



Tensions in Creating an Innovative Community of Vocational Education and Entrepreneurship

Dr. Elina Oksanen-Ylikoski, Director, Communications and Development Omnia, the Joint Authority of Education in the Espoo Region, Finland and **Dr. Teemu Ylikoski**, Director of Regional Services Laurea University of Applied Sciences, Finland.

Abstract

New innovations are necessary to ensure and enforce entrepreneurship skill development and working-life-centricity in vocational education. We present an example from Finland. InnoOmnia is a multi-actor knowledge community within a VET organisation. It brings together students, entrepreneurs, and teachers in a non-formal setting where traditional roles are revamped. A number of traditional silos have been broken in order to build a co-learning innovation environment. The transition is not painless, however. Using a large dataset of text and visual content, we identify tensions relating to the transition. The tensions fall under the themes of community borders, operational culture, structures and leadership. InnoOmnia is not perceived as one community. Rather, every participant seems to have his or her own representation of it. Based on these differences, conflicts arise. Our research indicates that an innovative, entrepreneurial community inevitably contains destructive and conflicting forces as well. A key force counterbalancing the tensions is enthusiasm.

Keywords: innovation, entrepreneurial education, working life centricity, vocational learning, knowledge community, enthusiasm



1. Entrepreneurship and work life centrality in learning

Entrepreneurial education has reached a tipping point where the traditional methods are clearly no longer sufficient. OECD and the European Commission (2014, p. 5) claim that there is an apparent need for innovative solutions. New types of learning environments are needed to address all of the numerous skills a typical entrepreneur needs.

Even on a larger scale, there is an increasing demand for new types of connections between learning and the working life. The Council of the European Union (2009) has called for closer cooperation between vocational training, higher education, entrepreneurs, employers and other parties. The key reason for an improved collaboration is whether the skills that students learn correspond to the needs of the working life. The match or mismatch of the skills needed and the skills learned is both an issue of efficiency and an issue of competitiveness for Europe.

This article describes entrepreneurial education and work centrality in learning, particularly from the perspective of vocational education in Northern Europe. As one possible way of addressing the issues in working life centrality, we present an innovative example of a knowledge community in Finland.

The European debate on educational resourcing and capacity is expressed in terms of future skills. There is a consensus relating to entrepreneurs' and employers' role in identifying these skills. Unless effective communication is established between education and employers, the risk of educating people in the "wrong" skills increases. The EU Council notes that the issue is also related to sharing expertise. Educational institutes possess enormous amounts of skill, knowledge and innovation potential, which should be made accessible to entrepreneurs.

Collaboration with employers is potentially most important in the realm of entrepreneurial education and a student's growth into entrepreneurship. Entrepreneurial capabilities have a positive relationship to the likelihood of becoming an entrepreneur. Hence, it is important to identify the ways in which to improve entrepreneurial capabilities. However, research indicates that entrepreneurship is difficult to learn only based on theory. What is needed is practical experience and modern adaptations of apprenticeship. Such transfer of knowledge may be best conducted by bringing students into direct contact with real entrepreneurs. On the other hand,



difficulties relating this type of cooperation can be exacerbated in entrepreneurial contexts (Fiet 2001). Cooperation with employers is always subject to the availability of time and how easily the benefits are seen. Clearly, new types of approaches to counter the impediments would be welcome.

Students are not the only parties from whom new capabilities are needed in this context. The changing working life, new occupations, innovativeness, and new demands challenge teachers as well as entrepreneurs to learn and develop their professional skills. It is important to keep in mind this point of view when discussing working life centrality in learning. The transfer of knowledge and skills between students, teachers, and employers can have an even more pronounced role in vocational training.

The increasing pressures toward working life cooperation change the nature of learning and the structures of educational systems. As Tynjälä et al. (2003) observed over a decade ago, learning is in a shift toward the co-creation of knowledge. In this new approach, interaction between education, the working life and the society are pivotal.

As a result, education providers should transform themselves into larger knowledge communities (Tynjälä et al. 2003). In this type of community, learning, innovation and solving working life problems are simultaneous, synergic, and part of everyday routines. The requirements for the emergence of such knowledge communities are learner activity, authenticity of learning, and problem solving (Blumenfeld et al. 1991).

Rather than claiming that the phenomenon itself is new, one should focus on the new possibilities that today's society enables. Experiential learning and practical, hands-on-training are far from new phenomena, dating back to Dewey's ideals of learning by doing and Kolb's (1984) principals of experiential learning. Equally, the call for making learning more working-life-oriented dates back quite a while. Resnick (1987) noted the need for breaking down the different silos in learning and the need for narrowing the gap between informal, practical problem-solving learning and the structured and planned classroom learning decades ago. Even though the problem has been identified for a long time, the society has perhaps only now evolved to a stage where concrete examples of addressing the problem are starting to arise.



2. From vocational institution to innovative knowledge community

What would a true knowledge sharing community look like, if it consisted of seamless cooperation between employers, entrepreneurs, and education? Knowledge communities with educational institutes do not happen overnight. Cooperation should be seen as evolutionary steps that are only made possible through a common path of growth and development (author reference). As the cooperation evolves, new, practice-oriented communities arise. These can contain students, teachers, and representatives of work organisations. Such a community typically shares knowledge and skills informally in personal interaction and without adhering to formal routines (Earl 2001).

When starting to build an innovative learning environment that corresponds to the needs of the world of work, one must address certain learning-related assumptions from a new angle. Wenger (2011) reminds us that changes in cooperation go hand in hand with changes in learning. In the new, seamless cooperation, organising practical, everyday-learning experiences becomes essential. Also, managing student allocation to various projects and ensuring life-long learning opportunities begin to require more effort than before.

When participating in a knowledge community, employer organisations are also in the position of the learner. The cooperation offers direct benefits for organisations to develop, improve professional skills of their personnel, share best practices, improve recruiting and help guide strategy towards new opportunities (Wenger & Snyder 2000).

Even though the need to bring educational institutes and work organisations closer to each other is becoming a common norm, we are still far away from the point where this is self-evident and automatic (Lee & Hung 2012). “True” cooperation is often quite some distance away (Katajavuori et al. 2006, Henricksen 2012). Gupta and Govindarajan (2000) discuss the hurdles of the cooperation, and suggest it is partially an issue of lack of motivation. Sharing knowledge and skills is not always something that offers immediate rewards for the participants. Other issues are related to the overall perceived importance of sharing knowledge, working communication channels and the capabilities to receive the information.



Different operational cultures are also part of the problem. Gomes et al. (2005) suggest that this stems from different cultural backgrounds as well as differences in assumptions relating to the nature of knowledge and skills. It is not unheard of that working life participants consider “school learning” as useless for practical purposes. In a knowledge community, the value of the produced knowledge must be clear to all participants. Otherwise it will be very difficult to justify the effort needed of participation (Gupta & Govindarajan 2000).

Research suggests that educational systems and working organisations still approach learning largely from traditional silos. Students are still being sent to working-life organisations for “practical training” to learn “real” skills. Entrepreneurs are being sent to incubators and new business development agencies for training and guidance. However, the shift to a world beyond the traditional silos is becoming more and more imminent. In the future, students and entrepreneurs can obtain all the skills and knowledge they need in a shared community that enables free transfer of knowledge between all parties.

3. InnoOmnia: an innovation hub

InnoOmnia In Espoo, Finland is a knowledge community built inside a VET organisation where teachers, students and entrepreneurs share the same coffee pot - literally. All spaces are learning spaces and everyone is both a learner and a teacher. As described below, its purpose is to bring together innovation, entrepreneurship, vocational education and various development programs.

InnoOmnia's development projects pilot different aspects of 21st century vocational learning, e.g. teaching real-world skills, using mobile technology and cloud-based learning to improve learning outcomes, or learning through entrepreneurial projects.

As all the facilities are shared with real entrepreneurs, InnoOmnia staff and students, the community develops new forms of co-operation on a daily basis.

We will first describe the history and purpose of InnoOmnia and then explain its operational model and actor roles. The description is partially based on (author reference) work.

Omnia, The Joint Authority of Education in the Espoo Region is a multi-sector education provider and regional development centre with over 700 staff and 10,000 students, offering



training at 11 locations. Omnia offers vocational training to young people and adults ranging from basic to specialist qualifications, apprenticeship training, youth workshops and professional development programs for teachers, trainers and school leaders in both the K-12 and vocational training sectors.

Omnia is a forerunner in national and international education development projects focusing on systemic, sustainable solutions, and received the Ministry of Education Quality Award in 2013 in addition to recognition for the most innovative learning environment. As a UNEVOC centre, the development of vocational education both nationally and internationally is a long-term commitment. The goals of Omnia align with the goals UNESCO has set for vocational education and training. The thematic priorities being implemented are decreasing youth unemployment and furthering skills development, greening VET and taking advantage of ICT as a means to enrich learning.

In Finland as in many other countries incubators co-exist with universities to support start-ups and encourage new business development. Yet typically over 30% of entrepreneurs in Finland have a vocational background (The Federation of Finnish Enterprises 2005). In the Finnish education system, entrepreneurship has been one of the pillars for lifelong learning embedded in all vocational qualifications and implemented by VET institutes through activities ranging from annual JA-YE programs to optional courses.

With a concentration of technology and ICT companies in the area, the City of Espoo had previously focused on high tech start up support in higher education. However, when Omnia began to plan the expansion of its' newest Espoo campus, the Mayor decided that the city would co-finance a designated part of the expansion, which was to serve as a basis for diversifying entrepreneurship in the area.

A core Omnia team was appointed to work on the new concept, including drafting a business plan and designing innovative physical spaces to accommodate entrepreneurs, students and teachers. The centre now known as InnoOmnia was also a test bed for new pedagogical approaches. There was a particular need to pilot new approaches to delivering the Business and Administration Qualification as the drop out rates were growing. The feedback from the students reflected the need to have a less theoretical approach to learning business studies. Thus



an implementation model based on real-world learning was designed, blending classroom-based activities, projects, working in InnoOmnia and in local companies.

Since opening in September 2011, InnoOmnia has supported over 120 new/would-be entrepreneurs. Participating entrepreneurs vary from student start-ups to experienced entrepreneurs. Over 600 students have benefited from on-the-job/work-based learning within the community or its projects. Over 1,000 teachers and school leaders have been trained in entrepreneurial pedagogy and educational technology, spreading new ideas across VET in Finland. 700 Omnia staff have been exposed to new pedagogy along with 2,700 visitors. The piloted real-world curriculum for the Business and Administration Qualification has been very successful, and resulted in a dropout rate of 0%.

A student's everyday life is very different in InnoOmnia. VET education on business and entrepreneurship has moved out of the classroom and into shared spaces with real entrepreneurs. Students' studies are integrated in solving entrepreneurs' real-life problems and creating related innovations. High-tech solutions, tablets, video, online and mobile learning applications are used daily. In addition to youth students, InnoOmnia also provides professional training for educators.

In InnoOmnia, the teacher is no longer the only source of information. Information flows in all directions and the teacher is more of a tutor and guide than an expert. The practical problems that participants face can change on a daily basis so there is no certainty as to what capabilities are needed today or tomorrow. This changes the nature of teacherhood. In fact, most of the staff in InnoOmnia are referred to as "coaches".

For the entrepreneurs, InnoOmnia offers some features of a business incubator, but with the added benefits of a learning environment. There is an application process for interested entrepreneurs, who have to fulfil certain criteria to be eligible. In selection of a new entrepreneur, balance is sought to ensure synergy among existing entrepreneurs in the community. In addition to the written application, a meeting is arranged to further map the needs and expectations. The entrepreneur is then offered a tailored package consisting of office decisions and a professional development plan. An opportunity to participate the Omnia Adult



Education Further Qualification Programme for Entrepreneurship is optional for the entrepreneurs.

All members receive daily support from a designated advisor, community and business support ranging from facilities, training, collegial support to product development and service design projects with students and teachers, business advice, innovative workshops and have the opportunity to display products in OmniaShop - a specialist store selling sustainable crafts and related products.

Entrepreneurs can rent work premises from the InnoOmnia. In addition to private offices and workshop spaces, entrepreneurs can share spaces or use free seating facilities. Opportunity to use these facilities in a flexible and cost-effective way has attracted many home-based start-ups and freelancers to the community. Most spaces are available for use 24/7. There are special premises for handicraft production and beauty services available.

An active contribution to the community is a requirement for every entrepreneur. In the application stage, applicants' expectations, needs and potential for co-operation are mapped in order to create successful relationships. This is pivotal as failure to identify the applicant's expectations can result in dissatisfaction, isolation and potentially resignation from the community.

Below are some examples of the silo-breaking modus operandi in InnoOmnia.

An entrepreneur participated in InnoOmnia's gamification training. During training, he created an innovation of a game for job seekers. He started to design and test the game with students. Finally, he launched the game to schools as an innovative pedagogical tool, and soon broadened the product to different languages, industries, and virtual environments.

InnoOmnia organised a competition in which young students were guided to make their competencies and skills visible through video-cv:s and other innovative digital tools. Four big employers in the area participated in the project through rewarding the winners with summer jobs in their companies.

Three free-lance entrepreneurs in InnoOmnia met at InnoOmnia's café. Their shared vision turned into a business innovation; they started to design and provide a new type of communication service together for potential customers.



InnoOmnia helped Omnia teachers to start a pedagogical cooperative, through which 40 students are currently integrating their studies and taking their first steps as entrepreneurs.

4. Research question and methodology

To better understand the conditions of creating innovative knowledge communities of entrepreneurs and VET institutions, we designed a qualitative case study of InnoOmnia. The purpose of the research was to investigate how a multi-actor knowledge community arises in and around an educational institute to support innovation and vocational learning. We wanted to increase understanding about the opportunities and problems related to such communities. The research questions for the analysis were: How is InnoOmnia and being an actor in InnoOmnia constructed in the talk of the respondents? What are the issues that facilitate or impede learning in InnoOmnia?

The case study of InnoOmnia is based on the socio-constructionist research tradition where textual and visual content are used to create new understanding of how the focal phenomenon – InnoOmnia – is constructed in a social discourse (Holstein & Gubrium 1997, 116; Silverman, 2001, 87). In the data, the voices of students, entrepreneurs, teachers and other staff are heard. The data consists of interviews, focus groups, photographs and semi-structured surveys, all of which are analysed with the tools of textual analysis.

The speech, images and text were produced by Omnia students, personnel, and affiliated entrepreneurs. All participants brought their own viewpoint to InnoOmnia. The data were collected at various points during 2013 and 2014. Entrepreneur interviews were primarily collected in one-on-one interviews that were also video recorded. Student input was primarily collected in focus group sessions. Teacher and staff feedback, as well as augmenting data, was collected in a loosely structured online survey that prompted the respondents to produce stories and visual content of their experiences and perceptions of InnoOmnia. The data set features responses from thirty students, eight entrepreneurs, and sixteen staff members. Additionally, secondary data (documentation, reports, plans) was used ranging from 2010 to 2014.



The authors analysed the multimedia data set systematically. First we collected all of the data into a single word processing document, including video transcripts and provided drawings, photos and other representations such as popplets. Then we classified the data according to the themes found in the data; and for the textual data, according to the rhetorical tools used. For the text, we sought for commonalities, differences, metaphors, examples, juxtapositions, as well as assumptions relating to the actor roles in the text (Alasuutari 1995, 111-115). We documented these observations into mind maps, which we then compared. This was to ensure a reflective approach, as both authors had been active participants in the case community.

5. Results

The analysis suggests that there is no single, harmonic entity of InnoOmnia for the participants. Instead of a shared view of “our community”, we found strong personal experiences of “my InnoOmnia”. Instead of a consensual view of a knowledge community, InnoOmnia seems to build on different tensions and power relations. The participants are in a constant negotiation for finding a balance on the one hand and creating new ideas and innovations on the other. We are using quotes from the data to exemplify and enrich the analysis. The tensions arising from the data are:

Community borders: InnoOmnia is a coherent team of actors, an open learning environment and a flexible way of operation. However, it is also a closed group, separate space and distinct unit.

“InnoOmnia is a ‘centre’ of entrepreneurs, teachers and students. Entrepreneurs and students serve as peer support for each other and learn many things from another.” (student)

“I see InnoOmnia as being ‘apart’ and ‘far away’. I’m not sure if these are issues that hinder learning. I am also sensing a certain level of envy among staff towards it.” (teacher)

“In the discussions inside the organisation, personnel problems and a barrier between InnoOmnia and other units are constantly repeated.” (other personnel)

Community culture: In InnoOmnia, an entrepreneurial attitude and flexibility are praised. However, a more hierarchical culture is also missed.



“Learning is easier when there are no formal authority restrictions, hurdles are low, staff are easy to approach and nobody brings up their formal positions...this is an operational culture that fosters new innovations and joy of work.” (teacher)

“I’m sure learning would improve if I slept better. When I get inside InnoOmnia, the surroundings are just great. I go and get myself a cup of tea to give me energy to work. Learning results are best once I get up to speed with working. The working environment is really fantastic and so much better than the regular classrooms. That teachers are also enthusiastic has a big positive effect.” (student)

“Circling the students across different tasks hurts learning. I don’t think they can get a holistic view this way.” (teacher)

“Here we have no need to make meticulous plans. People can have their own styles of making an idea into a digital vision and putting them on the table.” (other personnel)

“InnoOmnia offers a community for a lone entrepreneur. To me it seems that it offers community support in many ways, surely much more than a conventional incubator or business park would.” (entrepreneur)

“Teachers are making a bad example by letting the students lounge in the area and the couches. Work can be fun but it can’t be just drinking coffee.” (other personnel)

Structures: Work at InnoOmnia is planned and coherent. Simultaneously, it is also flexible, impulsive and chaotic.

“Occasionally it feels that everything in InnoOmnia is a little mixed up. I’m not referring to the people or the premises, but the organisation.” (entrepreneur)

“InnoOmnia is about seeing and doing things differently. You can always say things in another way...there are many truths.” (other personnel)

“I face problems in learning when there are so many people around making quite a lot of commotion.” (student)

“The good thing that Omnia has understood is that for developing something new we need a unit and the resources. This is the way in which new products, services and pedagogical methods are born.” (teacher)

Leadership: Is InnoOmnia led top-down or bottom-up? Is the object of leadership in the people, substance or actions, or all of them?

“For an organisation as big as Omnia is, you need a real change agent to renovate the operational models and bringing in new ideas for learning.” (other personnel)

“InnoOmnia is like a road. You can walk this road straight, in zigzag, or you can stop to look around, wonder, think, listen. You can take a step forward or back, alone, with another, or in a group.” (teacher)



“One hurdle to learning is that concrete results are expected from us even though the journey is still underway.”
(other personnel)

In the respondents' talk, learning in InnoOmnia is different and atypical. The community is a place where learners are equal with entrepreneurs and educators. Even coffee break practices are the same for everyone. InnoOmnia is constructed as a changing environment where life is not taken too seriously and that offers inspiring opportunities for the participants. The metaphors that respondents use highlight these mental images: amusement park, hang glider, cornucopia, a collection of puzzle pieces, a journey, springboard, free fall and crossing the finish line.

6. Analysis

When starting a community such as InnoOmnia, one will inevitably face various issues causing tension. We believe issues in community borders, culture, structures and leadership will always have to be addressed, whether through conscious effort or not.

Looking at the substance that is InnoOmnia today, we believe it could not have been pre-planned. However, the precursors that help in creating new innovations and activities have been actively developed and maintained. Every new participant of InnoOmnia, whether person or company, has brought pieces of will, skill, and knowledge to the community. These are the building blocks on which learning support services have been built.

The structure of InnoOmnia has been flexible, adaptable and agile. On the other hand, a constant rapid change also appears as chaos, communication breakdown and uncertainty. A key to success and survival seems to be high tolerance for uncertainty and trust in the community despite the changes.

In order to create a community out of a group of people, someone must always be left outside of the group. This is a social fact that creates difficulty for leadership when a new operational model is being instituted to replace or complement an existing model. In the working community, a perception of being left outside is taken as seriously insulting. This can hamper cooperation even in situations where belonging to a certain subgroup is not even necessary for individual or organisational reasons, but appears lucrative because of the status.



A community's operational culture is a constant negotiation process. In InnoOmnia, it focuses on the juxtaposition between “working life and entrepreneurship” and “educational institute and school” on the one hand, and “InnoOmnia” versus “the rest of Omnia” on the other. This contrast is apparent in everyday practices. For example, the informal communication culture in InnoOmnia is highly valued, but simultaneously, it also causes concern: is coffee drinking the only thing students learn in InnoOmnia? Who is responsible for enforcing rules and order?

The differences of operational culture and consequent conflicts do not seem to be restricted to the border between school and work. Instead, it seems that in InnoOmnia, different gaps and interests are found inside the educational institute, between entrepreneurs and among students. A recent study addresses the same issues in academia. Bartunek and Rynes (2014) discuss the conflicts in an educational institute as a result of disagreement between internal silos and tribes.

Top-down leadership of a community when formal positions are non-existent is always difficult. If the idea of a multi-actor, working-life-centric and equal community is to be taken seriously, traditional hierarchical management systems become obsolete and redundant. A community's rules and professional growth needs to be in the hands of the grass roots actors, not only in the hands of a formal management organisation.

Based on the case study, the learning hierarchy in InnoOmnia is built rather conservatively, even though the community is considered equal. Learning is primarily driven and guided by the teachers/coaches and the students are there to learn. Alternatively, the entrepreneurs guide the students, and the students learn. However, we also found talk of the opposite happening. Entrepreneurs spoke about learning from the students, teachers spoke about learning from the students and from their colleagues, and students spoke of learning from their peers. The need for leadership of shared knowledge in a community like InnoOmnia is very apparent and best practices are in high demand.

7. Conclusions

Both the academic and political debates raise pressures for educational institutes to cultivate innovative, entrepreneurial thinking and transform towards working-life-centricity. However, it is not easy to build a community that genuinely breaks the silos between work and education. A



new type of knowledge community brings multiple challenges because of e.g. different operational cultures. In this article, we have discussed how these different challenges have created the basis for InnoOmnia yet concurrently cause tensions in its operation.

In the analysis, we did not find a common perception or shared view of an innovative, working-life-centric knowledge community. On the other hand, we did find a widely diverse set of perceptions and tensions based on the perceptions. It appears that a multi-actor community such as InnoOmnia is not constructed as a single consistent phenomenon for the participants, and moreover, a coherent whole is not even always expected. The community represents something different for every participant. These representations can be very different from another, causing inevitable conflict. On the basis of this case study we question the ideal of a harmonic and conflict-free knowledge community. It may be that an entrepreneurial, innovative community must also contain conflicting and destructive forces as well.

Parallel to the conflict, we found an emerging discourse relating to the positive benefits of enthusiasm. Our analysis brings forth the actors' wild enthusiasm and positive attitude to doing, entrepreneurship and learning. The joy of work is present in all that people do. This topic has been recently raised by the Finnish Parliament's Committee of the Future (Martela & Jarenko 2014). Enthusiastic employees are a requisite for sustainable economic growth. Yet, the importance of the joy of work is often forgotten in the innovation discourse. Based on the case study, studying new knowledge communities from the point of view of enthusiasm, positive psychology and sensation of flow could bring a substantial angle to the research field of vocational education.

References

- Alasuutari, P. (1995). *Researching culture: Qualitative method and cultural studies*. Sage.
- Bartunek, J. & Rynes, L. (2014). The gap between academics and practitioners is a reflection of the underlying tensions of academic belonging. <http://blogs.lse.ac.uk/impactofsocialsciences/2014/05/23/the-paradoxes-of-academic-and-practitioner-relationships/>
- Blumenfeld, P. C., Soloway, E., Marx, R. W., Krajcik, J. S., Guzdial, M., & Palincsar, A. (1991). Motivating project-based learning: Sustaining the doing, supporting the learning. *Educational psychologist*, 26(3-4), 369-398.



Council of the European Union (2009). Enhancing partnerships between education and training institutions and social partners, in particular employers, in the context of lifelong learning. Council conclusions, May 2009. http://ec.europa.eu/education/lifelong-learning-policy/doc/policy/council0509_en.pdf

Earl, M. (2001). Knowledge management strategies: Toward a taxonomy. *Journal of management information systems*, 18(1), 215-233.

The Federation of Finnish Enterprises (2005), *Selvitys yrittäjien koulutustaustasta Suomessa (A study on entrepreneurs' training background)*. <http://www.yrittajat.fi/File/29616ee2-3332-4670-a6ca-6b40bd83e788/Koulutusprofiili2005.pdf>

Fiet, J. O. (2001). The theoretical side of teaching entrepreneurship. *Journal of Business Venturing*, 16(1), 1-24.

Gomes, J., Hurmelinna, P., Amaral, V., Blomqvist, K. (2005). Managing relationships of the republic of science and the kingdom of industry. *Journal of Workplace Learning*, 17(1/2), 88 – 98.

Gupta, A. K., & Govindarajan, V. (2000). Knowledge flows within multinational corporations. *Strategic Management Journal*, 21(4), 473-496.

Henricksen, G. M. (2012). An examination of the engagement barriers perceived to exist between small firms and graduates. Doctoral dissertation, University of Birmingham.

Holstein, J. A., & Gubrium, J. F. (1997). *Active interviewing*. Sage Publications.

Katajavuori, N., Lindblom-Ylänne, S., & Hirvonen, J. (2006). The significance of practical training in linking theoretical studies with practice. *Higher Education*, 51(3), 439-464.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.

Lee, S. S., & Hung, D. (2012). Is There an Instructional Framework for 21st Century Learning?. *Creative Education*, 3(4), 461-470.

Martela, F. & Jarenko, K. (eds.) (2014). *Sisäinen motivaatio - Tulevaisuuden työssä tuottavuus ja innostus kohtaavat. (Internal motivation – in the work of the future, productivity and enthusiasm meet)* Finnish Parliament's Committee of the Future 3/2014.

OECD and the European Commission (2014), *Entrepreneurship360 Project, Seminar publication*. http://www.oecd.org/cfe/leed/Entrepreneurship360_Potsdam_Agenda_web.pdf

Resnick, L. B. (1987). The 1987 presidential address: Learning in school and out. *Educational researcher*, 13-54.

Silverman, D. (2011). *Interpreting qualitative data*. Sage.

Tynjälä, P., Välimaa, J., & Sarja, A. (2003). Pedagogical perspectives on the relationships between higher education and working life. *Higher Education*, 46(2), 147-166.



International Journal of Innovation, Creativity and Change. www.ijicc.net
Volume 2, Issue 2, November 2015

Wenger, E. (2011). Communities of practice: A brief introduction. Working paper. scholarsbank.uoregon.edu.

Wenger, E. C., & Snyder, W. M. (2000). Communities of practice: The organizational frontier. Harvard business review, 78(1), 139-146.