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eLEARNING IN FINLAND

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The Association of Finnish eLearning Centre
Promoter and Network-Builder in the Finnish eLearning Branch



Are we creating social networks for a current reason or for later use?...16



Kinect, a motion-sensing input device for the promotion of learning and participation in the welfare sector...4

The open future of virtual worlds...5

Kiltakoulut, Guild Schools...20

Contents

Editorial.....	3	Blended distance education challenges us to change	14
Kinect, a motion-sensing input device for the promotion of learning and participation in the welfare sector.....	4	Are we creating social networks for a current reason or for later use?	16
The open future of virtual worlds.....	5	Social media and Finnish general education in the year 2023	18
Peer learning supporting collaboration and creativity in organisations.....	6	Kiltakoulut, Guild Schools – for active vocational students with working-life skills	20
In search of a future learning concept	9	The association of Finnish eLearning centre promotes a new learning culture.....	23
Digitalisation revolutionises our conceptions of knowledge and learning.....	10	Members of the association of Finnish eLearning centre	24
Managing crowdsourcing – what did Iron Sky teach us?	12		

14

16

SeOPPI



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The SeOpPi Magazine is the only Finnish magazine in the field of e-learning. It is a membership bulletin for the members of, and published by, the Association of Finnish eLearning Centre.

The SeOpPi Magazine offers up-to-date information about the latest e-learning phenomena, products, solutions, and their uses. The magazine promotes the use, research and development of e-learning and digital education solutions in companies, educational establishments and other organisations with the help of the best experts.

The SeOpPi Magazine gathers professionals, companies, communities and practitioners in the field together and leads them to sources of information about e-learning.



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Visamäentie 33, FI-13100 Hämeenlinna

EDITOR IN CHIEF

Titi Tamminen
Tel. | +358 40 869 6306
e-mail | titi.tamminen@eoppimiskeskus.fi

JOURNALISTS

Oili Salminen

Niina Kesämaa
Tel. | 040 827 6378
e-mail | niina.kesamaa@eoppimiskeskus.fi

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Niina Kesämaa
Visamäentie 33, FI-13100 Hämeenlinna
e-mail | niina.kesamaa@eoppimiskeskus.fi

TRANSLATION

Tiina Lanas | TILA Communications
e-mail | tiina.lanas@tilacommunications.fi

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The digital world is here – and we are ready

Finland has pioneered educational uses of information and communication technologies and the development of digital services. We continue to allocate significant amounts of research and development funds for the promotion of digitisation. For a small country to succeed, it needs expertise, and expertise must be invested in. Versatile, extensive and continuous learning is the key factor in our future. Different digital competences will form essential parts of any field of expertise in the future, but on the other hand, our future activities will be increasingly community-based. The University of Phoenix listed ten future work skills and all of them have digital technology integrated in one way or another.

Ten skills for the future workforce (Future Work Skills 2020, Institute for the Future for the University of Phoenix Research Institute):

1. Sense-making
2. Social intelligence
3. Novel and adaptive thinking
4. Cross-cultural competency
5. Computational thinking
6. New-media literacy
7. Transdisciplinarity
8. Design mindset
9. Cognitive load management
10. Virtual collaboration

The Association of Finnish eLearning Centre is doing its share in the development of these precise skills. Working with our members and interest groups, we are educating teachers to acquire new competences. Our projects develop new ways of working, rendering models to show the learning in a form that allows others to benefit from it. The eLearning Centre promotes the use of web-based learning, the digital implementation of educational contents, and research and development efforts in businesses, educational institutions and other organisations.

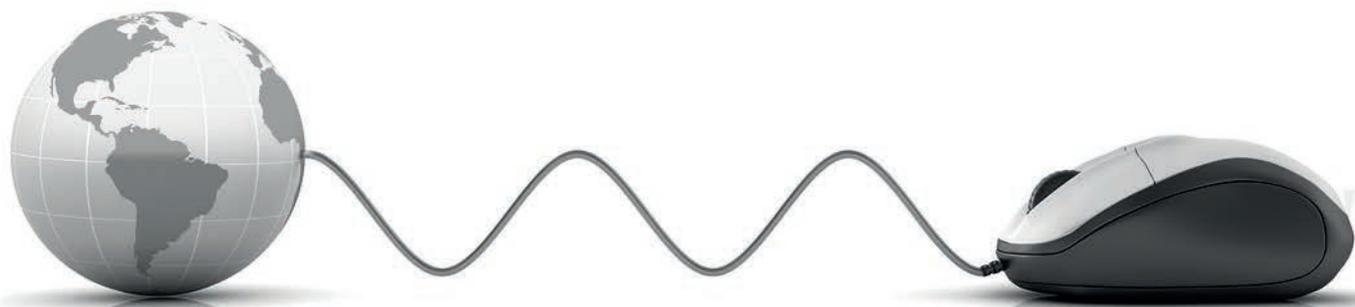
This magazine will provide an overview of our current development projects. In addition, these articles will depict contemporary development trends: new forms of learning through working, peer learning, participatory learning, open-source learning materials and learning environments, augmented reality and gamification.

Learning something new is inspiring and succeeds optimally in good networks. Please contact us – becoming international and transdisciplinary makes learning even more rewarding. •



Picture: Teemu Korpi

Leena Vainio
Chairman of the Board
of the Association of Finnish eLearning Centre
Tel. | +358 3 6464 380
Mobile | +358 40 727 6601
e-mail | leena.vainio@hamk.fi



Kinect, a motion-sensing input device for the promotion of learning and participation in the welfare sector

Kinect is a device that recognises speech and gestures, interprets the user's actions and learns from the user. All interaction at the user interface takes place in ways natural to human beings: gestures, facial expressions and speech. The user interface of this motion-sensing device, developed by Microsoft, has been used by HAMK University of Applied Sciences in the development work conducted in the project *Openness Accelerating Learning Networks (AVO2)*, more specifically, in its subproject *3D and mobile environments for participation and learning*.

The special target of the development work at HAMK University of Applied Sciences has been the use of virtual and augmented reality applications in welfare studies, but the goals have also included the improvement of the participation possibilities of the users of new services as well as the development of service concepts. The environment in which our project's development work has been conducted is the service centre for disabled people, *Virvelinrannan vammaispalvelukeskus*, offering daytime activities, housing services and support services for disabled people in the city of Hämeenlinna, Finland (www.virvelinranta.fi).

The simple user interface of Kinect facilitates the introduction of the new technology. This is why the user interface is particularly suitable for various user groups in the welfare sector who may not be able to use technically demanding user interfaces at all due to disabilities relating to their cognitive, motion, motor or sensory functions. The easy use of this user interface has facilitated its introduction among the mainly female welfare sector students participating in our pilots; most students involved in the pilots were new to playing computer games, to game consoles— and, in particular, to Kinect.

The natural user interface of the device produces a comprehensive, bodily experience for the user and this experience, in turn, structures new learning for the user. Kinect was seen to help actualise the project's goals through its concrete visualisation power, or the way it structures – unlike traditional technologies – virtual, visual, experiential 3D environments for learning and participation. In practice during the first phase, our game pilots made use of commercially available Kinect games that were suitable for the user group at Virvelinranta. The pilots in the second project phase have tested applications developed by IT students at HAMK, applications that are more oriented to the particular needs of their special customer group.

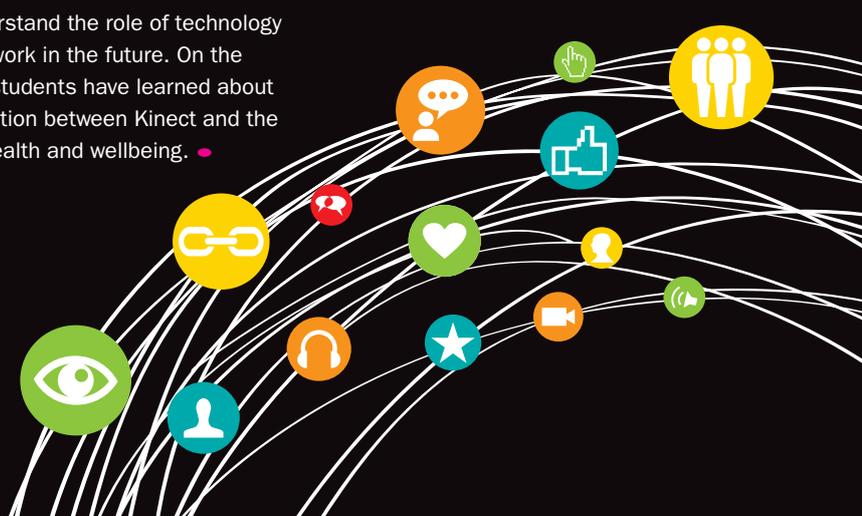
The concrete pilots conducted in our project have created new information easy to apply to practice; they have offered us concrete experiences and also provided us with collaborative models for education and working life. The project has made information available to us about new possibilities of learning and participation for our target groups, which consist of teachers and students in the welfare sector as well as service providers and their customers in this sector. Learning environments have become more versatile and learning has been enriched through gamified solutions. Welfare sector students have been able to familiarise themselves with new technologies; they understand the role of technology in specialised work in the future. On the other hand, IT students have learned about the interconnection between Kinect and the promotion of health and wellbeing.



Playing is all about co-working.

More information

You can monitor the progress of our project on the web at <http://www.hamk.fi/avo2>, and more information about the pilots is available from merja.salminen@hamk.fi and leena.koskimaki@hamk.fi.





The open future of **virtual worlds**

Hiking in OpenSim – looking towards the future.

While the initial hype regarding virtual worlds already seems to have settled, virtual worlds still continue to be used in education around the world. Second Life has been one of the most popular virtual worlds so far, but rising costs and growing needs for more customisable environments have led many to seek alternatives. Open source virtual worlds may provide a solution, but more research is needed to examine their potential. To provide new insights, a benchmarking of Second Life and 5 open source platforms (OpenSim, realXtend, Open Wonderland, Open Cobalt and OpenQwaq) was carried out as part of an ESF funded project called *Openness Accelerating Learning Networks*.

Open source platforms are a potential alternative to Second Life as their acquisition is free and they can be highly customised, thus providing more flexibility for different types of teaching. However, the development of standards is important in order to facilitate interoperability among different platforms, e.g. transferring objects and avatars from one platform to another. A personalised avatar, for example, is an important part of the user experience, which is why users should be able to use the same avatar in different worlds. A single compatible client or browser integration could also facilitate the co-use of different platforms. This could eventually lead to a standard hypergrid where users could move seamlessly among different environments.

EMERGING OPPORTUNITIES

Virtual worlds are inspiring environments as such, but mixing virtual and real spaces will offer new and even more versatile possibilities. Video and audio connections between virtual and real spaces are already common, and motion control is also making its way into virtual worlds. Data glasses, mobile devices and various controllers can be used to view and manipulate virtual objects, enabling users to interact with each other and the world in entirely new ways. The ideas are nothing new, but technology is finally catching up. The realisation of this dream, however, still requires standards, more research and open cooperation. The future of virtual worlds is open – welcome aboard! ●

KEY FINDINGS

- All examined platforms offer similar basic functionality, but they differ from each other in both technical properties and potential uses.
- Installation and basic use of open source platforms is free, but costs may arise during maintenance and customisation.
- Rather than forming a single cohesive environment, open source worlds are deployed on different servers. Separate spaces may help users to better focus on individual tasks, but they also prevent users from moving seamlessly between worlds, using environments built by others and experiencing random encounters.
- Most open source platforms do not offer tools for building and creating objects within the world as does Second Life. However, objects can be imported and free content is available for all platforms.
- Some platforms are still in an early stage of development.

OPEN SOURCE

VIRTUAL WORLD PLATFORMS

OpenSim | <http://opensimulator.org>

realXtend | <http://realxtend.org>

Open Wonderland | <http://openwonderland.org>

Open Cobalt | <http://www.opencobalt.org>

OpenQwaq
<http://code.google.com/p/openqwaq>

MORE INFORMATION

Yrjö Lappalainen | University of Tampere
yrjo.lappalainen@uta.fi

Peer learning

supporting collaboration and creativity in organisations

This article is based on our experiences at Open Päivitys (Teacher Update) staff training sessions during 2011 – 2013, the respective participant feedback, and experiences gained in the AKTIIVI project (www.aktiivi.info). Long-term work in staff training and networking has made us see the significance of peer work among colleagues. Peer work supports us in learning new things as well as in applying our learning to practice. At the same time, peer work increases positive interaction among people and helps them learn from one another. We find that together, it is easier to bear the anxiety awakened by changes.

CHANGING PROFESSIONALISM

Because learning is becoming more and more significant as a success factor, we need competence management and new types of learning methods. When learning is challenging, we need peers with whom we can share experiences and build our knowledge. To a greater degree than before, learning must form a part of our daily work, in which working and learning new things intertwine.

More and more often, work is project work in character. We work under stress and more and more often face problems that nobody has been required to solve before in that particular form. We need the experience and competence of several individuals in order to resolve such issues. Renewals that take place at a quick tempo are rarely accompanied by sufficient training: we need new ways to cope, and peer support seems to be an excellent aid. We can find peers at our own workplaces and among the different parties with whom we network. Telecommunication networks make it possible for us to find peers further away than our immediate circles.

SOCIAL LEARNING IS EMERGING

Today, social media tools make it easy for us to make our learning visible and they also make it possible for us to exchange thoughts with one another irrespective of time and place. Many of us already know how to find networks to make our learning visible and thereby gain interlocutors from among the members of these networks.

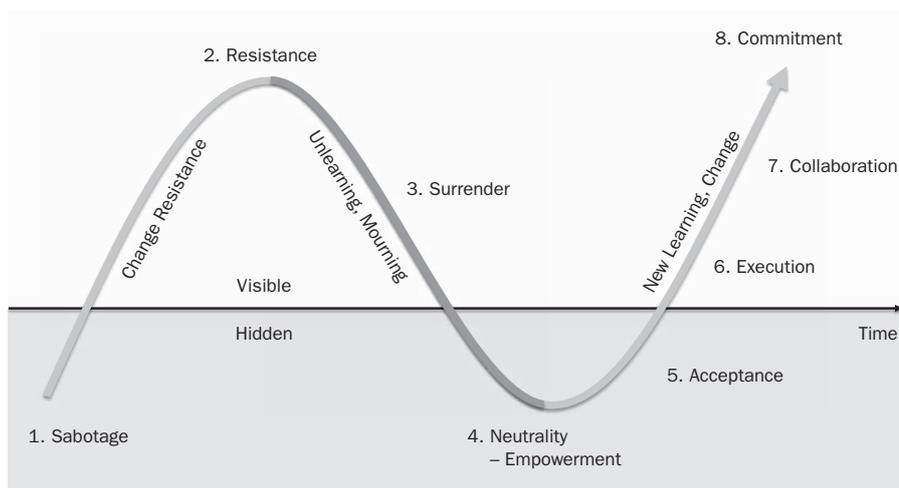
Various e-learning methods provide significant forms of study at many workplaces. ICT solutions enable new types of learning environments founded on social interaction. These environments support knowledge creation and the formation of shared understanding while they also provide the means to externalise thinking, investigate and test alternative solutions, ask, explain, give grounds, self-assess, collectively assess work, and communicate with experts (Häkkinen, Arvaja & Mäkitalo, 2004).

According to Jane Hart (2013) social learning includes social training and social collaboration. Social training refers to the use of various social media tools in learning situations that have been purposefully set up – this means the systematic building of learning communities. However, these learning environments do not guarantee social learning. In addition, we need social media work environments to support the collaboration of study groups, work teams or projects. These environments allow the participants to continuously share what they have learned through the work and to structure knowledge together; in other words, the participants are able to build team- and project-specific communities of practice.

Social learning consists of open discussion, cohesion among individuals ➔







Arikoski and Sallinen use the concept of wave of change to depict the phases of change processes and the degree of employee commitment.

Changes travel from resistance and unlearning to learning and the implementation of change.

and groups, and strong, emotional personal experiences. Meaningful discussions can be initiated in such communities only in which discussion is open and learners feel that they are able to confidentially bring up incomplete ideas to thereby extend their own expertise. Social relationships create a sense of belonging, support free expression and maintain cohesion, but this is not necessarily enough for any professional development to take place (Garrison and Vaughan, 2008).

Social interaction does not suffice to maintain a goal-oriented approach to learning. High-quality learning requires reflection and expert support as well as the application of the learning to problem solving. We need different kinds of study paths and possibilities to test our learning in genuine problem situations.

YOUR PEER NEAR YOU

When we are at the level of our work community recognise the fact that we all have weak points in our competences, we can also realise that similarly, we all have certain competences, and together, we can cope with anything new.

A new work culture involves us in many changes, and different people proceed at different paces in change processes. Finding a common direction and will are crucially important – we are managing change and the creating a common work spirit.

The following diagram of the phases of change, by Juha Arikoski and Mikael Sallinen (2011, 71), is eloquent. They combined the stages of commitment by Kurt Lewin to the key phases of change processes. Changes travel from resistance and unlearning to learning and the implementation of change.

At all times, participant commitment varies as to its degree and form. Participants' states of minds and attitudes are not always visible, or they may not be correctly interpreted. At times, it may be difficult to communicate with other individuals simply because they are experiencing the wave of change at a different point in the process. Some people may even become stuck at certain points, unable to proceed. Therefore, it is important to find the right words and a common language as well as the mental state that together allow the expression of pain and inertia relating to changes. We all proceed at our own pace.

The objective of staff training is to promote the key objectives that have been agreed on together. Training can support the wave of change and the respective change management activities, but training cannot dictate the direction or implement any real changes. Any real change will require that the work culture of the work community move on to a new phase. Staff training often faces the same problem that new, eager employees face when they enter working life: one single, eager individual cannot change the working mode of the entire staff. Eager newbies are integrated into the old patterns.

Personal learning environments, learning networks and communities of practice together with open educational resources enable learning to be blended with work. Social learning will make room for itself while we commute and also in the weekly routines of our work communities. Stopping to meet one another and to reflect will open surprising new vistas for us.

When we collaborate, change becomes associated with meaningful future goals.

Instead of compulsory change, we are allowed to encounter genuine visions and a desire to change. We may work to clarify issues together with those that are walking the same road with us. We find ourselves empowered when there is a plan and a shared goal. Collaboration among colleagues also strengthens our professional identities, our mutual trust and our trust in ourselves. It fortifies our motivation and endurance in the face of uncertainty and obstacles that are, nevertheless, normal parts of our lives. ●

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TEXT | ARI-MATTI AUVINEN | Researcher | The Association of Finnish eLearning Centre
 PICTURES | THINKSTOCK

In search of a future learning concept

The research project *Työelämä oppimisympäristönä* – Working life as a learning environment, casually dubbed Tyyne, studied working life as a future learning environment. The key conclusion to be drawn from this study is that multi-faceted, extensive and continuous learning will be the most essential aspect of all work in the future. It was highlighted that work in the future will clearly be community-based in nature, and expert tasks conducted alone are already vanishing. Information processing and new learning are almost without exception involved in all current and future professions – including those that are usually not considered knowledge-intensive.

FUTURE WORK ENVIRONMENTS AND LEARNING

High standard in competences of individuals will still be important in future work environments, but individual expertise will need to be related to the collective competences of the work community. The fact that individuals may belong to many different work communities at the same time and assume different roles in them creates a new challenge in future work. Because learning in work environments will change focus from the development of competences of individuals to the development of

competences of communities, new competences are required in the management of work communities, in the supporting of the daily learning in them, in the development of learning networks and in the management of the learning itself.

Learning will change in character also because learning in future work environments will take place at all times and everywhere – learning cannot be limited to a certain time and a certain place. Learning will break away from course centres and training schedules. Work will be learning and learning will be work; the borderline between the two is becoming artificial.

Various ICT-based solutions will become more important in working-life learning than ever before. The key trends that affect learning include e.g. the maturing of augmented reality applications and services, the embedding of different types of learning resources in tools and structures, and the fact that mobile technologies have diversified and become more efficient.

More developed information and communication technologies increasingly enable the automatic saving and analysis of many aspects of our work. It is also an increasing trend that people measure their work and wellbeing on their own. These trends create opportunities for new types of learning in which individuals and work com-

munities reflect on their actions in real time as well as over the long term.

LEARNING AND THE REVOLUTION IN THE CONCEPT OF WORK

We can assume that in future society, a major part of the population will not be employed in the traditional sense. However, people working in different ways and in different contexts should function as active, networked learners. We must take care that people such as sole traders and people employed by microenterprises and small public organisations are included in continuous learning activities.

The diverse, continuous learning of individuals is highly significant as a facilitating factor for professional mobility and, therefore, it is also significant in the dynamics of the labour market. Even in the near future, individuals will almost without exception change professions during their careers and therefore, continuous learning and self-development form the key elements of individual careers and the flexibility of the labour market. ●

FURTHER INFORMATION

This article is based on the report of the TTYNE project and the project's recommendations. The entire report is available at the address www.eoppimiskeskus.fi/projektit/tyyne.



Digitalisation revolutionalises our conceptions of knowledge and learning

The development of the digital world offers us a great number of new types of tools to support our thinking.^[1]

In science, the application of the theory of complex networks to explain the functioning of networks, whether composed of neurons or human individuals, allows us to understand in a new way what knowledge and learning mean. Such an understanding may have important application areas in organisations focusing on knowledge-intensive or creative work.

From the point of view of individuals, the most obvious cognitive consequence of the growth of the digital world relates to memory. According to recent research, individuals have started to include dimensions of the digital world in their personal memory systems^[2]. They no longer commit items to

memory because they know that they can always retrieve them from the Internet^[3]. Therefore, the constant testing of memory at school is now seen by many as rather senseless. Other cognitive skills^[4] such as flexible thinking, creativity and self-direction are considered more important^[5].

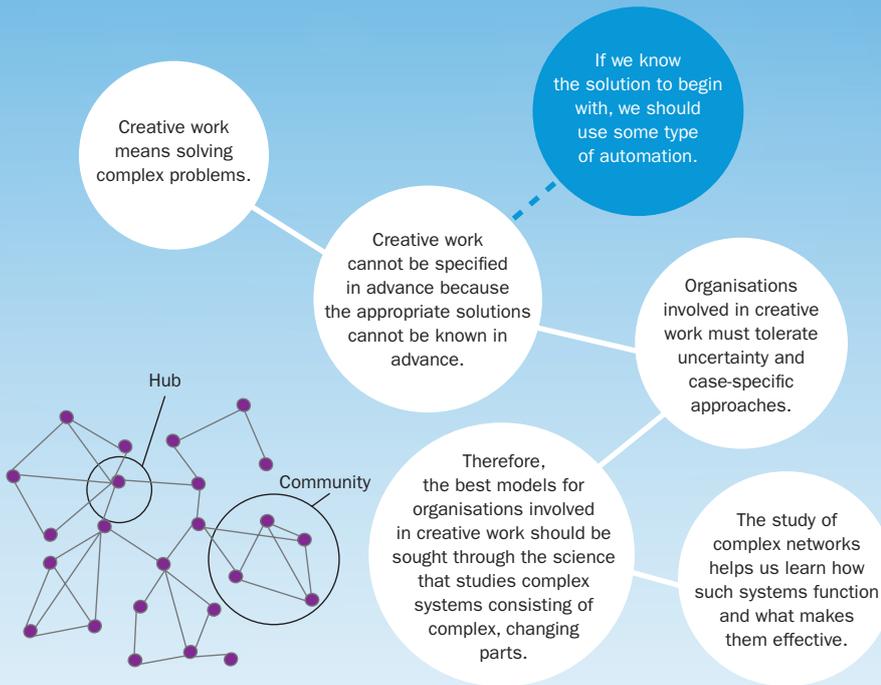
Digitalisation and an increased scientific understanding of the operation of complex networks challenge our concept of cognition even more widely. The study of complex networks has yielded information about how such networks, whether composed of neurons or individuals, organise themselves effectively^[6]. Instead of focusing on locating our functions in our brains, neuroscience has transferred its focus to the study of cognition through functional networks originat-

ing in different contexts and the connectivity of the parts of these networks^[7]. Neuroscientists now believe that the functions of our brain such as memory, perception and cognition are created through complex and partially random interactions among the various network parts.

Therefore, knowledge cannot be thought of as a concrete item to be stored either in a memory or on an Internet page – instead, knowledge is the (unique) consequence of the interaction among the members of a network, be they neurons or individual human beings communicating on the Internet.

However, complex systems are always limited by certain kinds of structures. On the level of neural networks, limitations

WHY IS THE THEORY OF COMPLEX NETWORKS IMPORTANT FOR WORK ORGANISATIONS?



exist due to the structure of the brain while on the level of human interaction limitations to interconnectivity may be caused by e.g. physical distance. It is precisely through the elimination of the limitations to communication caused by physical distance that the digital world has created unforeseen possibilities for individuals to form knowledge-producing networks that learn.

From the viewpoint of information work, questions relating to the creation of knowledge are particularly relevant because the value of a product is based on the fact that it is new, in other words, that it causes learning to take place. Learning, on the other hand, requires that all parts of the network are free to connect and be self-organised effectively according to situational demands.

The application of the theory of complex networks to work organisations is a relatively new trend, and it is difficult to provide simple recommendations. Ideas relating to complex networks may prove productive when considering, in particular, encounters between employees and clients, and organisational structures. If knowledge, by nature, is a characteristic in the operation of a complex network, do working-life networks composed of people have sufficient freedom to self-organise in a contextual manner? Do work organisations grasp the manner in which value-creating networks are formed? In which ways could obstacles to connectivity between e.g. employees and customers be removed? •

Examples of complex networks

- Neural networks
- Social networks composed of individual people
- The Internet and the World Wide Web

Characteristics of complex networks

- Network architectures come about through constant evolution.
- Their structures are irregular but limited.
- Short distances among members ensure speedy information transfer.
- The relevance of individual members can be measured through the number of their connections (highly networked members are called hubs).
- Close communities are formed within networks...
- ...but the communities are still interconnected, which accelerates the information transfer.
- The diversity and plasticity of networks make them sustainable.

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MANAGING CROWDSOURCING – what did Iron Sky teach us?

For us Finns, the most familiar term for community-based activities is *talkoot*. Talkoot is a term for communal work in which everyone pitches in to help. This tradition goes back far into the days when Finland was mostly an agrarian society. We crowdsourced long before the inventor of the Internet was a twinkle in his father's eye. The management of crowdsourcing is easiest approached through the concept of talkoot. How do we keep participants happy and productive?

LANGUAGE & CULTURE

LEARNING FREE OF CHARGE AT ANY TIME

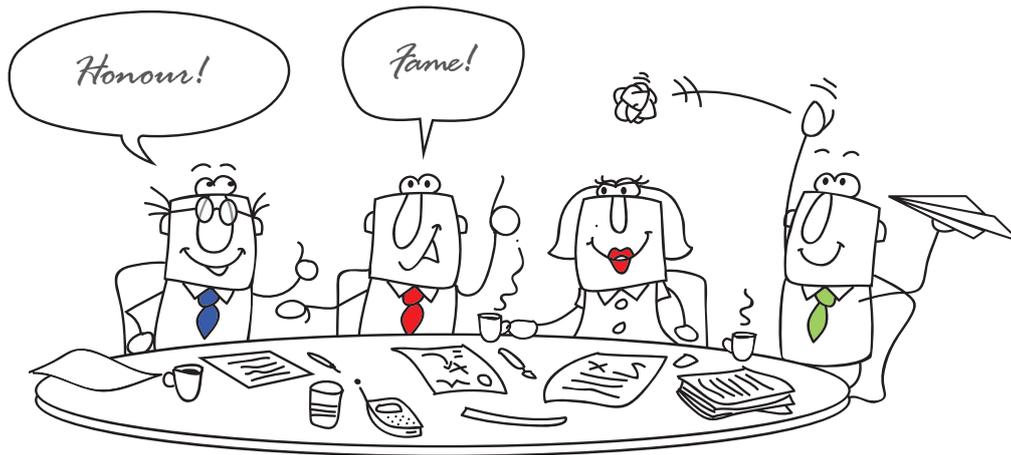
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It has been customary to reward this sort of communal work with home-made food; a favourite meal at a talkoot is soup, because soups are easy to prepare in great quantities for large groups of helpers. Often, beer and other alcoholic beverages are also served.

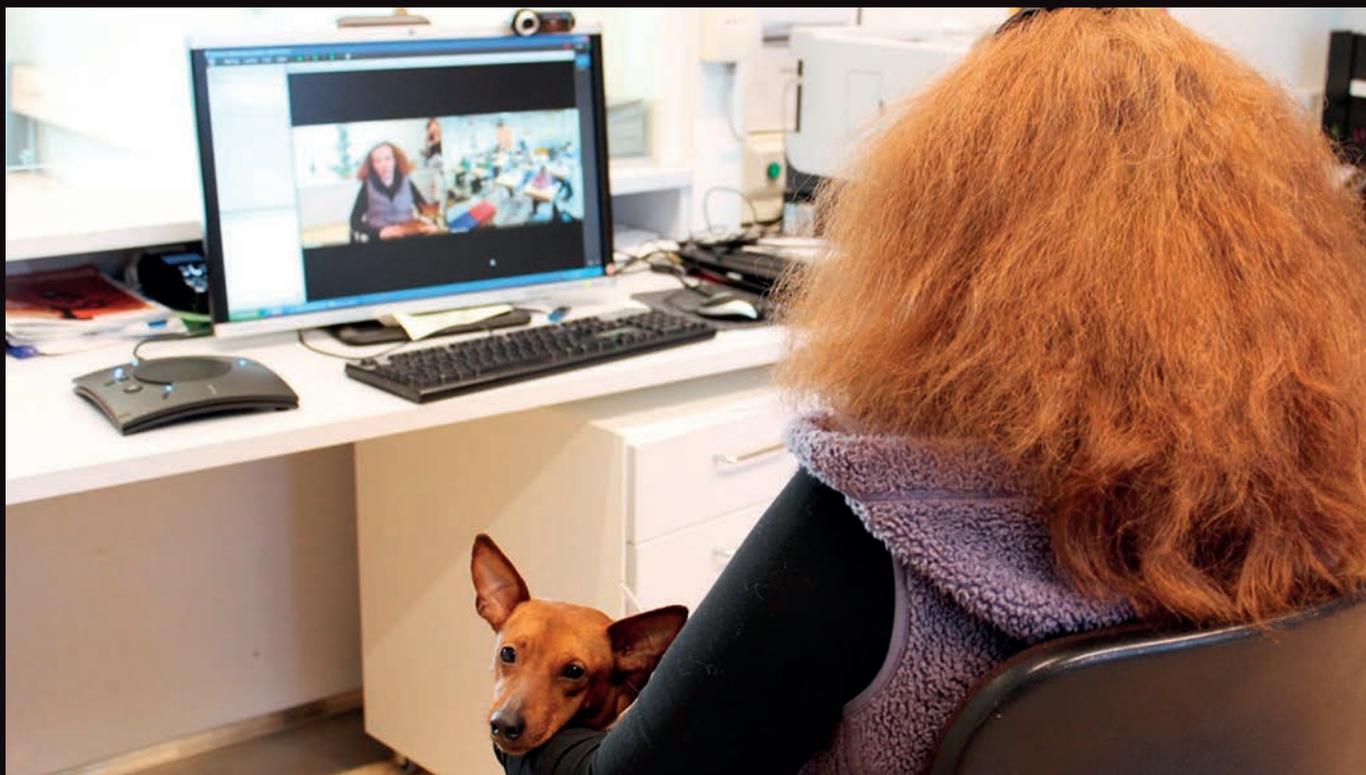
Soups do not travel well in network cables, so we must reward through other means in the web.

Can we use money as a motivator in crowdsourcing? We are used to receiving salary for our work, but bringing money into talkoot easily leads to problems. Motivation for participation in these events comes from matters very different from earning a living. If money is brought into play, the monetary compensations available in any talkoot budget rarely correspond to the amount of work that people actually contribute. Crowdsourcing often involves collaboration and building on the ideas of others – and in that situation, rewarding one participant with money easily causes friction among the participants. However, the greatest problem is that monetary rewards often attract participants who are not prepared to contribute any real amount of work. The same problem occurs with rewards given through lotteries and competitions. Any web competition will rack up half-professional lottery participants. In Iron Sky, we randomly rewarded community members, but our goal was to build commitment – we did not use competitions to entice new participants to join. Competitions were kept apart from crowdsourced work.

What sort of rewards work, then? Even if they are not rewarding enough in our daily work, honour and fame seem to make great motivators in voluntary work. People are willing to go through a surprising amount of trouble to gain fame. The strongest motivator to participate in any talkoot, however, is the end result of the work. The best talkoot targets benefit all participants. In crowdsourcing, such benefits could be brought about by, say, open source software that are created to fulfil the needs of their developers. Movies and other creative projects are often seen to be founded on people's desire to see the end result and their own contribution in it on screen. Internally arising motivation is also beneficial in that it makes the work self-directed to a greater degree.

In managing crowdsourcing, we must try to make participation in the talkoot event fun. It goes without saying that we should make our appreciation of their work clear to the participants. It is great if the community manages to hold onto a good work spirit, and participation is entertaining and rewarding. ●





BLENDED DISTANCE EDUCATION challenges us to change

What do we mean by distance education? Do web courses count as distance education? How about recorded materials and taking place in real-time? We cannot avoid these issues when we present the concept of distance education. People's ideas of distance education vary and the scopes of their views may even be surprisingly narrow. In our coordinating project EKO we usually speak of blended distance education, which is a concept that includes many options and opportunities.

Distance education, for us, means all education in which the teacher and the student are physically separated. The components of their interaction may or may not occur in the same point of time. We may well ask now if social media counts as distance education. Social media gives us blogs, Facebook and Twitter presences, many sorts of learning environments and, no argument about it, distance activities. We may all decide for ourselves where we draw the line.

LANGUAGES AND RELIGIONS ARE TAUGHT AT DISTANCE AS EARLY AS THE FIRST SCHOOL YEARS

There is a great deal of discussion ongoing about the restricted selection of languages in Finland and the overpowering force of the English language. The worry is valid, because the number of less common foreign languages available in our schools has decreased due to e.g. municipal pressure to save money, a lack of teachers, and long distances. We have many small schools who would like to offer, say, Russian and French, but their student groups would

be too small, and it would be difficult to find qualified teachers. Real-time distance learning offers effective help in this situation: students from different schools and even different municipalities may attend class together. Teachers may come from anywhere in the country, though most often, they are located somewhere nearby. Learning results, by the way, equal those attained in contact teaching.

Several languages are taught in Finland in the basic and upper secondary school grades. Distance learning in the Sami language already has long traditions, with

Spanish, French, Swedish and Russian following. There are opportunities available that we have not taken in e.g. native language instruction for students with immigrant backgrounds. Distance learning language clubs have been successfully experimented with: we have a distance learning Chinese Club convening for the third year in row in the areas of Turku, Kokkola and Raisio. Distance learning clubs could meet for maths, students' native languages and even environmental studies. If children go to their computers after school anyway, why could they not attend distance clubs?

Teaching religions and ethics over the web works well. Distance education in the Greek Orthodox religion involves even first graders. Naturally, their inability to write yet presents some challenges for their teachers. Ethics students are often scattered among different student groups in their schools, and arranging classes for them may be difficult. When distance learning is applied, these students can be convened from their units to attend classes together under qualified, enthusiastic teachers.

In later grades, schools are not required to provide in-person supervision, and students may attend distance classes from any location. Courses can be designed blended in form, in which case they contain assignments on learning platforms, various recorded materials, video clips and distance teaching in real-time. Web courses and blended courses are commonplace in many upper secondary schools, and they prepare students for continued studies and working life.

SPECIAL SITUATIONS CHALLENGE SCHOOLS

Students have the right to receive education also when they are suffering from long-term ailments. In their role as education providers, it is the responsibility of the relevant municipalities to arrange this education. During students' incapacitation, distance learning is a method for students

to maintain their social relationships and to go to school with their classmates. More important for them than good grades is that they get to meet their friends at least at distance. The risk of marginalisation is increased with long absences. Distance learning time tables may be specifically tailored for students that have fallen ill.

Any school, any class and any teacher may encounter illness. It would be great if we had a national system to provide assistance and instructions for setting up distance learning in special situations. Currently, various development projects carry this responsibility. In the long term, project funding is not a sustainable solution. What would you do if a student of yours had to skip school for several months due to an illness?

VIRTUAL GUESTS AND VISITS ENABLE FIELD TRIPS AT NO COST

Many school subjects benefit from concise expert presentations, factory tours or, say, police briefings. Virtual guests may be of help in career selection; they may describe e.g. researchers' work or represent the third sector in matters of, say, drug education. Visits of virtual guests may be prepared for in advance and they may be worked on after they have taken place. These visits may be recorded and watched again if necessary. Those who were absent during the actual visit can be included in this way. A school class may take a trip to the library, museum or animal shelter. A virtual visit will not be the same as a live one, but due to a lack of resources or long distances, it is not always possible to travel physically.

A good example I can give is a field trip to the premises of the Animal Welfare Association in Turku. We saw the strayed wild animals in real-time through a tablet device, and the animal welfare inspector answered the students' questions. There would have been questions enough for many more lessons. Similarly, upper secondary school students could visit a cultural destination.

It is a long and expensive way from Northern Finland to the museums in the Capital. Why not take the opportunity virtually?

THE VIRTUAL WILL NEVER EQUAL THE LIVE

Very often we hear someone complain about people spending their time on the web, reminding us that people need to meet in real life, that everything cannot be done at distance. Social relationships will suffer and teachers will soon not be needed at all... Who says that we should work at distance only? We do not need to escalate issues and search for the worst possible scenarios. Working at distance and distance education can form important, valuable extensions to face-to-face encounters. Because we cannot always be physically present in the same room, let's at least be present for one another virtually. When I see, hear and learn through the web, I gain more from the world around me. ●

The writer is the project manager and distance expert in a national distance education coordination project.

CONTACT DETAILS:

Päivi Luoma | paivi.luoma@turku.fi
+358 (0) 50 4323 514

Link to the coordination project website

www | etaopetus.fi

Additional information about distance education in languages

<http://info.edu.turku.fi/virta/>

Additional information about special situations

<http://sairaankinselviaakoulusta.wordpress.com/>

Additional information about virtual visits by experts

<http://www.tat.fi/joko-olet-kuullut-virtuaalisista-asiantuntijavierailuista/>





Are we creating social networks for a current reason or for later use?

In this article, we will present some ideas for developing networking and information sharing in working life. These ideas are based on the research we have carried out in our coordinating project *AKTIIVI plus*, in which we have studied the dissemination of good practices in a network of development projects. There are many variables involved in effective networking – its success may even depend on a single key person in a company.

NETWORKING IS A HOT TOPIC

Networks and networking have become a hot topic in business-related activities as well as in informal situations. Networks are seen to solve most of our problems, highlighting the idea that anything is stronger when connected to something else. However, the term *network* is used very loosely. In today's terminology, *networking* and *network* very often refer to social networking. The major online services in the mainstream of the Internet are typically associated with social networking. Facebook, Google and Twitter form good examples of this. However, social networking as such does not necessarily have anything to do with online environments or even information technology. In particular, social

networks do not evolve automatically when effective tools are made available.

In this context, we would like to define *network* as a construction of interactive interpersonal relations. A network consists of a group of people who work in projects and stay in contact with the other members of the network through interaction (Berends, van Burg & van Raaij 2011). Interactive relations are formed and maintained through – interaction. Interaction is the cohesive force in any network.

NETWORKING WITHIN AND AMONG PROJECTS

The *Active Citizen of the Open Learning Environment*, an ESF development programme, focuses on activating people in different

sorts of learning environments. This ESF programme funds 27 different projects (see www.aktiivi.info).

One of the objectives of this development programme is to establish network projects, but it also aims to have these projects network among themselves. Of the 27 projects that have received funding from this development programme, 17 are network projects with 8 active parties involved, on the average (number of parties ranging 3-13). Projects managed by one organisation have produced results through networking and crowdsourcing. Networking within projects has worked well, and great emphasis has been given to the development of networking itself. Collaborative networks have been established among

member organisations, local networks have been created for the implementation of sub-goals, and expert communities of project participants have also been born.

Inter-project networking is supported by the coordinating project AKTIIVI. This coordinating project is seen to play an important role as the enabler for networking; the face-to-face and online meetings under the various themes are felt to be beneficial. Networking is seen to help in disseminating and planting the common practices in participants' projects. The role of the coordinating project is felt to be essential as regards communication, because the participants do not have the time to follow other projects systematically while they are deeply involved in their own work. It is good to have someone collect the essential points from other projects so that all may make use of them in their own work.

EXPERIENCES OF NETWORKING

As our projects have proceeded, several new collaborative models have been created together with networks that cross the boundaries of industries. The key elements that lead to cooperation include the tendency to network and the active presentation of one's own work and its objectives on various forums. The project network has established several models for different levels of collaboration among the participating libraries, schools, museums, organisations and other-than-formal educational institutions. The target groups of the projects were selected to successfully involve e.g. entrepreneurs' organisations, village associations, the Criminal Sanctions Agency, cancer organisations, municipal youth work departments, trade unions and the Association of Finnish Local and Regional Authorities. The creation of networks requires time and strong networkers – project managers play a significant role in the structuring and maintenance of the necessary interaction.

Collaborative networking has helped our projects disseminate information and good practices while it also has facilitated the establishment of new projects and new collaborative models. The use of open-source online tools has improved the quality of working and enabled the reaching of the common goals in a fluent manner. During the project, we have established well-functioning local networks that even today can be made use of in other development activities, showing that these networks will live longer than our project. In addition, the adoption of new,

networked ways of working have increased peer learning and reduced hierarchies.

Our inter-project networking has been advanced through diverse common events and commonly developed contents. On the other hand, our networking has been encumbered by bureaucracy, travel rules, a lack of time and the geographical distribution of participants.

Small projects have gained the best benefits from the networking. The small number of staff in these projects has created a need for help from the network while it at the same time has made possible dynamic reactions to any events in the network. The participants in the larger projects have had difficulties in disseminating the information from the development project network among the implementing sub-project participants, and those participants do not necessarily see the development project network as significant for their own implementation-level sub-project network.

The fact that our projects have started at very different points of time during the period 2008 – 2013 has presented challenges for networking. Projects that have been included for a long time have learned about one another and established relatively stable networks. New projects do not necessarily know

about the work and competence areas of the others. The coordinating project plays a significant role in the dissemination of good practices and in urging the relevant parties to network. The new, extensive, collaborative network has helped development work gain depth and supplied new points of view. Virtual meetings have added a new dimension in this way of working while they also have improved the possibilities for networking.

There is a clear will to continue and stabilise collaboration, and many of these networks are continuing their collaboration in different forms after the projects end. This collaboration, started in a systematic manner, is now hampered by the worry experienced by many participants concerning the continuation of their funding. Sometimes, the success of collaboration may depend on factors such as an individual participant changing jobs, or duties changing within an interest group. We have not had the time to disseminate project experiences and networks to larger audiences during the project. In a way, this shows that networks are very dependent on the individual participants; it is not easy to transfer work to other participants or to externalise work to new parties. This is understandable as networking is largely founded on trust. ●

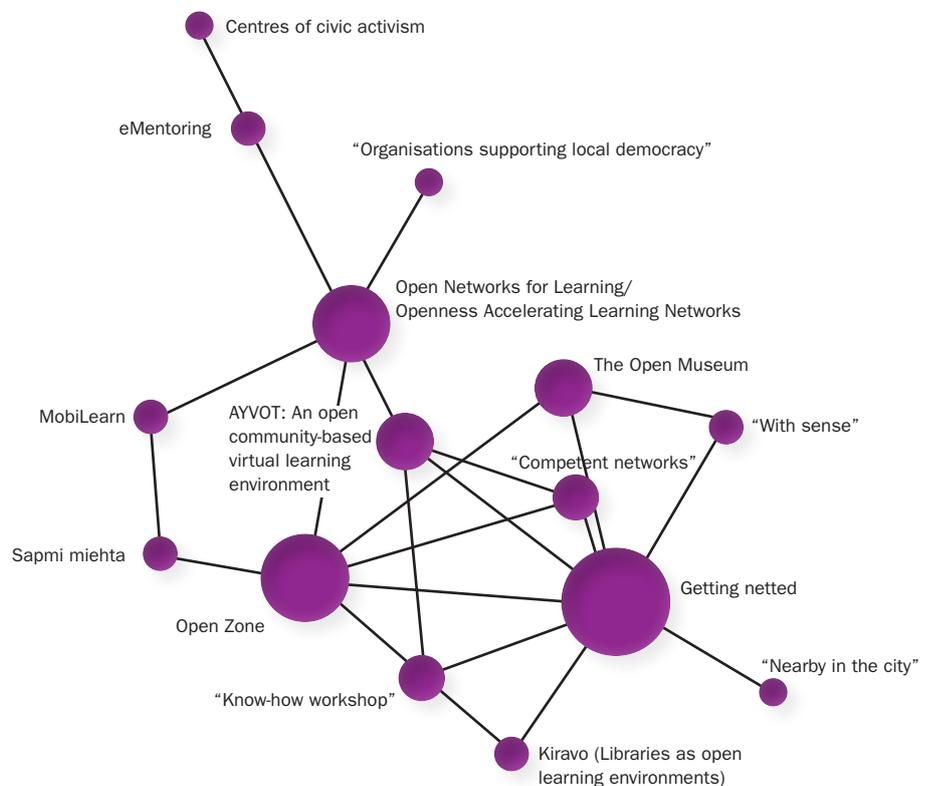


FIGURE 1. Network chart on interaction among projects.

Sources: Berends, H., van Burg, E. & van Raaij, E. M. 2011. Cross-level network dynamics in the development of an aircraft material. *Organization Science* 22 (4), 940–960.

Social media and Finnish general education in the year 2023

Finnish schools have introduced social media rapidly and widely during the past few years. The numerous pilot learning projects relating to this development include, for example, flipped classroom education and learning; authentic and mobile environments; personal learning environments (PLE) and networks (PLN), and phenomena-based and problem-based learning (PBL).

These pilots are steered by a national social media coordination project for Finnish general education, SOMY. SOMY coordination is funded by the Finnish National Board of Education (FNBE).

FUTURE STUDIES METHOD eDelfoi

As a part of SOMY coordination in the autumn 2013, we are now conducting a future-oriented research project focusing on how the Internet and social media, in particular, might impact the Finnish school and Finnish education by the year 2023.

Our research questions are: 1) What kinds of pedagogical models are emerging with social media? 2) What benefits do social media bring to the quality of learning?

Our main method is the eDelfoi research tool, which is based on the Delphi method. eDelfoi is a multi-purpose questionnaire for gathering a wide variety of opinions concerning possible future paths relating to a desired theme.

The Delphi method itself is a systematic, interactive foresight method which relies on a panel of anonymous, independent experts as a form of collective intelligence. The main benefit of eDelfoi is that it produces probable and innovative visions and various paths to the future including collective evaluations regarding them.

The eDelfoi tool was developed by Otava Folk High School and Future

Research Center of Turku School of Economics in Finland.

Our eDelfoi research project is based on four sets of questions: 1) learning and pedagogy, 2) education materials and learning methods, 3) authenticity of information and 4) the future school environment.

SOME PRELIMINARY RESULTS

Our eDelfoi study is still ongoing. However, we still wish to present some preliminary results before the Online Educa Berlin 2013.

The first set of our questions studies what will be the most valuable skills for teachers and pupils to have during the next ten years. It has been said that many of today's pupils will work in professions and jobs which have not even been invented yet.

Our specialists think this sort of development highly likely and even desirable. More than they do today, Finnish schools should emphasise interactive skills, problem solving skills and the application of knowledge. On the other hand, many think that a general education still creates a foundation that supports the application of new types of skills.

The concept of personal learning environments (PLE's) with individual studies at pupils' own paces, enabled by social media, caused great dispersion in our study. In Finland, we have a strong culture of equality created by our comprehensive school



system. Individual learning was considered a good development in the future as long as it would take place within the community and group learning.

The second set of our questions studies what kind of learning resources will be used in the year 2023. Will all learning resources be open on the Internet, produced by peer networks free of charge for purposes of flipped learning?

Our eDelfoi experts agreed that many of the current pedagogical trends will be everyday matters in ten years, even desirable to have in Finland. Such trends include authentic and mobile environments, flipped classroom, gamification, invisible learning as well as phenomena-based and problem-based learning.



Kiltakoulut, Guild Schools

– for active vocational students with working-life skills

In the Guild Schools model, active students acquire efficient professional skills and prepare for working-life using social and mobile media. The enterprising attitude in these schools towards learning and getting down to work takes their students far. The teamworking and work counselling skills in Guild Schools are just right, and the skills students acquire while they learn to learn, such as observing, documenting and reflecting, will support the growth of their professional skills throughout their careers.

The Kiltakoulut – Guild Schools project was initiated because there was a need to make teaching and learning methods more modern and more motivating for students. The key principles in Guild Schools are working-life orientation, sensibility of studies from the students' point of view, and the teachers' eager but still critical and

development-oriented approach to teaching. Peer learning and master–apprentice relationships occupy key roles in this model. Work is conducted in different Guild Schools in slightly different ways, but the key principles are always the same.

The Guild Schools model was developed in eager collaboration through social media and live meetings. The developers of these learning environments and teaching methods have topped their previous performances time after time. Students and teachers have been active and have worked towards common goals with the aid of lifelong learning, research-orientation, team formation, project work and positive energy.

Actually, nothing radically new is being invented in Guild Schools, but good, old, familiar methods are investigated and free-of-cost social media tools are applied to

the storing and dissemination of information, as seen in Figure 1.

PIONEERS IN SCHOOL ORGANISATIONS

The organisation of Guild Schools in vocational schools has been the result of the passionate work conducted by teachers. Developments lead to changes, and often the uncertainty of parties external to processes leads to confusion and resistance to change. Therefore, those involved in development processes have needed a strong belief in what they are doing and an entrepreneurial spirit in the acceptance of risks.

The vocational schools in which Guild Schools operate value their teachers and trust the teachers' professional and pedagogical skills. Teachers are encouraged to develop their identities as educators in terms of pedagogy and their specialisation subjects equally. Competence development

Figure 1. Guild School tools

These tools can naturally be applied for other things as well, and they can form useful aids for studies even more widely. Today's trend seems to be that students bring their own mobile devices and use them as learning aids.



- Wiki = Study book, materials storage. (Any storage place, e.g. Moodle, Weebly, Google drive.)
- Blog = Student's notebook, learning diary (Currently, Blogger is an easy-to-use platform available in Finnish, and its password provides access to YouTube as well.)
- Mobile device = pen, storage medium
- Facebook or some other community-based service in social media = extension to group instruction

activities are available for teachers to improve their Guild School skills.

In their book *Yrittäjyyskasvatuksen uusia tuulia* (New Directions in Entrepreneurship Training)(2006, 122), the editors Paula Kyrö and Anna Ripatti encourage teachers to develop their work with an enterprising spirit, always ready for innovative experiments. Guild School teachers exhibit such an orientation to a high degree.

When we study models of Guild Schools' implementation and operation while comparing them to theory, we see that collaborative pedagogical models work well and are applied in Guild School education. Two types of features can be observed highlighted in these models: collaborative and entrepreneurial. In student-tutors, we can even distinguish the model of the cognitive apprentice.

Development activities in Guild Schools take such a variety of forms that we cannot name one main pedagogical model or method; in a more extensive view, the combinations we see largely fulfil the criteria of integrative pedagogy. The favoured implementation models are, clearly, projects and orders from customers.

TEACHER COMMUNITIES IN GUILD SCHOOLS

Guild Schools present many entrepreneurial features. Could it be only a coincidence that the teachers involved in Guild Schools approach their work, according to my observations, in an entrepreneurial manner?

The viewpoint of the pedagogy of risk. Learning to take risks forms an interesting object of study as such, but we will not

focus on that; our focus is on *Pintakilta*, the Surface Treatment Guild, which is one of the Guild Schools. We will study the learning environment, methods and those process features visible to us that seem to yield good learning results and produce elements that are applicable to different areas of students' lives, helping them in a comprehensive way to go forward. These various areas are included in the conception of values in the philosophy of vocational education, presented in Figure 2 below.

TEACHERS TAKING ON RISKS

In terms of its design, implementation and assessment, the foundation of vocational education lies in the national core

curriculums leading to vocational qualifications. According to Kyrö and Ripatti (2006, 118), risk-taking involves the designing of such standard education as systematic processes in a manner that allows student participation in the designing of the learning objectives and the learning process. In such a case, the teacher is taking a risk. On the part of the teacher, this requires endurance, daring and trust in that students will be active and assume the responsibility of their own learning in accordance with the set objectives. (Kyrö, Ripatti 2006, 122.)

When teachers organise and anticipate their teaching, they can see many of the elements before the implementation of any actual learning processes starts. Teachers

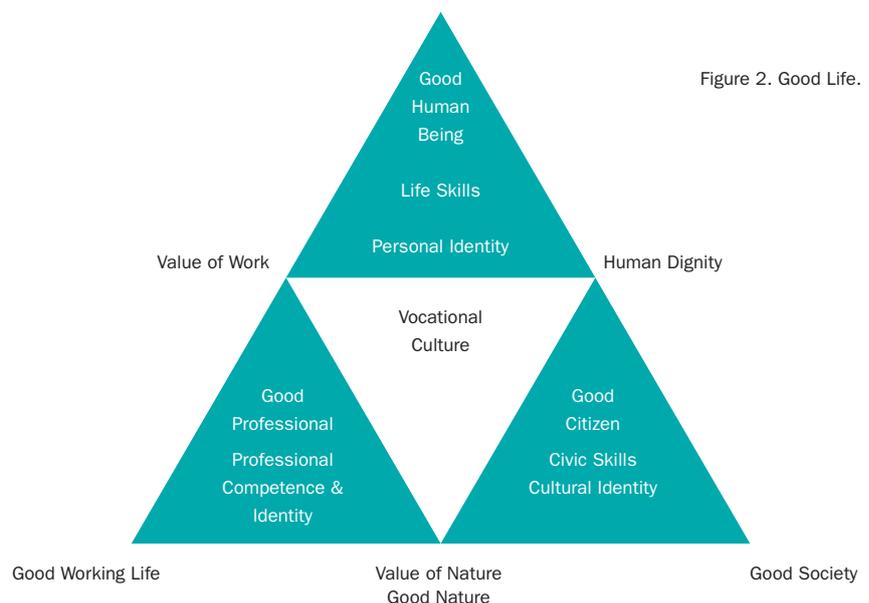


Figure 2. Good Life.

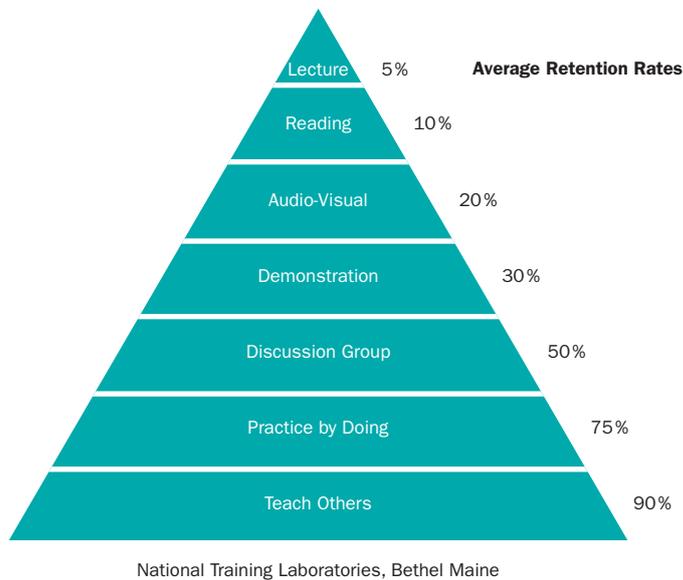


Figure 3: The learning pyramid

must set up several implementation process models that finally unite into one guiding frame during the actual learning activity; which frame is actualised will depend on how students work and focus themselves in the direction of the set objectives. Teachers must be particularly sensitive and react easily to the different needs of their various students so that teachers may choose the appropriate means to activate their students to work in a goal-oriented manner.

LEARNING ENVIRONMENTS SUPPORT AUTHENTIC LEARNING

Guild School learning environments resemble real businesses. Students are given customer orders to complete in the form of projects which they implement together, searching for information and practising their skills. Students plan their learning, depending on the type of their assignments, either longer term or even per day if they have short assignments. Students write blogs to describe the understanding and competences they reach. These short descriptions of students' learning channel information to their peer groups, and short video clips make visible the various ways of working.

STUDYING IN THE GUILD SCHOOL STUDENT COMMUNITY

Cooperative skills and common rules go hand in hand. Teachers take students to their own workplaces where the students may study skills that the teachers master. We see the teachers' first steering challenge here. The teachers challenge their students to collaborate in order to reach the objectives required to learn a profession. The common rules applicable in all Guild Schools are supportive of the community-basis in that

everyone is expected to assume responsibility for the others. Nobody will be left alone.

Guild School students are active parties in their learning.

The learning pyramid in Figure 3 shows us excellently the ways in which students work in Guild School environments. The activities in the three lowest sections of the picture take place in Guild School workshops, and the fourth section is seen in workshops and students' blogs.

All teams have student leaders or tutors nominated. Students plan their activities and have their teachers approve the plans. The teams then implement their plans in which every student has a personal responsibility area. To succeed in their work, students must depend on one another. It is almost unavoidable that students need to teach their own work to their fellow team members.

Errors are acceptable and understood as positive for learning when they are discussed with teachers; if students resolve problematic situations themselves, their solutions are documented in work process descriptions.

Regarding the items in the four topmost sections in Figure 3, demonstrating and sharing of information would seem to be initiated also by the students themselves. When giving feedback concerning students' blogs, teachers present and share good practices with student groups, explaining the reasons behind them and structuring the attained knowledge, understanding and skills.

USEFUL THINGS TO TAKE TO WORKING LIFE FROM GUILD SCHOOLS

Guild Schools are like sports cars assembled of good, modern components. This is an electrifying point. The development of

vocational education and the research conducted in the various areas of this education have produced, enriched and clarified excellent teaching methods and pedagogical models that can be made use of in a multitude of ways when learning professional skills. In addition, the user-friendly applications made available to us by the recent developments in ICT technologies can easily be introduced for use even by teachers with relatively minor ICT skills if these teachers only have the will and the daring.

In Guild Schools, information and communication technologies and social media applications have produced sets of tools that support learning. These tools open for students many versatile channels for learning and community-based information structuring, while at the same time making their learning processes visible and documenting their learning in the form of learning portfolios when they enter working life. All this is excellent capital in the job-seeking markets.

THE GUILD SCHOOL MODEL IS SPREADING AROUND FINLAND

The different parts of the Guild School model are available on a public website (kiltapeda.blogspot.fi). Guild Schools organise supplementary training for teachers to help them master the entire Guild School concept. Guilds operating openly in the web are easy to monitor in order to follow their example. Students learn about the opportunities of blogs by following the blogs of others.

All teachers make their own guilds in their own manner and in their own field, using their current strengths. It is enough for a beginning Guild School teacher to master one area so that school operations may begin.

The name of Guild can be used as soon as the steps for the application of the entire concept have been marked. The greatest common denominator is the attitude. Guild School teachers' attitudes are entrepreneurial and enthusiastic.

It is also essential that students are active in structuring knowledge and skills for themselves. In addition to the subject matter, teachers must be interested in motivating students and making groups function. When the sense of working has permeated the culture of an educational institution or department, everyone involved in learning will automatically become a social and active participant. ●

The Association of Finnish eLearning Centre promotes a new learning culture

The Association of Finnish eLearning Centre is a national association open to all, always ready to welcome new members. We are an independent non-profit promoter of web-based learning; we also form a cooperation forum for developers of digital educational activities and ways of working. We promote an open culture of doing and working together.

 Our members include private persons, communities and organisations; their competences and knowledge form the foundation of our expertise. We very openly distribute this expertise for the benefit of all.

In addition to membership fees, we as an association receive our funding from various projects conducted to advance the information society and web-based learning, as well as from event productions and the sales of our services.

WE IMPACT THE DEVELOPMENT OF A DIGITAL LEARNING CULTURE

We exert influence on many levels to impact decision making so that educators and trainers might fully benefit from all pedagogical uses of information and communication technologies; we also work to create preconditions for new experiments. We stay in close contact with decision makers in the public and private sectors to make our message heard.

We also wish to advance the introduction of work methods that are independent of time and place.

WE COME UP WITH NEW IDEAS, WE CARRY OUT RESEARCH, WE SHARE BEST PRACTICES

The Finnish eLearning Centre is well-known particularly in development networks in which learning, training and new forms of work are tried out and conducted using open multichannel digital services. We also participate in many EU-funded projects such as Openness Accelerating Learning Networks.

Our projects are all similar in that we want to spread wide the best practices gained through them without hiding any of the failures.

WE PUBLISH, WE COMMUNICATE AND WE SERVE

The communication and publishing activities of the Association provide the members with the latest information concerning web-based learning; the means involved include communication through various networks, reporting, seminars and events. We publish the SeOppi Magazine in Finnish twice per year, and in English once per year.

The Association offers a diverse selection of projects, information services and events for everyone interested in the use and research of digital educational products and their development networks.

We publish our materials openly in the web. Our web service and social media channels feature a continuous information flow concerning current events and news.

Guidance and instruction form the foundation of our work. We carry out these activities e.g. through our participation in events and trade fairs, but we also have a field presence in the school world through our projects.

WE BUILD NETWORKS

We monitor the international developments in our field closely and apply best practices to our own work. The Finnish eLearning Centre is highly networked nationally and internationally. We have local and regional partners, and work internationally as well as in Finland. With the help of our networks,

we have the possibility to carry out domestic and international research and development projects. ●

JOIN US!

The Finnish eLearning Centre is a network node and a meeting point for experts in many different types of fields. You gain the best benefits from our work by becoming a member.

Join us and make a difference!

CONTACT INFORMATION

The Association of Finnish eLearning Centre
Visamäentie 33

13100 Hämeenlinna info@eoppimiskeskus.fi

www | twitter.com/eoppimiskeskus

www | facebook.com/seoppi

Niina Kesämaa | Sales assistant
niina.kesamaa@eoppimiskeskus.fi
+358 (0)40 827 6378

Piia Liikka | Project manager
piia.liikka@eoppimiskeskus.fi
+358 (0)40 860 1494

Anne Rongas | Project planner
rongas.anne@gmail.com
+358 (0)40 518 1229

Titi Tamminen | Development manager
titi.tamminen@eoppimiskeskus.fi
+358 (0)40 869 6306

Members of the Association of Finnish eLearning Centre

Organization members:

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