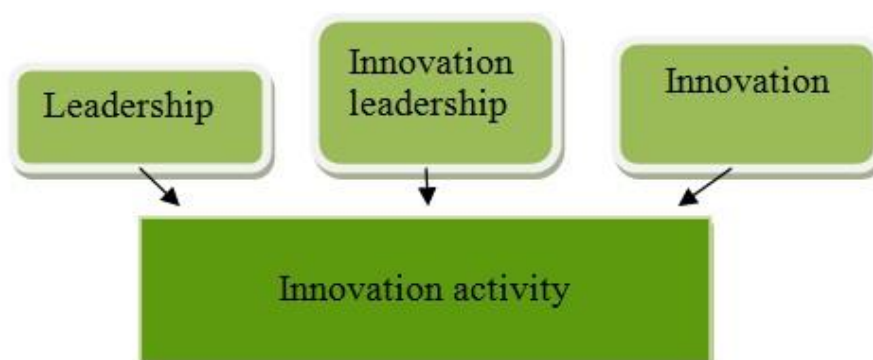


Figure 1: Components of innovation activity

In the next subtitles three main components of innovation activity concerning this thesis are depicted. As presented in figure 1 these components are leadership, innovation leadership and innovation.

2.1 Leadership

According to Grint (2005, 16) leadership has as many definitions as there are people who have attempted to define it. Vakkala (2012, 51) reminds that there is no unambiguous solutions for leadership in complex operational environments and organizations. Grint (2005, 18) sees that leadership can be understood through four (4) different ways. These are person, result, process and position. He claims that these four dimensions often overlap and they can mean really different things to different people. Person dimension of leadership consists of the notion that it's a personal attribute that makes a leader. Result dimension indicates that it is the result that is achieved that makes a leader. The position of the leader, i.e. where they operate in, is what makes a leader. The fourth leadership dimension indicates that the behavioral processes, i.e how things get done, define a leader. (Grint 2005, 18.)

Conventionally leadership is defined with the help of its so called opposite; management. Grint (2005) explains that management is seen as means to maintain the stability of the organization meaning it deals with control of things. The term leadership however is often linked to persuasion, movement and change which makes it more of a process than a position. (Grint 2005, 15.) Characteristics presented by Grint are essential in innovation activity therefore this thesis is concerned with leadership instead of management. The process aspect of leadership is also acknowledged by Duprin (2001, 4), he says that leaders need to have some sort vision of what the future of the organization could be and with a vision comes change.

Pont, Nusche & Moorman (2008, 18) claim that leadership is most often described as an intentional process of influence. Dubrin (2001, 3) defines leadership as the capability to inspire and encourage support and confidence amongst the people who are vital in reaching the set organizational goals. Inspiring and encouraging are good examples of this intentional process which strives to influence others as depicted by Pont (2008, 18) et al. According to Isaksen & Tidd (2006, 135-136) leaders are seen as people who think creatively and have vision where as managers tend to focus on doing things better, i.e. improving quality or productivity. Isaksen & Tidd (2006, 135) argue that creativity is needed when doing things better or doing things differently. This would make management and leaderships two different components of a continuum, not two opposing characteristics (Isaksen & Tidd 2006, 135). According to Owen (2011, 247) a leader is expected to possess five different qualities which are the ability to motivate others, decisiveness, vision, the ability to handle crisis, honesty and integrity.

Salminen (2011, 86) divides leadership into management or process leadership and leadership or human resource management. Management means leading issues and things where leadership means leading people. Karlöf (2004, 9-12) et al. sees that leadership is made of three main components which are leading people, operations and development. These components lead to a leader having three different leadership roles which are a coach, a supervisor and a strategist. The role of a coach is to motivate and lead people where as the supervisor's job is to keep track of the efficiency of the organization's activity. Strategist's role is to make present decisions and procedures in order to secure future success. (Karlöf 2004, 9-12.) All of these roles are needed in innovation activity.

Drucker (1990, 9) sees that leader's most important assignment is to predict crisis. Predicting and anticipating it is more important than averting it. According to Drucker (1990, 9) a leader can't prevent a crisis, but instead it can build an organization that is prepared to fight, has high morale and self-confidence and whose employees also trust each other. According to Karlöf & Helin Lövingsson (2004, 9) leaders often have a tendency to follow trends because leadership is complicated and intricate. This especially affects the weak leaders and can thus affect the leader's ability to predict future events (Karlöf & Helin Lövingsson 2004, 9). Harisalo (2011, 13) distinguishes two separate basic tasks a leader has to manage at the same time. The first one is to guarantee certain level of certainty, stability and predictability. The second task is to make change possible, inspirational and encouraging. Changes in the organization's operational environment have a major effect on the stress given to tasks that promote certainty and change. By managing these two tasks the leader strives for profitability. (Harisalo 2011, 13.) Pont (2008, 18) et al. note that leadership in the education field deals with finding the balance between routine maintenance operations, higher order tasks and lower order duties. Higher order tasks are designed to improve student, school and staff performance.

Pont (2008, 18-44) et al. introduced four main responsibilities concerning school leadership in particular. The first responsibility deals with developing, supporting and evaluating teacher quality through coordinating the teaching program, monitoring the teacher practice and supporting the staff's professional development. The second core component is "setting learning objectives and implementing intelligent assessment systems". This leadership task involves adjusting to the national standards, setting goals for the school and measuring whether those goals have been reached. "The strategical use of resources and their alignment with pedagogical purposes" i.e. the third main component, is very much in contact with innovation activity through affecting the school's operational activities in order to improve learning and teaching. The final component depicted by Pont (2008) et al. focuses on "school leadership beyond the school borders". The aim is to increase the quality of teaching and enhance improvement through cooperation with actors of the same field and similar goals. (Pont et al. 2008, 18-44.)

It is important to acknowledge that leadership in a public and private sector isn't the same thing and that they have individual characteristics. Virtanen & Stenvall (2010, 35-37) point out that public sector and private sector organizations have more in common than they have differences when it comes to leadership. For example solving conflicts in the work community or motivating the staff does not rest upon whether you work in a big or small, public or private sector organization. Public and private sector however put stress on different things. (Virtanen & Stenvall 2010, 35-37.) The main difference is the regulations that control the operations of public and private sector actors (Henning 2000, 19). Characteristic feature of leadership on the public sector is that leading happens from above. This means that public sector organizations are tied more to the political decision making. Private organization's operations on the other hand comply more with financial aspects. Leadership in the public sector deals more with politics, different interest groups and it affects society. (Virtanen & Stenvall 2010, 35-37.) Public leaders also face the challenge of giving up some of their control and power through involving people (Bason 2010, 29). By involving people more power is achieved so the desired outcomes of the society can be reached (Bason 2010, 29).



Figure 2: The characteristics of public sector leadership

Virtanen & Stenvall (2010, 38-39) examine public sector leadership through three main characteristics (see figure 2). The first deals with the organization's task, which means that public organizations don't try to pursue maximum financial gain. Their operations aim to produce well being for the society regardless of what the organization is; a prison, university or a ministry. The second characteristic Virtanen & Stenvall (2010) introduced is the complicated decision-making process. Public sector organizations usually have numerous different interest groups and cooperation partners, whose needs and expectations have to be taken into account. The third special characteristic of public sector leadership is responsibility. Instead of being responsible for bringing financial gain for the owners of the organization they are responsible for fruitful operations that have societal impact. In the public sector organizations have to reach their operational goals, in addition leaders are in charge of the efficiency and productivity. (Virtanen & Stenvall 2010, 38-39.)

Leadership in the public sector is the means to create public value, where the goal is to produce socially sustainable and ethically acceptable solutions in a cost efficient way. It's up to the management to make sure that the basic task is executed. The characteristic features of public sector create challenges to leadership. In all operations must the requirements set by the legislation and the principal of good governance take into account. Public employees and state officials are responsible for the legality of their actions and as mentioned earlier the political decision-making is unique feature of the public sector. In the future change, complexity, instability and multilayered, sometimes even conflicting requirements of regeneration stand out in the operations of the public sector organizations. The starting point of leadership in public sector organization's can no longer be that their operational environment (e.g. resources and staff) is unchanging. (Työterveyslaitos 2013, 1-7.)

2.2 Innovation leadership

Innovation leadership is more than just leading the process of an idea forming in to an innovation (Sydänmaalakka 2009, 61). With innovation leadership organizations create new services, products, processes and procedures (Sydänmaalakka 2009, 82). Apilo, Taskinen & Salkari (2007, 37) remind that there is no clear model for innovation leadership that could be used in different organizations. Innovation leadership consists of creating and managing the resources, structures and processes that are necessary for the birth of innovations, as well as constructing and constantly updating of innovation strategy and communication (Apilo et al. 2007, 37). Innovation leadership is part of the whole organizations activity and is no longer solely linked to the company's product development unit (Sydänmaalakka 2009, 126).

Innovation leadership is about supporting innovativeness on individual, team and organizational levels. The main focus in innovation leadership is how the development from ideas into innovations can be refined and made better. Good innovative leadership aims at balanced leadership that invests in efficiency, regeneration, welfare and innovation activity. (Sydänmaalakka 2009, 221-222.)

In the complex world of innovation activity's concepts it is worth noting the difference between innovative and innovation leadership. Lovio & Kivisaari (2010, 10) explain that innovative leadership deals more with the general manner and way of leading which encourages and supports the abilities and possibilities of the staff in creating, experimenting and developing new solutions. Whereas innovation leadership means specific functions that are used for creating, funding and leading innovative projects as well as implementing their results (Lovio & Kivisaari 2010, 10). Good innovation leadership's goal is that the organization's core know-how is also based on innovativeness and that it's vital part of organization's main processes (Apilo et al. 2007, 26).

According to Sydänmaalakka (2009, 208) the big challenge of innovation leadership is to find business' turning points or irregularities and be among the firsts to try to take advantage of them. Opportunities and problems in the surrounding environment don't come gift wrapped but they need to be actively searched for, mapped out and interpreted (Harisalo 2011, 23). Organization's competitiveness is largely based on the organization's ability of taking advantage of these irregularities where customary procedures, ways of making business and values change. In order to find these irregularities and turning points the organization needs to have a comprehensive view of the organization and innovativeness, this is called innovation leadership. (Sydänmaalakka 2009, 208.) De Jong & Den Hartog (2007, 43) describe these irregularities as problems in working methods, unfulfilled customer needs or other things not fitting to the expected patterns. When searching for new perspectives to offerings as well as to the whole business models, Apilo (2007, 37) et al. see that the challenge for innovation leadership is to create conditions for different people, processes and technologies to meet both inside and outside of the organization.

Innovation process can be divided into three stages from the leadership point of view; free innovation stage, a combining know-how stage and the efficiency stage (Apilo et al. 2007, 113). The first innovation stage is the ongoing process of operations at the organization before the actual innovation project. In this stage creativity, freedom and lack of criticism are important and the role of leadership is to create possibilities through providing resources, challenging and envisioning. When the organization has ideas on the concept level and not yet plans on how to carry them out, the stage is called a combining know-how stage. At this stage leadership is bringing skilful people together and reserving resources as well as offering en-

couragement. The challenge is to keep people open minded so that they won't commit to just one alternative at a too early stage. At the final stage, the efficiency stage, the focus is very much on efficient use of resources. Control plays a bigger role in leadership at this stage and it's important to make use of previously well tried practices. Control focuses on timetables and resources since development projects have a tendency to delay. (Apilo et al. 2007, 113-115.)

Sydänmaalakka (2010, 215) describes the innovation process comprising of creation, selecting, development and launch processes. The creation process belongs to every employee's responsibilities at the organization (Sydänmaalakka 2010, 215). However it is not enough that the staff has come up with numerous new ideas, the key is in selecting the true gems. This calls for vision and expertise from the leader. (Sydänmaalakka 2010, 215.) According to von Stamm (2009,13,) having an inspiring vision is important to the staff so they know what areas should the ideas concern and also what kind of innovations the leader is seeking. When it comes to developing the ideas further it is important to view them critically relative to e.g. the organization's strategy, resources and realization possibilities (Sydänmaalakka 2010, 215). After developing the idea further it's time to evaluate whether it is worth launching. All the abandoned ideas should be hold onto since they may be put into action some time in the future. Sydänmaalakka (2010) reminds that the innovation processes aren't the same in every organization, but every organization needs to have a clear process on how to systematically find new ideas, evaluate and refine them. (Sydänmaalakka 2010, 215-217.) Seeck (2008, 247) reminds that innovation processes are very complicated and they entail uncertainty, resistance, dissonance and the rivalry of alternate working procedures.



Figure 3: Elements of innovation leadership (Sydänmaalakka 2009, 209-210)

Innovation leadership consists of eight different elements (see figure 3) according to Sydänmaalakka (2009, 209-210.) These elements are the core components of organization's innovativeness and they require systematic leadership. Innovation leadership starts off with strategy and ending in measuring with eight other important elements. Innovation activity needs to have a clear vision and goals i.e. innovation strategy. Strategy defines how and in what areas the organization strives to renew themselves while pursuing their vision. Culture reflects the organization's values and thus is a part of the organizational culture of the company. Culture also functions as a defining factor of the status or standing that innovativeness and creativity has in the organization. Innovation structure describes how the organization's structure and inner as well as outer networks support innovativeness. In addition the processes of innovation activity need to be defined as explained earlier. Education in innovation leadership means to coach the employee's innovativeness. Sydänmaalakka (2009) says that innovativeness should be seen as a know-how that can be trained and developed. The employees' know-how and the ability to learn along with information systems, time, money and organization's market knowledge are all innovation resources. It's important to monitor if there is enough resources for successful innovation activity and if they are used efficiently. In order to guarantee the efficient use of resources the organization needs innovative leadership. Leadership has to support innovativeness in individual, team and organization levels. Just like in all activity that aims at developing existing processes measuring is important. Innovation activity needs measuring in order to see if actual improvement has taken place and the set goals been reached. (Sydänmaalakka 2009, 209-210.)

2.3 Innovation

The field of innovation activity is going through a profound change. The success of the organizations' depends even more in their ability to innovate and renew themselves. Organization's different fields of operations require innovation activity from better services to material efficiency. In the past organizations tended to rely on their own know-how, but in the future innovation activity happens in local and global networks. This collaboration enables utilizing new recourses and knowledge. (Hautamäki 2014.) Ryan (2010) explains that innovation activity requires changing our individual as well as collective organization thinking patters.

Apilo, Taskinen and Salkari (2007, 22) define innovation to be a new idea that is made good use of in commercially successful way. More interesting definition of innovation emphasizes taking hold of opportunities where innovation is identifying the change and exploiting it in practice. Sydänmaalakka (2009, 115-116) says that innovations are reforms that bring additional financial value to the organization and that can be seen as a process. The foundation of innovations is solid motivation and know-how. Innovation activity calls for the ability to see

the assignment or problem from a new angle and the ability to combine the existing knowledge in a new way. (Sydänmaalakka 2009, 115-116.) According to Valovirta (2009) innovation activity is driven by customer and citizen feedback, possible organization's outer crisis and the efforts of improving the quality of service. Hautamäki (2014) notes that alongside the old model of a closed innovation that is created inside the organization there is new model of decentralized innovation. This means that innovations are created more and more together with possible networks (Hautamäki 2014). Mulgan & Albury (2003, 5) claim that innovation activity is sometimes seen by the organizations as an optional luxury or even as a burden rather than seeing it as a part of the organization's core activities. Successful innovation is important to public sector since they need to "increase the responsiveness of services to local and individual needs and to keep up with public need and expectations." (Mulgan & Albury 2003, 5.) Bason (2010, 89) notes that the innovation capacity of the public sector depends on how much the public sector can make valuable and relevant arrangements and interact flexibly with non-governmental and private actors.

Hamel (2009, 71) says that innovation activity is part of only a few organization's every day business. In most companies innovation activity doesn't feature in every employee's work assignments, instead it's pushed to the organization's research and development unit. These sorts of units and their innovativeness can be a bit too far from the work place's reality and actual needs (Hamel 2009, 71). In addition Hautamäki (2014) reminds that in the rapidly changing global economy the organization's own resources might no longer match the innovation activities' needs. According to Harisalo (2011, 42) innovativeness and creativity aren't built-in features of organizations, they have to be created. Promoting innovativeness demands persistent and consistent work in all the levels of governance (Harisalo 2011, 43). Harisalo (2011, 43) also notes that innovativeness is the cause of actions, not words. Kartsen & Pylkkänen (2004, 3) also support this view by defining that it's the operational environment that decides what innovation is. Development of an idea or an invention to an innovation is requires successful commissioning (Kartsen & Pylkkänen 2004, 3).

Apilo (2007, 22) et al. divide innovations in to three different categories. Innovations can be new to the organization, to the field or new to the whole world. Elinkeinoelämän Keskusliitto (Confederation of Finnish Industries) EK (2011) reminds that the innovation has to always be new to the organization. On Thota & Munir's (2007, 138) point of view there are two kinds of innovations; technological and non-technological. Technological innovations are used for problem solving and need more technology knowhow and expertise. Thota & Munir (2007, 138) also highlight the non-technological innovations as a key factor in sustaining organizations' competitiveness through adding value in economic, social and ecological dimensions. Service and social innovations are non-technological innovations which success is usually based on the added value that the new innovations give to the customers (Lemola 2009, 9-

13). Apilo et al. (2007, 22-23) reminds also that organizations and customers see innovations differently. Organizations seek new solutions through completely new invention whereas the customer evaluates the innovation through the added value it gives them (Apilo et al 2007, 22-23).

Lovio & Kivisaari (2010, 13) reminds that innovations don't come about the same way in the 21st century as they did in the 20th century. According to Deschamps (2005, 33) there are two paths in the creation and spreading of innovations; bottom-up innovation and top-down innovation. Bottom-up innovations is initiated by the staff, fuelled by ideas and supported by the management whereas top-down innovations is fuelled by vision, initiated by the management and supported by the staff (Deschamps 2005, 33). The birth of innovations also differs between fields of operations, so it should be remembered that when talking about public sector innovation activity the concepts and thought processes of traditional innovation research may not apply directly (Lovio & Kivisaari 2010, 13). Borins (2002, 467) notes that facing challenges, such as cutting costs, and opportunities, such as applying information technology, have pushed public sector organizations towards innovations.

Innovation is one of the most efficient ways of pulling ahead of the competition and the whole area of business and at the same time creating novelty products and/or services on to the market. Majority of new innovations, however, develop steadily which means that products, services or processes are developed gradually with minor adjustments. These minor adjustments might still have a huge impact on the customer (Lampikoski & Lampikoski 2004, 151-155). According to Thota & Munir (2007, 139) the most successful innovation is a different service or product that instead of creating an improvement, creates a new potential for satisfaction.

Innovations are usually perceived as a positive phenomenon in Western societies. Innovations have become important due to the ever quickening development of technology which causes that the new products have to compete with other products also the product's lifespan is getting shorter and hence creating a need to make substitutive products. Products are getting increasingly hard to differentiate and every field of business is invaded by new competitors. This in effect causes the customer's needs and wants to change and they have more options to choose from. In short, that is how the constant need for developing new and improved services, products and processes is created. Innovative organization is the first in the market and gets all the best customers, biggest market share and better profits. (Lampikoski & Lampikoski 2004, 38-39.) Mulgan & Albury (2003, 3) also see the importance of innovations when it comes to staying ahead of competitors. They note that innovations rarely make it to headlines or change the way organization is structured or the dynamics and relationships between or within organizations. Instead innovations especially in the public sector often are minor

changes to processes or services that already exist, but still crucial in the continuous pursuit of improvement (Mulgan & Albury 2003, 3).

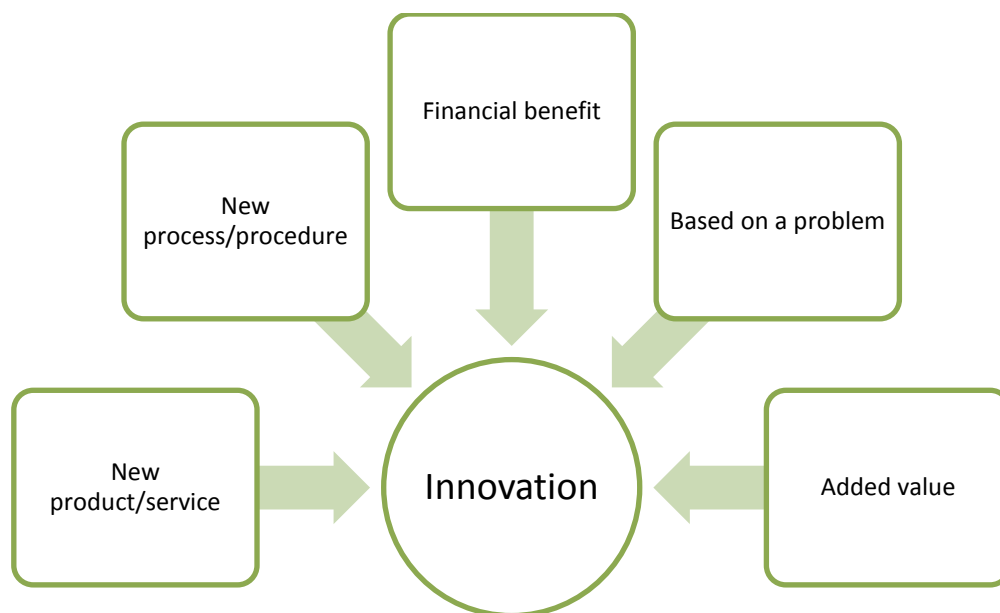


Figure 4: Innovation

On this thesis the term innovation means a new procedure or process, product or service that creates benefits to its users. These can be either financial or value adding benefits to both the creator and implementer or the customer. Innovation also means the desire and ability to develop something new and to carry it forward. In addition innovation usually is based on a real problem when talking about public sector innovations. Public sector innovations in the education field can be anything from new study methods and programs to changes in information technology. This concept of innovation is depicted in figure 4.

3 Characteristics of leadership cultures and education systems

In the next subtitles the characteristics of leadership cultures and education systems of England, Germany and Mexico are presented. These are additional country-specific variables that might have an effect on the state of innovation leadership in the educational field of these countries.

3.1 Leadership cultures

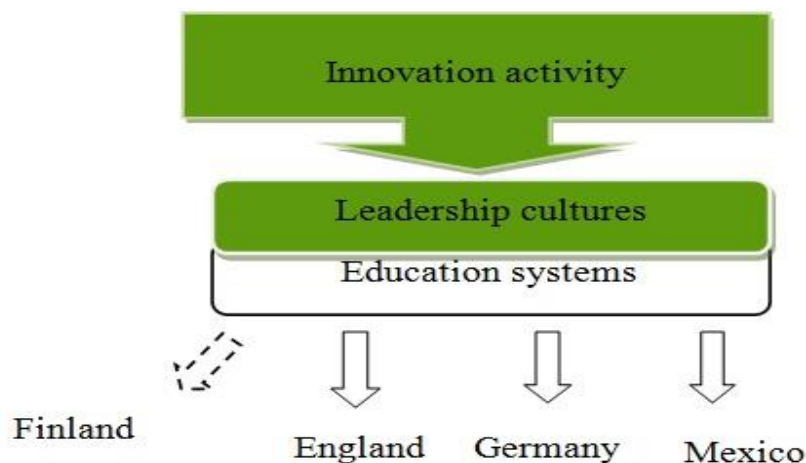


Figure 5: Theoretical framework moves onto leadership cultures

According to Mole (2004) leadership is one of the three dimensions of culture. It is based on the notion of how much power groups give to individuals. In European organizations the authority of leaders is largely based on the acceptance of those who are being lead, i.e. the staff. (Mole 2004, 44.) By imposing the values, beliefs and other assumptions the leader starts a process which outcome is the staff's shared experience. This is tightly linked with the dominant leadership culture (Schein, 225). The leadership cultures of England, Germany and Mexico are presented in the next subtitles.

3.1.1 Leadership culture of England

England's history with management and culture is rocky and the whole country has gone quite a culture change in the past decades. According to Booth (2007) managers were not seen as professionals even as late as 1970's. (Booth 2007, 341.)

Booth (2007, 343) claims that key features of English leaders are energy, change, facilitation, action and direction. These characteristics are most frequently cited in different British media concerning leadership. On the other end of the spectrum were characteristics like innovation, vision and setting a challenge. English leaders seem to promote change quite strongly and offer inspiration and clear directions to their workers. This goes hand in hand with being goal oriented and also setting realistic goals. On the contrary to Mexico, (see 3.3.) English leaders prefer so called flat hierarchies instead of tall hierarchies, this can be seen in using group decision making and other collective skills. (Booth 2007, 343-348.) According to Marx (2001, 87) as well as Schneider & Littrell (2003) UK's leadership culture is strongly team ori-

ented. This shows as coaching managers and developing teams and also so called soft skills are emphasized (Marx 2001, 87; Schneider & Littrell 2003).

Team integration and encouraging to performance orientation alongside with other characteristics like personal decisiveness, integrity, administrative competence and diplomacy are also highly valued traits in leaders whereas status-conscious and autocratic leaders are not highly rated attributes. Vision is also an important trait of a leader especially when bearing in mind that England is a trading nation so being able to anticipate future changes and underlining competitive performance as well as inspiring employees help the leaders to fit in to the needs of the business environment. (Booth 2007, 348-349.) Schneider & Littrell (2003) reminds that in contrast to Germans, the English leaders “tend to have a shorter-term perspective” when it comes to organizational development.

Booth (2007, 349) finds that there are four main dimensions to the leadership culture of England; the inspirational coach, the orderly organizer, the merchant adventurer and the compassionate visionary. The inspirational coach consists of attributes that emphasize morale boosting and encouraging linked with trust and honesty. The key is to create confidence in employees by delegating and having an inspirational and excellence oriented approach. The second leadership dimension, i.e. the orderly organizer, emphasizes patience, use of procedures, orderliness and cautiousness. These leaders rely on rules and the decision making process is clearly based on established procedures. They prefer formality, organization and order and are often unwilling to take risks. The merchant adventurer is a leader with self-centered individualism as a main characteristic and who is ruthless and egotistical. The fourth leadership dimension, the compassionate visionary, can be seen as humane orientation that is self-sacrificial and inspirational. The leaders of this dimension are improvement and future oriented with compassion. The lack of dynamism is compensated with vision. (Booth 2007, 349-350.)

The leadership culture of England is filled with different characteristics and a variety of organizational cultures. The gender and hierarchy systems do not create any boundaries in the leadership field and the culture is therefore more permissive than in Latin America for example. Attributes that are considered to make an outstanding leader are capacity to lead others, motivate and to be inspiring, integrity, modesty and trustworthiness. Leaders who have these attributes are more likely to be intelligent, positive and clear communicators. (Booth 2007, 351.) Lewis (2000, 75-76) also notes that characteristics like tactful, laid back, diplomatic, reasonable, being casual and willingness to compromise could be used in describing British managers. At the same time Lewis (2000, 76) reminds that under the casual surface lies mercenary intent and pragmatism, which makes them ruthless and resilient if needed.

3.1.2 Leadership culture of Germany

The leadership culture of Germany seems to be characterized by emphasis on and respect for technical expertise and the idea that competence comes first rather than personal attributes or hierarchical position (Marx 2001, 80). This means that the leader's respect and authority are gained through their professional status (Schneider & Littrell 2003). This leads to the relations of employees and leaders being distant and stiff. Germans prefer a leadership style that is determined and leaders are respected specifically due to their technical expertise. (Marx 2001, 80.)

According to Mole (2004, 199-200) German respect people in an authority position and the employees rarely criticize their bosses and expect indisputable leadership. The managers in return expect obedience. In German organizations following orders is based on respect for the managers standing and competence which is not perceived as submissive behavior. Mikluha (1996, 124) also claims that the German leadership culture is authoritarian and that the hierarchical structure is self-evident. Contrary to the German system, the Finnish organization culture doesn't have as much of unnecessary regulations and systems. Germans also expect precise directions from their leaders which is seen to be the leader's way of showing interest in their work. In Finland this is often perceived as lack of trust and prying. (Mikluha 1996, 214-215.)

The communication in a German organization is vertical, meaning that instructions are given only to those who are directly below the leader and they are kept strictly inside their own department. It is important that the message finds exactly the right person. (Mikluha 1996, 215.) Mole (2004, 200) explains that delegation is done explicitly, precisely and preferably in writing. Feedback follows the same lines, but in addition it has to be objective since giving criticism isn't common and it's not usually received well (Mole 2004, 200).

Mikluha (1996, 202-203) explains that Germans strategy is to be accurate and consistent. Germans are focused on being productive and profitable. Marx (2001, 80-81) sees that German employees are highly committed to the organization and profession. They are also very process-oriented which, according to Mikluha (1996, 202-203), means that they see leadership as the means to use resources in the best way possible. Schneider & Littrell (2003) note that the German's pursue of perfection is often found in the administration of businesses and public sector actors rather than in the engineering or development unit.

According to Fatehi (2008, 232-233) the German leaders and managers are mainly engineers and usually come from a middle or upper class backgrounds. Leadership is executed through a model which consists of defining assignments, creating assignment descriptions and defining behavior models in order to execute these assignments. This model perceives leadership and

motivating employees from institutional, logical and economic/financial viewpoint (Fatehi 2008, 232-233). The individuals are perceived as rational beings, who strive to maximize personal gain in a way that is consistent with the organizations goals (Fatehi 2008, 232-233). Mikhluha (1996, 204) also points out that on a relationship level Germans separate personal life and business strictly. Fatehi (2008, 232-233) explains that from an institutionalized point of view the German leadership is phenomenon that joins together the acquisition, storing and usage of power.

3.1.3 Leadership culture of Mexico

Mexico's history and cultural values have a strong effect on the behavior of Mexican leaders in all kinds of organizations from businesses to government. Mexicans' values consist of e.g. family and deep respect for the past much like other traditional cultures and men often have higher social status than women. In the rural regions of Mexico people seem to respond to autocratic/dictatorial leadership ways since they seem to reflect the authority patterns of colonial period. Since Mexican's are brought up to respect and co-operate with those who are higher in the social structure, this often supports the autocratic leadership behavior. This autocratic leadership style is also very present in Mexico's many family businesses. (Howell, de la Cerda, Martinez, Bautista, Ortiz, Prieto & Dorfman 2007, 733-734.)

Directive leadership behavior is proved to be effective in Mexico according to Howell (2007) et al. In this directive leadership the leader is focused on the employees work tasks i.e. who does what, when and how are the job tasks completed and meeting the quantity and quality requirements. The autocratic behavior model is present in the way the leader is communicating about the tasks with his employees. (Howell et al. 2007, 736.) Howell et al. (2007, 735) found that supportiveness has become an increasingly important part of effective leadership today, even though traditional autocratic leaders are not supportive of their followers.

Traditionally participative leadership behavior has not been effective in Mexico due to the strong collectivistic culture and history of authoritarian political and military leaders. This is slowly changing in the Mexico's industrial centers and they are moving more toward teamwork and worker involvement. At the same time Howell et al. (2007) reminds that leaders who seek employee's opinion can easily be considered weak and this leads to leaders not sharing information or objective with his workers. Also internationalization helps this process. (Howell et al. 2007, 736.)

Despite that the traditional leadership behavior has been well accepted by the Mexican workers, approach that highlights punishment and threat are no longer seen as effective way of leading. Mexican workers do not approve rude leaders and leaders who embarrass employees,

gaining acceptance requires respecting the employees' customs and pride. (Howell et al. 2007, 742-743.)

Howell (2007) et al. also emphasize the influence the United States has when it comes to management models. Mexican generally admire the success of US businesses and try to imitate their practices and models in order to improve their own competitiveness and overall performance. Mexican leaders are starting to recognize the significance of motivation and how the leader's behavior impacts the organization. (Howell et al. 2007, 745.)

The Mexican leaders are also coming more interested in institutionalization which means establishing systematic managerial processes in order to secure quality consistency, productivity and better competitiveness. Institutionalization would also mean defeating the weaknesses of family firms e.g. hiring staff based on not job related criteria and would focus more on planning and development. Institutionalizing the business is creating a new role for the leaders in today's Mexico's organizations. (Howell et al. 2007, 745.)



Figure 6: Mexico's leadership culture

In figure 6 the main characteristics of Mexico's leadership culture are presented. As explained in the earlier sections these characteristics are institutionalization, autocratic behavior, directive leadership and the influence of the United States.

3.2 Education systems

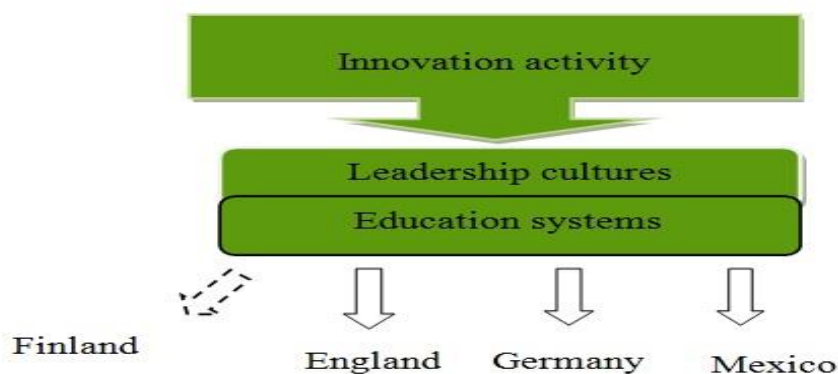


Figure 7: Education systems added to the theoretical framework

According to Willemse & de Beer (2012, 106) the education systems of European countries differ mainly in how higher education is organized. Willemse & de Beer (2012, 108-109) present three characteristics of educational systems that create differences between countries. These characteristics are stratification, vocational specificity and standardization. In the following subtitles the characteristics of England's, Germany's and Mexico's education systems are presented.

3.2.1 England's education system

Generally speaking the Great Britain's education system is divided into four stages, similar to Finland. These stages are primary school, secondary school, further education and higher education. Depart from Finland Great Britain consists of four different countries causing significant differences in the education system in the UK. In this thesis the emphasis is on England's education system.

Compulsory education starts at the age of five and ends at the age of 16. Thus further and higher education is not compulsory. The first six years are spent in Primary school, similar to Finland. At the age of 11 the students move on to secondary school which is also the end of their compulsory education. After that it is possible to continue studying in a level called 6th form. This is so called further education and it lasts for two years. England's 6th form is equivalent to Finnish high school education, i.e. so called all around education where you mostly study liberal arts. After this you can apply to higher education; universities, colleges and other institutions. (Maatietao 2013.) According to Willemse & de Beer (2012, 108-109) England's education system is more stratified than the Finnish one. Stratification means the hierarchy of various pathways in the educational system. The number of educational paths in sec-

secondary and higher education institutions is the first indicator for stratification. England has various education levels which are “associated with different educational and occupational life chances”. (Willemse & de Beer 2012, 108-109.) Another educational characteristic is vocational specificity, which deals with how much the system focuses on specific or general knowledge in preparing students for a specific vocation. According to Willemse & de Beer (2012, 109) systems that are more highly stratified tend to put more value on vocational specificity. England’s system is a diversified educational system which means that institutions are stratified by resources, prestige and selectivity of students and faculty. Institutions offer general academic courses alongside vocational courses hence the little vocational specificity (Willemse & de Beer 2012, 109-114).

All England’s, Northern-Ireland’s and Wales’ state schools follow the National Curriculum which is the framework for compulsory education. The private schools don’t have to follow the National Curriculum, but they need to make sure they offer good education. Across The United Kingdom’s education system majority of state schools are under the supervision and control of local councils (in England and Wales it’s Local Education Authorities and in Northern-Ireland it is Department of Education). The education is supervised by the Ministry of Education and the Department of Business, Innovation and Skills (Carl Heath 2011). Local authorities are responsible for the implementation of customs and practices of private and state schools. (Carl Heath 2011). The government of the United Kingdom has developed a system that functions as national framework for education. The system is called The National Vocational, education and training system (later VET). The VET system has set occupational standards and provision and it includes monitoring and developing qualifications. The system’s aim is to influence training providers, employers and of course learners. (Townend 1999, 73.) Willemse & de Beer (2012, 109) also introduced standardization as a characteristic of education systems. Standardization deals with the quality of different educational institutions. Institutions may vary in terms of curricula, budgets and examination standards. In England the higher educational institutions have an institutional autonomy which means that the institution has the right to e.g. manage its budgets, hire the staff, decide the form and content of its teaching, determine administrative structure (Willemse & de Beer 2012, 114) (European University Association 2014).

The biggest difference to Finland is that the education system of United Kingdom is more fragmented. This incoherence has to do with the fact that the UK consists of four different countries and they have much more authorities in county level that supervise the education system and how it’s implemented. According to Kuntaliitto (2008, 10) in Finland education is a basic service offered by municipalities. The Ministry of Education and National Board of Education are in charge of formulating the National Curriculum (Kuntaliitto 2008, 10). One difference is also the number of national exams, in UK the number is multiple to Finland’s. Fin-

land also doesn't have tuitions which means that education is free even in the higher levels. England also offers free education in state schools which are institutions financed by the government through the Local Education Departments (Wikipedia 2014).

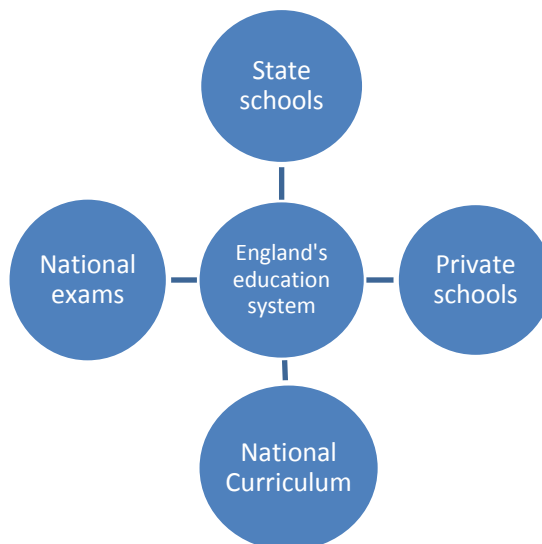


Figure 8: Characteristics of England's education system

3.2.2 Germany's education system

The German education system is similar to Finland's one, but the states have more control over the schools in Germany and they offer more wide variety of school types. Much like in Finland compulsory education starts at the age of six and ends at the ages 15 or 16 depending on the state (Ulkoasiainministeriö 2012). The different education paths that the states offer are in the student's reach after the first four collective school years. (InterNations 2014a.)

The compulsory education called *Schulpflicht* starts at the age of six. Depending on where you live, elementary school lasts from four to six years. The variety of secondary schools the German education system offers is overwhelming and a bit complicated because of the German federal system. Different states offer different types of schools and even the holiday times differ from state to state. (InterNations 2014a.) Students can choose from four different types of secondary schools, all of which have different academic standards, in most federal states. The options are *Gymnasium*, *Realschule*, *Hauptschule* and *Gesamtschule*. *Gesamtschule* is a combination of the first three mentioned. (InterNations 2014a.) This wide variety of secondary schools is an indication that the German education system is highly stratified (Willemsse & de Beer 2012, 108).

Gymnasium is the most demanding of Germany's secondary schools and it functions as a preparation for further high education. Passing a final exam called *Abitur* or *allgemeine Hochschul-*

reife after eight or nine years of studying entitles students to move onto universities. Gymnasium includes also a two-year preparatory phase called Gymnasiale Oberstufe which preps the students for the final exams. Realschule is a school which prepares students for attending one of Germany's many vocational schools and is a so called intermediary academic level. Hauptschule is also a school that offers education that is meant to prepare the students for vocational training or education. Both Realschule and Hauptschule end in a final examination after grade nine or ten. Gesamtschule is a combination of all the three above-mentioned schools and students can choose under which degree they graduate. (InterNations 2014a.) Germany's secondary education system is binary which means that there are separate institutions that offer academic education and vocational education. This characteristic in their education system makes them high in vocational specificity. (Willemse & de Beer 2012, 109-114.)

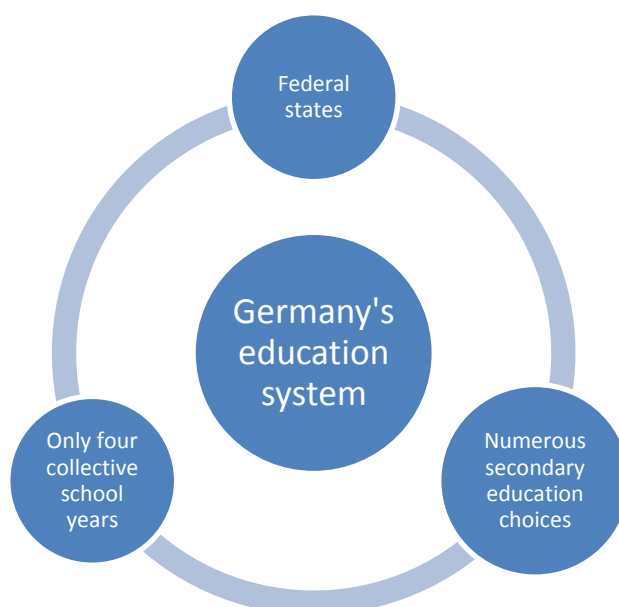


Figure 9: Characteristics of Germany's education system

As said earlier the states have a lot control over the educational institutions. The education field of Germany is characterized by regional decentralization which means that a lot of the government's power, e.g. the application of legislation, has been distributed regionally, in this case to the states (Willemse & de Beer 2012, 114). This is also why there are so many different education paths to choose from. Despite this regional decentralization Germany has a uniform education system which means that all exams and diplomas are approved in the whole country (Ulkoasiainministeriö 2012).

3.2.3 Mexico's education system

The foundation of Mexico's education systems is a nine year basic education which students start at the age of six, similar to Finland. The education systems consist of three levels; basic education, upper secondary education and tertiary education (universities). All three levels are provided by both public and private schools. Education in public school is free, but the private schools can be very expensive. Education in English is only provided by private schools. (Embassy of Finland, Mexico 2012.)

Mexico's whole education system is very similar to Finland's. The basic education starts at preschool moving on to a six year long primary school for children aged 6 to 15. The basic education is compulsory. After completing primary school successfully the student moves to a secondary school which has three grades. (InterNations 2014b.)

The upper secondary education is divided in to two different types of education; high school and professional technical education (vocational school). High school can take two to four years depending on the school. Professional technical education takes three years to complete usually, but there are differences in the length of the curriculum between education programs. Education takes maximum five years to complete. Successfully finishing the high school education or professional technical education allows the student to move on to tertiary education. (InterNations 2014b.)

The tertiary education consists of three different types of education. These types are higher technician, bachelor's degree and postgraduate studies. Postgraduate studies require completing bachelor's degree studies. (InterNations 2014b.) The education system of Mexico is supervised by The Secretaría de Educación Pública (SEP) and it is in charge of educational rules and standards (Studylands 2014). While SEP oversees the general implementation of education and its standards, the states of Mexico have a complete responsibility for providing basic education (Stateuniversity n.d.)

4 Research

4.1 Methodology

4.1.1 Research method

Interviews are the most common way of gathering data for qualitative research in Finland, but they can be used for data collecting in quantitative research also. The aim of an interview is to find out what the interviewee has in mind through open conversation. Conversation

is however started and lead by the interviewer. (Eskola & Suoranta 2008, 85.) Electronic questionnaires however aren't conducted in a direct interaction with the interviewees but are sent directly to them and after answering it they return it straight to the researcher. Sending questionnaires via e-mail or post is a quick way of collecting data even from a large target group. The biggest problem with sent questionnaires often is the lack of answers received by the researcher. This leads to small samples and also misunderstandings are hard to control. (Hirsjärvi, Remes & Sajavaara 2007, 190-191)

Due to their conversation like nature interviews are interactive events that are affected by normal social, physical and other aspects regarding communication between people. According to Eskola & Suoranta (2008) interviews can be divided into different types on the basis of how the questions have been designed and how does the interviewer structure the interview situations. Using these as criteria the interview types can be divided into four; structured interview, half structured interview, theme interview and open interview. (Eskola & Suoranta 2008, 85-86.)

An interview which has predetermined topic or theme is called a theme interview. However theme interviews lack the precise form and order of the questions, which are typical for structured interviews. In theme interviews all the same topic are gone through, but their order and extent may vary between different interviews. According to Eskola & Suoranta (2008, 87) specifically theme interviews have become more common method of data collection in Finnish studies. There are two reasons for its popularity. Firstly theme interview's open nature allows for the interviewee to speak more freely which causes the interview material to represent their own speech and vision more. The second thing that plays a role in its popularity is the themes. Using themes makes sure that all the same areas or topics have been discussed with the interviewees. (Eskola & Suoranta 2008, 86-87.)

In the study of innovation leadership the themes consists of e.g. the concepts of innovation activity, the origin of innovations and requirements and developing of innovations. All of the themes are depicted in figure 10. The research is conducted with theme interviews in England. The basis of the theme interview was also easy to transform into electrical questionnaire that was send through e-mail to the interviewees that couldn't be met in person i.e. the teaching staff of the German university. The themes were gone through with all of the interviewees and the conversation like nature of the interview conducted in England made it possible to ask additional or defining question if necessary. Because of the nature of the research, theme interview alongside electric questionnaire was just the right tool for data collection.

4.1.2 Reliability

Reliability means the repeatability of the research. In practice this means if the research was to be repeated, would the results stay the same (Vehkalahti 2008, 116). On this thesis the reliability was taken into account in the structure of the interview and questionnaire. This means that the same things were asked partially twice but with slightly different wording. This made evaluating reliability possible since it was possible to check did the answers stay the same or did differences occur.

4.1.3 Validity

Validity is concerned with the aspect whether the research studies what it is supposed to i.e. do the research data answer to those questions that was wanted (Vehkalahti 2008, 41). If validity for some reason doesn't come true, there is no point to evaluate the reliability of the study. (Vehkalahti 2008, 41.) In assessing the validity of this thesis the interview sheet has to be taken into account. According to Ahilampi (2012, 33) the interview sheet used in this thesis was drawn up based on a wide range of innovation activity's theory. The questions were planned to answer the most important themes that were birth of innovation, occurrence of innovation leadership and the development of innovations. Thorough familiarity with innovation activity's theory ensured the drawing up of a good-quality interview that seeks answers to the research subject.

4.2 Conducting the research

The research part of this thesis was conducted in spring of 2013 in London, England, and in the winter of 2013-2014 in Germany with the help of an exchange student. Interview carried out in London was a part of course called *Vieraalla maalla biznesmielessä* (Abroad with business in mind, F00720) which can be found in Laurea Lohja's course offering. Altogether seven students took part on that course, all of whom participated in conducting the interview to the teaching staff of a local school in London (St. Marylebone C.E. School). The interview itself was made by students who participated in a course called innovation leadership in 2011 as explained in the introduction.

In the spring of 2013 a pair of students participating in the course F0072 got the assignment of translating the existing interview outline into English. In April of the same year all the students of that course conducted the interview in small groups to four members of the teaching staff of St. Marylebone C.E. School. After the fieldtrip all groups transcribed their own interviews precisely. There were four transcribed interviews from London combined.

In the autumn of 2013 Laurea received twelve exchange students to the campus of Lohja from all over the world. With the exchange students came an opportunity to expand the case countries alongside the existing England. Three exchange students were open to the idea of conducting the same interview concerning innovation leadership in their own universities. Throughout the semester the students were briefed about the study and its goal. In Germany the research was conducted by Benjamin Scholz. The interview had to be remolded into an electronic form, because, according to Scholz, that was the easiest way of getting the personnel to answer the questionnaire. Four members of the teaching staff of Frankfurt's University answered the questionnaire.

In Mexico the interview was supposed to be conducted via an electronic questionnaire with the help from exchange students Maria Fernanda Duhne and Jimena de la Vega. Despite their efforts, no answers were received. The questionnaire was also sent directly to the school via e-mail. However no answer was gotten from the Mexico's university. According to Elizondo (interview 7.3.2014) it's a characteristic feature of the Mexican culture to not make effort for people they do not know since they would not benefit from it.

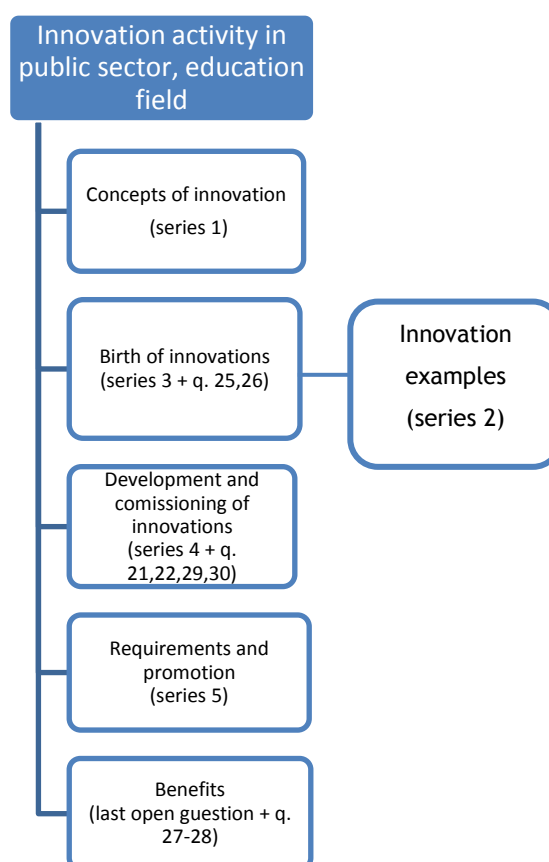


Figure 10: Frame of the research interview

The outline of the research interview and questionnaire is depicted in figure 10 with the corresponding question series numbers and questions. The interview was divided into themes starting from defining the key concepts of innovation activity and the moving onto innovation examples alongside finding out their origin. Next the interview and questionnaire focused on the development and commissioning of innovations followed by the requirements and promotion of innovations in the case operating environments. Lastly the interview focused on the benefits of innovation activity and how innovation activity is perceived in general. The following analysis of the research material follows the order of the themes as they are presented in the figure above.

5 Research analysis

5.1 England

5.1.1 Concepts of innovation activity

The interview started off by figuring out how the interviewees understand the key concepts of the study; innovation and innovativeness. Generally the staff of a school in London understands innovation much along the same lines. Innovation is understood as a progress of improving something that already exists or as creating and implementing new ideas. All in all innovation is seen to mean change and it was also noted that it is crucial that the work community and that other interests see the reason for that change that an innovation brings.

For me innovation means change. But it means change for the better. And the crucial element is that people can see why you're doing it and that there is a clear improvement. For me innovation is not necessarily creativity. (Manager A)

After establishing innovation the interviewees were asked to define innovativeness in other words describe an innovative person. All the answers have very similar attributes. Innovative persons are described as creative, inventive and determined. Interviewees found that innovative persons understand the need for a change and are not afraid to question things. Innovative persons also want to influence the development of operations. Innovative person was also perceived as someone who doesn't settle for status quo and keeps stretching their brain out.

Somebody as we say in English thinks outside the box. Is always searching for an opportunity for the environment they are in and thinks naturally. They're not just thinking along one path, stretching their brain out in different ways. (Careers adviser A)

Somebody that's creative and open to questioning things, that simply doesn't know what status quo is, somebody who wants to step it up. (Manager A)

5.1.2 Innovation examples

The staff of the English school was asked which areas in the workplace are usually the ones associated with innovations. Interviewees had some small differences about the areas where innovations are most common. Leadership and information technology were the areas that the interviewees acknowledged the most. Also the welfare of the workplace was mentioned and not only meaning the staff but students as well. One interviewee in particular was very keen on innovations directed at student development which means introducing psychiatrists and social councilors that work with stressed and challenged students and help with future independence and employment. Also new operational models were noted by the interviewees as an area associated with innovations.

Student development, making them... to develop them academic, preparing them to employment and independent and stuff like that. Try to make them more independent, not just relaying teachers to help. Try to make them more independent. (Teaching assistant A)

Leadership, information technology; parents often understand it in a different way that teachers or rest of the staff. Also welfare of the work place; we try to create an innovative work environment and interaction for the staff and the students. (Careers adviser B)

The interviewees were also asked has the school taken into use any new innovations during the past year. All the given answers differ from one another so there are quite many new innovations that have been launched. Career's counseling is new to the school as well as a program called Aspirations and challenges. The aim of that program is challenge students to do more difficult things and aim higher in the future. This is done with the help of impressive and successful speakers. Another new innovation deals with encouraging the students to independency and to read extra things and be more aware of current affairs by taking part of debates and group discussions.

The Aspiration and challenges program is a big thing. (Teaching assistant A)

5.1.3 Birth of innovations

The next question series' mission was to map out the birth of innovations in English schools. The first question asked was what is usually the origin of the new innovations. Innovations seem to usually come from the staff and management. Students also get to participate in the innovation activity through student council which meets up with the teachers weekly. The staff also feels that they have freedom to innovate as long as the education department funds them. One interviewee also feels that the education department brings changes and not so

much innovations. The development manager is also a source of new innovations by effecting decisions through constructive criticism as well as parents.

Combination really. Management rules suggest area to where to want to be innovation and then open discussion among the staff on the best way to do that. So it's not just one particular person, it can come from different areas, sometimes teacher could have an idea and implementing it. It can come from everywhere. We try to get students involved as well. (Teaching assistant A)

Education department; when something gets removed there has to be a new substitutive operational model, that's how you get innovations. (Career's adviser B)

Parental input and comments I think provide innovations. (Career's adviser A)

After that the interviewees were asked are they being encouraged to express their opinions or new ideas. All the interviewees agreed that they are encouraged to that in their work community.

Very open atmosphere here. (Teaching assistant A)

It was also asked have they expressed any new ideas in their workplace. They were also prompted to tell what those ideas were and that have their ideas been accepted. All the interviewees had expressed their ideas and the ideas had also been carried out. The new ideas revolve around changes in the education field such as career's counseling and combining fields. Innovations have also been carried out in the information technology field by presenting a new way of logging information.

For me in essence I got a new job because I said we needed to put together the maths, the science and the engineering and that's why I have a new job. Stem we call it. (Manager A)

Absolutely. I have new ideas constantly, but of course not all of them are carried out. The biggest change lately has been career's counseling. We are talking more with the students and try to create them individual career paths. (Career's adviser B)

Next in the interview the staff was also asked about how the management encourages them to transparency and to create new ideas. Management seems to respond to new ideas in a positive way and they always give constructive criticism so no idea is shot down immediately. Giving feedback and having open discussions about ideas is largely seen as a way of encouragement. Transparency can be seen in the way how all the upcoming changes are explained to everybody and especially the reasons for that change. The management is also said to be otherwise pretty passive but still express enthusiasm towards new ideas easily.

All the new ideas are welcome and we try to give especially constructing criticism. (Career's adviser B)

I think they just express enthusiasm. For example if I go to the head and say we have some visitors coming from Finland she absolutely lightens up and says “h sure go organize it!” But she won’t do anything, she just permits it. (Manager A)

5.1.4 Development and commissioning of innovations

The next question series focuses on the development and commissioning of ideas and innovations. The series started with finding out whether the new ideas and procedures are developed together with the employees or not. All the interviewees agreed that the staff is participating in the development process. One interviewee also noted that there aren’t any regular meetings focused solely on developing but an employee’s idea could be worked with if needed in small groups in which case you get many point of views to the idea. All of the interviewees perceived that the management is open to new ideas, but one staff member reminded that there still has to be a valid reason for innovating.

As long as we don’t change things just because. Innovations have to improve what we are doing but if a good idea is working, we stick to it. We look ways to improve but we don’t change things every year just to say we have innovated. There has to be a reason for it. (Teaching assistant A)

In the study the interviewees were also asked does the management offer any guidance to the employees when it comes to introduction of new innovations. Yet again all the interviewees agreed that they do receive guidance from the management through discussions about implementing the new ideas as well as explaining why changes are being made. In this question series was also a question about resistance to change among staff. General opinion was that there is occasional resistance, but that usually has to do with not understanding the benefits or the reason for it. It was also brought up that resistance is natural when there are so many different people in the work community so dissenting opinions are going to occur at one point or another.

Not really. The only resistance there can be is if they can’t see the reason for it. (Manager A)

People don’t like to give extra work if they don’t see the benefit of what they’re doing. (Teaching assistant A)

The question series about development and commissioning of innovations came to a close after the questions about management’s role in an innovation process and the possible reward staff members get for the creation of new innovations. Management’s role is to be the one who provides possible resources and encouragement. One interviewee saw that a successful manager is the one who is introducing the innovation to the rest of the staff and explains what the upcoming benefit are going to be. Leading innovation was also mentioned to be part of the management’s role in the innovation process. This means that they make sure they get

new ideas in particular fields, generate it forward and then it's up to the staff to implement it in to use. The reward employees get from implementing a new innovation successfully is mostly praise and attention. According to the interviewees there rarely are any financial rewards except in the form of a pay raise due to new job descriptions. An improved working environment is also seen as a reward.

To affect greatly to the process and its execution. (Career's adviser B)

To encourage and to provide sources. (Manager A)

With any change or innovation there is a process of disruption and so you need to reassure people that it is for a really good reason. (Career's adviser A)

That is kind of a reward to improve the working environment. There is no financial reward. (Teaching assistant A)

One thing is job satisfaction. Another is, quite often, if you've innovated then you're given maybe a pay raise because you'll be given a new task to do. (Manager A)

An important question was also to study how the schools function with new and successful innovation. Do they keep it or share it with other schools in order to improve the whole field? The interviewees are in an agreement that there is quite a lot of sharing of information and collaboration with other schools in the area. One interviewee also noted that all schools are part of a local educational authority which means that they have many schools around them who have regular meetings to discuss their methods and ways of working. Schools also share courses with one another.

We definitely share it (ideas). (Manager A)

I think there is quite a lot of sharing because this school is a teaching school. So there are a lot of new training teachers coming so of course everything they are learning, they are taking it out. This school is also a part of a little group of schools in London that collaborate. (Career's adviser A)

5.1.5 Requirements and promotion of innovations

The following set of questions started off with mapping out what resources the interviewee's work community use in the innovation activity. 50 percent of the employees chose all the given options which are time, money, encouraging work environment, open interaction and communication and the necessary know-how. Also it was mentioned that money is under strict control in the education field and it would be ideal if an innovation won't require any money. It was also brought up that innovations that don't have any costs are more likely to come true whereas innovations that require financial aid are thought through more carefully and take longer time to happen.

Time is the big one. And money, but very often you can do things without too much money. It is always somehow involved. Encouraging working environment as well, interaction and communication and the necessary know-how. So probably all of them. (Manager A)

The interviewees were also asked how they affect the innovation process, do they have meetings that focus on innovation activities. All the interviewees agreed that they're having meetings solely for that purpose. It was also noted that there often can be more informal meetings or meetings with smaller teams especially if the innovation activity relates to a certain year group. The interviewees found it difficult to answer to the question how could she/he improve the workplace's innovation activities except for one. That is due to the fact that they felt it is part of his/her job description. It was also said that having a positive mind set contributes to the innovation activity.

Yes and no. We don't have meetings, but we do have more informal ones. (Career's adviser B)

Yeah I think positively. (Career's adviser A)

The requirement and promotion of innovation question series ends with mapping out what does development activity require from the management as well as other personnel. Support is seen one the most important requirements innovation activity has, nothing new can be developed if all ideas are seen as bad. The work community has lots of discussion in supportive spirits and they strive to give feedback in a way that nobody is completely rejected. It was also said that developing requires leading and determination to see that the ideas do go through. Management also needs to be able to see the bigger picture i.e. being aware how possible changes affect the whole working environment. According to the interviews there also need to be lots of good will and also have time to listen to ideas.

Well it needs a lot of good will and listening. There has to be time to listen to an idea and there has to be support to ideas to be trialed with the right preparation. You just can't try everything 'cause then you wouldn't be doing any work. With the right support you can put the ideas in to practice. (Career's adviser A)

5.1.6 Benefits of innovation activity

All the interviewees found innovation activity useful and that innovations usually ease their jobs. One interviewee reminded that no matter how useful innovations are, they are not worth doing just for the sake of it, there has to have a clear reason for it. It was also noted that mistakes do happen but they try to make use of them by learning valuable lessons.

Yes, that's what I like to think of innovations. It's all about improving. (Career's adviser A)

Yeah, I wouldn't say that one and sit down and do new innovation. We discuss areas of schools and if people have ideas it's more organic rather than say we have to come up with new ideas. We don't have monthly meeting for creating new innovations. (Teaching assistant A)

All the interviewees felt it is relatively easy to create and develop innovations if the atmosphere is open to new ideas and also supportive. It also depends upon what the innovation is, some are easier to carry out than others. It was mentioned that you shouldn't just settle for the current procedures but be constantly on the lookout for new ways to work.

In general innovation activity is seen to be very important part of progress. The interviewees however were a bit concerned about how innovation is portrayed nowadays. It is easy to get lost in the sea of ideas without paying too much attention to the reasons behind them. Innovation without a clear goal is in vain. It was also brought up that innovation that comes from higher levels is often more difficult and frustrating to execute since the expectations are too high and the speed too fast.

It's crucial, really important. The only way we progress, so absolutely critical. And I think this school seems to be really good in forward thinking. (Career's adviser A)

I think we have to make sure it is an improvement actually to improve our lives not just to say this is new, look at that and life is not any better. As long it's done for the right reasons. I think it is useful but there is danger that people do innovations not to think about whether it's actually helpful or not. (Teaching assistant A)

5.2 Germany

5.2.1 Concepts of innovation

The concept of innovation was understood very much in the same way among the interviewees. It was perceived to mostly mean the invention of something new, especially ideas that slowly develop into new services or products. It was also noted by one interviewee that innovation doesn't necessarily have to be completely new but old ideas and processes can be re-innovated. Innovation was also said to be energetic and should be evaluated with wisdom. Alongside the concept of innovation it was important to find out what kind of characteristics do the interviewees feel an innovative person possesses. Innovative person is most often described to be open-minded. Other characteristics that were highlighted are creative, curious, entrepreneur and passionate. Innovative person was also said to be someone who is constantly on the look-out for new ways to improve products and services that already exists. Unusual characteristic for an innovative person was female which brings up an interesting question

that does the sex of a person have influence on their innovativeness.

Innovation is nearly everything, even the old things might be re-innovated, innovation is energetic and should be evaluated by wisdom. (Professor B)

An innovative person is somebody looking continuously for ways to improve existing products and services or a person looking to develop new products and services in order to create a benefit or solve a problem. (Professor A)

Reflected, energetic, wise, open, female. (Professor B)

5.2.2 Innovation examples

In the next question series the interviewees were asked which areas in their work environment are associated with innovations. According to all the teachers and professors leadership is one of the innovation activity's target areas. Information technology is perceived to be the most important area seeing that it features in all the answers. Other areas associated with innovations are new operational models and gender policies were also brought up alongside with other processes dealing with education.

Next the interviewees were asked what kind of innovations has been taken into use during the past year. The digital campus system seems to be a rather important new innovation in the work community since it came up in majority of the answers. The university had also developed new innovative study programs and a study and research concept. A new innovation is also the staff's monthly research newsletter. Other innovations are child care, new research projects as well as a new name for the university.

Digital campus system to plan, coordinate and control lectures, exams and resources. (Teacher A)

Digital campus, child care, switch to bologna system with masters and bachelors. (Professor B)

5.2.3 Birth of innovations

After the basic concepts of innovation activity and the areas they are usually associated with it was important to find out how and where do they originate. This question split the interviewees and all of them seem to have their own perception of innovations' place of origin. All together the main initiators are staff, management, Education Department, student, the municipality as well as the government so almost all of the options given in the questionnaire. Only the development manager is absent in the answers.

Staff and the government. (Professor B)

Staff, management, Education Department and the students. (Manager B)

Also crucial to the birth of innovations is the atmosphere of the work environment. All the interviewees felt that they are encouraged to express their own ideas and suggestions for improvement. The interviewees also admitted expressing their ideas in their workplace and most of them had been accepted well. The new ideas are then discussed in elected boards. In addition most of the interviewees noted that their ideas have been carried out. As said earlier management has an important role when it comes to encouraging employees with the creation of new ideas. The management's way of doing this is by having open conversations. In addition they have developed a program called "Think with us" where the new innovative ideas are evaluated and possibly rewarded financially. On the other hand one interviewee feels that the encouraging part is mostly in the freedom of their own jobs.

They have a "Think with us" program. Innovative ideas are evaluated and financially rewarded. (Professor A)

They try, but it's more self-commitment and the freedom of our jobs. (Professor B)

5.2.4 Development and commissioning of innovations

The next question series starts off with finding out which quarters are involved in the developing process of innovations. Half of the interviewees feel that the ideas aren't developed together with the employees. One interviewee said that employees are part of the developing process at least in his/her faculty. It is worth noting that there are indeed differences even between faculties that are part of the same school.

Yes, in our faculty. (Professor A)

Sometimes. (Teacher A)

The management is seen to be open for new ideas and but half of the interviewees felt that they don't receive enough information and guidance when it comes to the introducing the new innovations. One of the interviewees, however, felt completely the opposite and feels that she is getting enough guidance. The next question of the series also divides the interviewees in two. Majority of the interviewees experience that there is no resistance to change among the staff when it comes to new ways of working when one interviewee feels that there is a lot of resistance. This resisting of new procedures comes across as resisting, neglecting and protesting.

The fourth question series ends with enquiring the role of the management and also about the possible reward the staff is given. The management's role in the whole innovation process is

seen to be a supporting and a guiding actor who also offers praise to the employees. It is also said that the management needs to be open to new ideas, establish innovation process and offer resources. Employees are rewarded with moderate financial rewards as well as with public praise if they create new functioning innovations.

Also part of the developing process is sharing ideas and innovations with other similar education parties. All the interviewees agreed that the innovations stay inside the house which means that they don't cooperate in that sense with surrounding schools and keep their innovation activity mainly themselves.

The interviewees were also asked to define how they could, on their own behalf improve the work place's innovation activities. One interviewee had a clear suggestion in mind and that is that the university should define a vision and a strategy for the whole university for the next 5-10 years and an action plan to go with it. On the other hand one of the interviewees felt that there is no need to improve the workplace's innovation activities since there has been so lot of it lately.

Overall target should be to work out a vision for the university and a corresponding strategy for the next 5-10 years, as well as an action plan for the next 5 years. (Professor A)

5.2.5 Requirements and promotion of innovations

Innovation activity also needs resources and that was the main interest in the next question series alongside with other requirements. All the interviewees mentioned money to be one of the most important resource needed as well as open interaction. Money however wasn't seen as a mandatory resource in innovation activity. Encouraging work environment was noted in few of the interviewee's answers. Interestingly enough, only one of the interviewees found that they use the necessary know-how in their workplace's innovation activities. This interviewee was also the only one who answered all the given options.

Time, encouraging work environment and open interaction and communication. (Manager B)

Time and open interaction and communication. Not necessarily money. (Professor B)

In this question series the interviewees were also asked do they have meetings in their workplace concerning innovation activities. Only one of them said that they do have meetings related to innovations, all the other interviewees denied either fully or partially. Partiality means that there are seldom such meetings or that there aren't specific meetings that deal with innovation activities. Only half of the interviewees use their opportunity to affect the

work place's innovation activities and they also do it different ways. Some of them try to contribute with new ideas as much as they can and some contribute by doing research.

I try my very best to contribute with new ideas to my workplace. (Professor A)

Concerning the promotion of innovations the interviewees were asked do the other schools in the area cooperate with each other. Interestingly all the interviewees said that cooperation does happen between other schools by sharing training programs and information on the IT program called Digitaler Campus. However all the interviewees said earlier in the questionnaire that they don't share their new innovations and new developed ideas with other schools.

Yes, information is shared on the IT-program (Digitaler Campus). (Professor A)

Yes, in offering a shared training-program. (Professor B)

5.2.6 Benefits of innovation activity

The final question series focuses on the benefits of innovation activity, or more precisely do the interviewees feel that there are benefits. Majority of the interviewees found innovation activity to be useful, however one interviewee said that is rarely the case. One of the main benefits of successful innovations for employees is that they ease their daily jobs. All of the given answers were positive meaning that the interviewees felt that innovations do ease their job, at least sometimes.

Only one of the interviewees felt that creating and developing innovations is easy where as the others were more critical. It was mentioned that innovation activity requires time, the right inspirational environment, an open mind and personnel. Alongside all these, money is often needed in order to implement the ideas.

No. You need time, a creative environment, an open mind and often also personnel and money to implement innovative ideas. (Professor A)

Innovation activity is perceived to be very important especially to European universities who compete for resources and of course students. Universities need innovations to keep up with the competition and constantly renew themselves in different ways. It was also noted that innovations should be linked to value systems which ensures that each innovation has a reason and a far-reaching clear goal.

Innovation is extremely important for a European university, as we are in a national and global competition for motivated students and resources (finance, staff, professors). (Professor A)

We need innovations to survive, but they should be connected to an overall value system. Innovations not only for the reason to please us and ruin the other parts of the world. (Professor B)

6 Results and conclusions

It was understood in both case countries that innovations in the education field don't have to be life changing, but even small innovations to their everyday processes can have big outcomes. Interviewees in both case countries pointed out that while innovations usually are new products, services or processes they can also be so called re-innovations which means improving existing processes or products. An innovative person was described with similar attributes in these case countries. These attributes were creative, open-minded, curious, inventive etc. A surprising characteristic for an innovative person was female. This characteristic came up only once and by a German interviewee. Both English and German interviewees saw information technology and leadership to be the most common type of areas associated with innovations. Other areas that the German staff brought up were gender policies and new operational models where as the teaching staff of England emphasized student development. Even though the interviewees recognized the possibility of smaller innovation they seemed to focus in their examples on bigger innovation such as new subjects that had been added to the education offering in their schools or new IT-systems.

The study shows that in both case countries the innovations usually come from the staff and the management. Students also have the possibility to influence on things through student councils and unions. In England for example the student council meets up with the teachers every week to discuss about matters that affect and are important to them. All in all the main initiators in both case countries are the same, with a few exceptions, but their roles as well as emphasis in the birth of innovations are different. The development manager is seen as a source for new innovations through offering constructive criticism in England but in answers from the German teaching staff it is completely absent. Parental input is also mentioned only in England, but this has likely to do with the age difference of the students in these two case schools, seeing as one is secondary school with sixth-form and the other is a university.

All interviewees in both case countries felt that they are being encouraged to express their ideas through open discussion with the other staff and the management. The teaching staff is also encouraged to transparency in England by always explaining the upcoming change and the reason behind it. When it comes to the possible resistance the staff has for changes, Germany draws the shorter straw. Half of the German interviewees felt that there occurs resistance among the staff which comes across as neglecting, protesting and resisting the change. In England resistance occurs only when the changes aren't explained properly i.e. the

staff may not see the reasons and benefits of the changes. English interviewees also felt that dissenting opinions are natural in work communities and they are clearly used to them which is a result of the team work culture.

Management's role in an innovation process differs in the two case countries. The English interviewees perceive encouraging and providing resources to be part of the management's role. It was also said that it is important that the manager introduces the innovation to the rest of the staff and also explains what the change is going to be like and also future benefits. Leading innovation was also noted in the answers. Apart from offering resources, the management's role, from German point of view, differs. German interviewees feel that supporting, offering guidance and praise are key parts of the management's role. It was also noted that the management needs to establish an innovation process and to be open to new ideas.

When it comes to the rewards that are given to the staff for successful innovations, Germany is the one who gives moderate financial rewards. This German case school has a program called Think with us, where innovations are evaluated and possibly rewarded financially. England doesn't give financial rewards to innovative staff, but instead offer praise and attention. In addition the improved working environment is seen as a reward by both case countries.

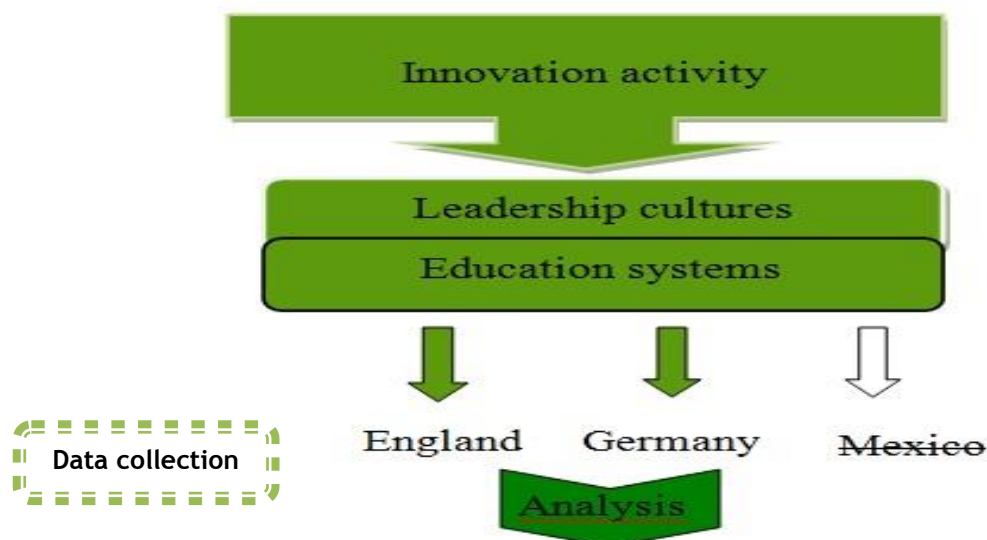
According to the study cooperation with other nearby schools isn't a shared characteristic in this study's case countries. England does collaborate with other schools by sharing ideas and experiences and even courses. They have a local educational authority where local schools gather to discuss about their ways of working, thus also innovations. German schools on the other hand tend to keep all innovation activity to themselves and also strictly inside their own faculties except for IT knowledge and sharing training programs. This behavior can be due to their leadership culture, as said in the title 3.2, i.e. German's use vertical communication. Vertical communication means that instructions and other information is give only to those who need it and are directly below them. Also the German interviewees noted how important innovation activity is in the competition with other European universities concerning students and resources and could there for be another reason for the lack of cooperation with other similar schools.

Money and open interaction were seen to be the most important resources needed in innovation activity. Money however is under strict control in the public sector including the education field and it wasn't seen as a mandatory resource by either of the schools. English interviewees felt that innovations that do not require money are more likely to come through and succeed. English interviewees also answered all the given options more frequently than Germans. This indicates that the staff of the English school understands better that successful innovation activity is a sum of many different factors. Surprisingly enough, only one of the

German interviewees and few of the English ones saw the necessary know how as an important resource for innovation activity. What makes this surprising is that combining know-how is one of the three stages of an innovation process after the free innovating stage (see 2.2) according to Apilo (2007, 113) et al. Also it would seem that the case school in Germany doesn't have clear innovation processes but instead it was one interviewee's idea on how to improve the workplace's innovation activity.

The interviews show that innovation activity is perceived as useful organization's activity and that it eases the staff's jobs. The English school reminded that innovations need reasons and motives, there's no reason to innovate just for the sake of it. Innovation activity is also seen to be an important part of progress, a tool needed for survival in the education field, in both case countries. Since the education field is also tied to political decision making, the schools need forward thinking and also constant adapting to the possible changes that affect them. At its best, innovation activity is the means to an easier and more efficient ways of working that also eases the lives of the students for example by investing in information technology.

It is worth noting that since the data was collected in different ways, it may indeed have an effect on the study results. Theme interview makes it possible for the interviewer to present additional questions if they are not content with the given answer. With electronic questionnaires this is not possible and this was also visible in the Germany's often short answers. It is worth questioning if the study data had been different and in what way, if the research method would've been the same.



	England	Germany
Innovation activity		
Origin	Staff Management Student and parents	Staff Management
Sharing	Cooperation with schools	-
Resources	Money Open interaction Know-how	Money Open interaction -
Rewards	Praise, attention	Finacial rewards
Leader's role	Encouraging Providing resources - -	Supporting Providing resources Offering guidance Establishing innovation processes
Education systems		
	4 stages National Curriculum Private/state schools Institutional autonomy	4 stages Power of the states Various preparatory schools Regional decentralization
Leadership cultures		
	Motivating, inspiring Clear directions Flat hierarchies > team orientation	"Competence comes first" Authoritan leadership Vertical communication Result orientation

Figure 11: Research outline from theory to results and conclusions

The main characteristics of leadership and education systems of the two case countries are depicted in figure 11. The figure also shows where the research results fit into the framework of the whole thesis and reminds what the theory elements lead to this.

7 Summary

The purpose of this thesis was to study does the different education systems have an effect on the state of innovation leadership in education activity. The aim of the research was to look into what innovations are, where they come from and how they develop and with what resources in the education activity of England and Germany. In addition the purpose was to find out the role of the leader in innovation activity. Mexico was also one of the original case schools, but no research material was received. This left no choice but to leave Mexico out of the research part. It is however present in the theoretical framework of this thesis.

The data collection was done and completed well ahead of time. The interviews in London were conducted in April of 2013 and transcribed in the next few weeks by students who participated in the London's fieldtrip. The volunteer who was in charge of getting the research data from Germany was an active exchange student Benjamin Scholz. He collected the data via e-mail with the questionnaire in the beginning of December of 2013. The interviewees send the answered questionnaires directly to Finland.

Examining the topic of innovation activity from two different perspectives, i.e. two countries, made the study interesting and gave more variables that might possibly have an effect on the research subject. The study showed that innovation activity is affected by much more than the question of is the organization operating in the public or private sector or its leadership style. Culture and how the organization is built have considerable effect on the innovation activity as a whole. The research material shows that the case countries differ from each other when it comes to the education system as well as from leadership culture's point of view. Cultural differences seem to be the main source for differences in innovation leadership in the education field. The cultural characteristics presented in the theory part of this thesis are also visible in the research analysis. The study showed that the differences in education systems have an effect when it comes to the cooperation with other schools. Germany's education system consists of the individual states, all of which organize their education in their own ways which in effect hinders the cooperation with other schools significantly.

The study showed that the both case schools differ in some ways from one another in all the aspects of innovation activity. They have minor differences when it comes to the origin of innovations and well as innovation activity's resources. When it comes to the reward system, they are opposites; Germany gives moderate financial rewards whereas England offers praise and attention for the creation of innovations. The interviewees also see the leader's role in a different way in the case schools and sharing innovations is characteristic for the English case school. Study also showed that the benefits of innovation activity are perceived positively in

both case countries and the most important resources for innovation activity are money and open interaction. It was understood that innovations are crucial in the education field.

Even though there was no hypothesis for this thesis, the study results were surprising. Beforehand one might think England to be old-fashioned when it comes to leadership styles and that they might even sheer away from new leadership models such as innovation leadership. The study showed, however that the teaching staff of the English school has understood the requirements and benefits of innovation activity better than their German colleagues and the overall atmosphere towards innovation activity is more open and progressive.

The small sample of the study, i.e. four interviewees per case school, has an effect on the reliability and validity of the research. This results in the fact that these study results can not be generalized to apply to the whole countries of England and Germany, only to these specific case schools. In order to do that the study needs to be repeated with the same interviewee sheet to a larger sample i.e. many other schools from England and Germany and preferably have more interviewees per school.

The data collection is advisable to carry out in the same way with all of the research subjects. The different data collection methods affected the results. Data that was collected through interviews were more precise and casual thus representing the interviewees' opinions more accurately. When the interview was sent as an electronic questionnaire the answers tended to be short and getting extra information was a rare occasion. This is visible in the research analysis of the German case school. Also worth noting is that all the interviews in England were conducted by a different person, this can affect how the interviews were lead and how much information was gotten out of each interview. Another developmental suggestion is some changes to the interview sheet. Especially when analyzing the answers gotten from German case school with the electronic questionnaire few questions proved difficult. For example question number three (see appendix 1) could be changed in to how do you define, instead of understand, the concept of innovation. This way the interviewee is not tempted to just answer that yes they do understand the concept without actually defining it in any way. Another suggestion concerns the electronic questionnaire where interviewees tend to give shorter answers since there is no interviewer to ask additional question. The answer space for open questions should have limit for minimum characters in order to avoid one word answers.

A future suggestion for this study could be drawing up clear innovation processes for both case schools. Alongside the actual process also guidelines to help its implementation could be provided to the school. This process could consist of four stages which are free innovation stage/creation stage, a combining know-how stage, the efficiency stage/implementation stage and lastly measuring stage. These stages should make the innovation process more effi-

cient since all the staff members know the codes of conduct when they come up with a developable idea. These stages are depicted in the subtitle 2.2. After the planned processes have been given to the schools the study would be repeated in order to see whether clear processes make innovation activity more efficient, if the resistance among staff decreases and what happens with the overall atmosphere when it comes to innovation activity. Alongside this innovation process idea the schools could arrange an innovation day as a part e.g. the staff's development day where the results are gone through and discussed. Another suggestion is to repeat the study but with a broader sample from both countries and also include more schools from each country. This would provide a more comprehensive understanding of the state of innovation activity at England and Germany, not just the two case schools.

References

Literacy

- Apilo, T., Taskinen, T. & Salkari, I. 2007. Johda innovaatioita. 1. edition. Helsinki: Talentum.
- Bason, C. 2010. Leading public sector innovation. Bristol: The Policy Press
- Booth, S. teoksessa Chokkar, J., Brodbeck, F. & House, R. 2007. (edit.) Culture and leadership across the world: The GLOBE book of in-depth studies of 25 societies. London: Lawrence Erlbaum Associates.
- Dubrin, A. 2001. Leadership. Research findings, practice, and skills. 3. edition. Boston: Houghton Mifflin Company.
- Drucker, P. 1990. Managing the nonprofit organization - Principles and practices. New York: HarperCollins Publishers
- Fatehi, K. 2008. Managing internationally: succeeding in a culturally diverse world. Los Angeles: Sage Publications.
- Grint, K. 2005. Leadership: Limits and Possibilities. New York: Palgrave Macmillan.
- Hamel, G. 2009. Johtamisen tulevaisuus. 2. edition. Helsinki: Talentum.
- Harisalo, R. 2011. Luovuuden teknologia - Ideointimenetelmät organisaatioiden luovuuden vahvistajina. Tampere: Tampereen Yliopistopaino Oy.
- Hirsjärvi, S., Remes, P. & Sajavaara, P. 2007. Tutki ja kirjoita. Helsinki: Tammi.
- Henning, R. 2000. Ledarskap och ledning i offentlig sektor - en problematisering. Stockholm: Stockholm school of economics.
- Howell, P., de la Cerda, J., Martinez, S., Bautista, J. A., Ortiz, J., Prieto, L. & Dorfman, P. teoksessa Chokkar, J., Brodbeck, F. & House, R. 2007. (edit.) Culture and leadership across the world: The GLOBE book of in-depth studies of 25 societies. London: Lawrence Erlbaum Associates.
- Isaksen, S. & Tidd, J. 2006. Meeting the innovation challenge. West Sussex: John Wiley & Sons Ltd.
- Karlöf, B. & Helin Lövingsson, F. 2004. Johtamisen näkökulmat: peruskäsitteitä- ja malleja. Helsinki: Edita.
- Kartsen, B. & Pylkkänen, P. 2004. Innovaatiotoiminta julkisissa laitoksissa - johdon kokemuksia ja näkemyksiä. Tekes.
- Lampikoski, K. & Lampikoski, T. 2004. Kehitä ideasi innovaatioksi. Vantaa: Dark Oy.
- Lemola, T. 2009. Innovaation uudet haasteet ja haastajat. Helsinki: WSOY
- Lewis, R. 2000. When cultures collide - Managing successfully across cultures. Lontoo: Nicholas Brealey
- Marx, E. 2001. Breaking through culture shock: what you need to succeed in international business. Lontoo: Nicholas Brealey

Mikhula, A. 1996. Työkulttuurit: avain menestykseen kansainvälisessä liiketoiminnassa. Helsinki: TT-kustannustieto.

Mole, J. 2004. Maassa maan tavalla: opas globaalin Euroopan yritys- ja neuvottelukulttuureihin. Helsinki: Tietosanoma.

Owen, J. 2011. Death of Modern Management : How to Lead in the New World Disorder. Hoboken: Wiley-Blackwell.

Pont, B., Nusche, D. & Moorman, H. 2008. Improving School leadership. Volume 1. OECD.

Salminen, A. 2011. Julkisen toiminnan johtaminen - hallintotieteen perusteet. Helsinki: Edita.

Seeck, H. 2008. Johtamisopit Suomessa - taylorismista innovaatioteorioihin. Helsinki: Gaudemus.

Selkee, J. (toim.) 2008. Aakkoset sivistystoimeen. 2. edition. Helsinki: Suomen kuntaliitto.

Sydänmaalakka, P. 2009. Jatkuva uudistuminen - Luovuuden ja innovatiivisuuden johtaminen. Hämeenlinna: Talentum.

Tidd, J., Bessant, J. & Pavitt, K. 2005. Managing innovation. 3. edition. Ontario: John Wiley and Sons.

Thota, H. & Munir, Z. 2011. Key concepts in innovation. Hampshire: Palgrave Macmillan.

Virtanen, P. & Stenvall, J. 2010. Julkinen johtaminen. Helsinki: Tietosanoma Oy.

Articles

Borins, S. 2002. Leadership and innovation in the public sector. Leadership & Organization Development Journal. Vol 23.

De Jong, J. & Den Hartog, D. 2007. How leaders influence employees' innovative behaviour. Volume 10.

Deschamps, J.-P. 2005. Different leadership skills for different innovation strategies. Strategy & Leadership.

Hautamäki, A. 2014. Tieto ja osaaminen kilpailuetuna-käsikirja. Kauppalehti 1/2014

Lovio, R. & Kivisaari, S. 2010. Julkisen sektorin innovaatiot ja innovaatiotoiminta. Espoo: VTT.

Mulgan, G. & Albury, D. 2003. Innovation in the public sector.

Schein, E. 2004. Organizational culture and leadership. San Fransisco: Jossey-Bass

Schneider, J. & Littrell, R. 2003. Leadership preferences of German and English managers. Bradford: Emerald Group Publishing

Townend, W. K. 1999. Waste management and research.

Työterveyslaitos 2013. Hyvän johtamisen kriteerit julkiselle sektorille.

Von Stamm, B. 2009. Leadership for innovation: what can you do to create a culture conducive to innovation. Strategic Direction. Vol 25.

Willemse, N. & de Beer, P. 2012. Three worlds of educational welfare states? A comparative study of higher education systems across welfare states.

Internet

Carl Heath. GR Utbildning. 2011. Introduktion till Englands utbildningssystem. Cited 9.4.2014.
<http://www.grkom.se/download/18.3c7146c2133410740bd8000383/Introduktion+till+Englands+utbildningssystem.pdf>

Elinkeinoelämän keskusliitto EK. 2011. Innovaatiojärjestelmä. Cited. 15.4.2014.
<http://pda.ek.fi/www/fi/innovaatiot/innovaatiojarjestelma.php>

Embassy of Finland, Mexico. Cited 8.1.2014.
<http://www.finlandia.org.mx/public/default.aspx?nodeid=41896&contentlan=1&culture=fi-FI>

European University association. 2014. Cited 25.3.2014.
<http://www.eua.be/eua-work-and-policy-area/governance-autonomy-and-funding/governance-autonomy.aspx>

InterNations. 2014a. Schools in Germany. Cited 8.1.2014.
<http://www.internations.org/germany-expats/guide/15985-family-children-education/schools-in-germany-15992>

InterNations. 2014b. Healthcare and education in Mexico. Cited 8.1.2014.
<http://www.internations.org/mexico-expats/guide/living-in-mexico-15386/healthcare-and-education-in-mexico-2>

Maatiето. 2013. Britannian koulutusjärjestelmä. Cited 20.11.2013.
http://www.maatiето.net/britannia/opiskelemaan_britanniaan/britannian_koulutusjarjestelma

Ryan, J.R. 2010. Leadership Skills for Driving Innovation. Cited 20.4.2014.
http://www.businessweek.com/managing/content/nov2010/ca20101119_303832.htm

Stateuniversity. n.d. Mexico- Educational System- Overview. Cited 14.4.2014.
<http://education.stateuniversity.com/pages/981/Mexico-EDUCATIONAL-SYSTEM-OVERVIEW.html>

Studylands. 2014. The Education System in Mexico. Cited 14.4.2014
<http://www.studylands.com/guide/MX-education.htm>

Ulkoasiainministeriö. 2012. Maatiedosto, Saksa. Cited 11.4.2014.
<http://formin.finland.fi/public/default.aspx?nodeid=30994&contentlan=1&culture=fi-FI>

Valovirta, V. 2009. VTT. Innovaatiot ja niiden johtaminen julkisella sektorilla. Cited 14.4.2014
<http://www.kunnat.net/fi/asiantuntijapalvelut/tuke/palvkeh/innovatiiviset-palve-lut/innovaatiokoulutus/innovaatiot%20KUMA/Documents/Innovaatiot%20ja%20niiden%20johtaminen%20julkisella%20sektorilla,%20Ville%20Valovirta%20VTT.pdf>

Wikipedia. 2013. Education in England. Cited 20.11.2013.
http://en.wikipedia.org/wiki/Education_in_England

Others

Ahilampi, A. 2012. Innovaatiojohtaminen julkisella sektorilla Case: Opetus- ja koulutoimi Länsi-Uudellamaalla. Laurea-ammattikorkeakoulu. Laurea Lohja. Thesis.

Raúl García Elizondo. 2014. Interview 7.3.2014.

Vakkala, H. 2012. Henkilöstö kuntauudistuksissa: psykologinen johtamisorientaatio muutoksen ja henkilöstövoimavarojen johtamisen edellytyksenä. Helsinki: Suomen kuntaliitto.

Figures

Figure 1: Components of innovation activity	9
Figure 2: The characteristics of public sector leadership	11
Figure 3: Elements of innovation leadership (Sydänmaalakka 2009, 209-210).....	14
Figure 4: Innovation	18
Figure 5: Theoretical framework moves onto leadership cultures	19
Figure 6: Mexico's leadership culture	23
Figure 7: Education systems added to the theoretical framework.....	24
Figure 8: Characteristics of England's education system.....	26
Figure 9: Characteristics of Germany's education system.....	27
Figure 10: Frame of the research interview	31
Figure 11: Research outline from theory to results and conclusions	46

Appendixes

Appendix 1 The interview sheet.....	56
-------------------------------------	----

Appendix 1 The interview sheet

Innovation leadership - field research part

This survey has been carried out by Laurea Lohja's business administration student Saana Kaipanen as part of her thesis. The purpose of this survey is to study the state of innovation in an organization operating in the public sector.

"Innovation is a new or improved product, service or operational model that has been taken into use."

Basic information

1. Your post in the school
 - a) Teacher
 - b) Manager

2. For how long have you worked in this school?

3. How do you understand the concept of innovation?

4. How would you describe an innovative person?

(In this context innovation means for example a new procedure that produces benefits. Innovation means desire and ability to develop something new and to carry it forward)

Innovations of the public sector

5. Which areas in your workplace usually are associated with innovations?
 - Leadership
 - Information technology
 - New operational models
 - Welfare in the workplace
 - School transportation
 - School lunches
 - To something else, what?

6. Have new innovations been taken into use in your school during the past year? If yes, name the innovations?

7. If no: why has the innovations not been taken into use?

Birth of innovations

8. Where do the new innovations usually come from?

staff

management

Education Department

the students

the development manager

the municipality

somewhere else, from where?

9. Are the employees encouraged to express their opinions and/or new ideas?

Yes

No

10. Have you expressed new ideas in your workplace? If yes, what?

Yes

No (If no, please move to section 10)

11. How have your ideas been accepted?

12. Have your ideas been carried out?

Yes

No

13. How does the management encourage the employees to transparency and creation of new ideas?

Development and commissioning of innovations

14. Are new ideas and procedures developed jointly with the employees?

Yes No

15. Is the management of your school open for new ideas/procedures?

Yes No

16. Do the employees receive enough guidance for introduction of new innovations?

Yes No

15. Is there any resistance to change among the staff towards the new ways of working?

Yes No

If you answered yes, then how does it appear?

17. What do you think is the management's role in an innovation process?

18. How are the employees rewarded for creating new innovations?

19. Do the developed ideas stay inside the house or do you share it with other schools?

Requirements and the promotion of innovations

20. What kind of resources do you use in the innovation activity?

Time

Money

Encouraging work environment

Open interaction and communication

The necessary know-how

21. Do you have meetings in your workplace related to innovation activities?

Yes No

22. Do the other schools in the area cooperate with each other? If yes, how?

Yes No

If you answered no, do you think cooperation could be develop and in what way?

23. How could you improve your own workplace's innovation activities?

24. What do you think the developing requires from the management and other personnel?

25. Do you have open atmosphere in your workplace?

26. Is your school open to new ideas?

27. Do you find innovation activity useful?

28. Do the new innovations ease your own job?

29. Do you think it's easy to create and develop innovations?

30. How are you for your own part striving to advance innovation activity in your workplace?

Finally, let me know what do you think of innovations and especially your workplace's innovation activity. Do you think innovation is emphasized too much in today's society or do you find it useful?

Thank you for your time and cooperation!