

Educational Export in the Oulu Region: Possibilities and Advancement

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bstract

The Finnish education system has received worldwide attention in large part to its success in international standardised testing assessment programmes in particular, the Organisation for Economic Co-operation and Development's (OECD) Programme for International student assessment (PISA) tests. This attention has led to an increase in attention on Finnish education, and educational tourism in Finland, with a number of high level delegations, and interested parties travelling to Finland to view the "Finnish miracle," and resulting in a great deal of demand for the procurement of Finnish educational expertise, products and services on the international market.

In 2009 the Finnish Ministry of Education and Culture recognised the evident demand for Finnish educational know-how on the international education market, mainly due to this success in PISA, While Finland has dropped in these rankings Finnish education and skills, and higher education and traning are still rated by many as being the best in the world. In 2010, the official Country Brand Report 'Mission for Finland: How Finland is going to solve the world's most wicked problems' recognised Education as a key element of the Finnish nation brand. This recognition of education as a key element of the Finnish national brand was not only limited to the financial benefits that would be gained from exporting Finnish education expertise, but also indicates the benefits of exporting Finnish education to the world in general.

Various areas and institutions in Finland have taken up this challenge, most notably Jyväskylä and the capital region, but the Oulu region has seemingly been left lagging behind, both Finland and the rest of the world regarding entering the international educational export market, and the productization of Finnish educational expertise and products/services. In an effort to providing impetus, and focus attention on the educational export industry in the region, the Council of Oulu region commissioned this report: with the aims of

investigating the current situation in the region, in addition to providing suggestions as to how this industry can be developed and turned into a sustainable and profitable industry for the region. There is an abundance of expertise and knowledge in the Oulu region, at all educational levels, from early childhood education to higher education. In general the players in the region concerned with educational export are small and have only limited capacity; however, there are also a number of larger international players that can play a leading role in the development of the industry in the region. Educational export in the Oulu region at present is for the most part passive, and re-active, and this approach and lack of focus needs to be addressed.

In order for educational export in the region to be developed and turned into a profitable and sustainable business the following measures are recommended:

1. Some more research is needed on the topic:

A variety of perspectives from both business and educational viewpoints need to be brought together to discuss their views and objectives concerning educational export, as at the regional level there seems to be a general lack of cooperation and trust among, and between business and educational institutes.

2. Products and modules need to be identified:

The products, expertise and services that are available in the Oulu region, need to be identified, and focused on. Target markets and customers can only then be identified based on the specific product or services identified.

3. A strategic agenda or plan needs to be developed for the region:

This necessitates cooperation among the vested local and domestic entities, such as the Council of Oulu region, Future Learning Finland, TEKES, the relevant cities and municipalities in the region, and the relevant ministries. State and regional, funding, marketing channels and mechanisms need to be collected together and information on these has to be readily available, particularly for micro sized and SME's.

4. The possibility of starting a regional cluster or network specifically focused on educational export in the region should also be seriously examined, as soon as possible:

This cluster or network is needed as existing expertise in the region needs to be identified, and then focused on, whereas the ecosystem and cooperation amongst entities concerned with educational export also needs to be expanded and developed.

5. Organisations educational expertise, training and services need to be available in (at least) English:

The availability of training and education in languages other than Finnish in the Oulu region is a major obstacle to this at the moment. In order to take advantage of the recent changes in fee charging laws, educational institutions need to focus on offering degree, diploma and certificate level courses in areas such as early childhood education, vocational training and K-12 teaching qualifications.

6. Organisations in the region also need to make more effective use of existing marketing and promotion channels:

Success stories and references from the region need to be collected and promoted on both national and international media: International customers want, and need these references, and it would also be helpful if these success stories were available in English. Native speakers and networks in the region should be utilised to provide information on target markets, and in availing of social media channels in the local languages to promote and brand products and services.

7. The focus of future Educational study tours should be on creating awareness of the regions educational products and innovations:

There needs to be a focus on highlighting the commercial value of education to these tour groups and the international market in general, and creating awareness that the regions educational innovations and expertise are not just nice to look at, but are also available as products.

8. Above all additional funding is needed:

All available funding mechanisms should be utilised within the region, in particular EU structural and social funds aimed at improving business expertise and internationalisation skills, as well as investments and development projects concerning SMEs that promote growth, internationalisation and competitiveness. Additionally domestic funding should also be applied for where possible. Research, development and innovation (RDI) funding should also be sought to increase the competitiveness of local organisations through the expansion of, and development of co-operation initiatives among universities, higher education institutions, research institutions, vocational institutions, general government actors and enterprises, in order to productise and market regional educational innovations.

1

Introduction

1.1. Background

In November of 2014, the council of the Oulu region (Pohjois-Pohjanmaan Liitto) contacted the University of Oulu with the aim of commissioning a report to examine educational export possibilities and advancement in the Oulu region. Up until now, this investigation and examination of the possibilities and opportunities offered by educational export in the region had been largely neglected. This analysis of educational export in the region, and its progression supports the strategic development objectives and priorities of the Oulu region, in addition to supporting and promoting the regional programme policy lines and axes for development.

A total of 33 working days were used in writing and researching this report, between the 9th of November 2015 and the 31st of December 2015, including background research, questionnaire design and interpretation and expert interviews.

The aims of this report are to provide an overview of the current state of educational export in the Oulu region and to identify possibilities for the region by:

- Mapping out different educational organisations baselines and procedures concerning educational export
- Identifying the main companies related to educational export in the Oulu region (including construction and learning environments)
- Assessing potential customers as well as cooperation opportunities and marketing procedures
- Providing suggestions, recommendations and development plans concerning stimulating educational

export in the Oulu region, in line with the possibilities of utilising European Regional Development Fund (ERDF) and European Social Fund (ESF) funding to achieve these objectives.

In order to provide this information a mixed method approach was adopted. Initially a questionnaire was developed via webpropol, consisting of 29 multiple choice questions, and one open question, and sent via email to organisations identified as being concerned with educational export in the Oulu region.

Companies identified were then sent a cover letter and an explanation as to the purposes, and goals of the research between the twenty first and the twenty fifth of November. The companies were informed of the deadline for return, (which was later extended to the 29.11, and extended again to a final cut-off date of 02.12, after which no more submissions would be accepted) and reminders were set to companies that had not completed the questionnaire on the twenty-fifth of November, twenty-seventh of November, and the first of December. A total of 60 organisations (see appendix II) were identified based on a search of the Association of Finnish e-learning centre company wiki database, a search of Business Oulu's directory, FLF's member list, as well as contact with Business Oulu, Business Kitchen, Demola, Oulu Entrepreneurship Society, and Oulu start up services. Contacts and recommendations were provided by Seppo Keränen of Finpro whereas business leaders and University contacts also provided additional information used in compiling this list.

The main organisations and companies concerned with educational export in the Oulu region were identified based on the results of this analysis, and input from experts who were interviewed for the report. Interviews were undertaken (where possible) with the main businesses and educational organisations identified, in order to provide a more indepth understanding concerning both their operations related to educational export, in addition to the possibilities and potential for educational export in the region. Unfortunately this was not possible for the majority of companies contacted, due to the short time-scale and proximity to the holidays. In these cases input and information was provided by email, and confirmed by the relevant company representatives, before inclusion in the report. (See appendix III for a list of flexible questions around which the interviews were structured).

Additional background information was ascertained by using a variety of sources, including existing literature, and policy documents, existing information provided by the council of the Oulu region, and other relevant sources.

The content of this report does not reflect the official opinion of the Council of Oulu region, as views expressed in this report are those of the author. Additionally, responsibility or information, omissions, or errors contained within this report are solely the author's responsibility.

1.2. Educational Export - Background

In 2010 the Finnish Ministry of Education and Culture identified educational export as being "part of the global service economy and a sector which broadly combines different industries"..... with "Finland's strengths in education export and in the field of education itself being "a competitive education system and a good reputation internationally, acknowledging that there is an evident demand for Finnish know-how on the international education market." (Ministry of Education and Culture, 2010).

Additionally the publicity over Finland's consistent success in international testing comparisons, most noticeably in the OECD's PISA, has resulted in increased interest and focus on the Finnish education system. Numerous international delegations have visited Finland to witness the "Finnish miracle," and despite Finland's drop in the PISA rankings, Finnish education is still recognised as being a top performer in education, with for example the inaugural "Inclusive Growth and Development Report" published by the World Economic Forum ranking Finnish education and skills as being the best in the world. Finland was also ranked first by the same organisation concerning higher education and training, in its 2014-2015 global competitiveness index report. (World Economic Forum, 2015b; World Economic Forum, 2015c)

Interest in Finnish education and the potential of turning this industry into a sustainable export sector that would produce income while both maintaining and creating employment, was recognised in 2009, when the Finnish government established a working group to "identify the bottlenecks and challenges of Finnish education export and outline the strategic lines and measures for it," and investigate the potential of Finland becoming one of the world's leading education-based economies, relying on the high quality of its education system. In 2010, the official Country Brand Report 'Mission for Finland: How Finland is going to solve the world's most wicked problems' recognised Education as a key element of the Finnish nation brand. This recognition of education as a key element of the Finnish national brand was not only limited to the financial benefits that would be gained from exporting Finnish education expertise, but also indicates the benefits of exporting Finnish education to the world in general on global issues such as climate change, fluctuations in the global economy, ageing, risks arising from technology, pandemics and wide-scale migration" The spread of Finnish education would improve teaching levels worldwide, and thus help the world combat these issues. (Country Brand Report, 2010: pp. 239-245)

The Ministry of Education and Culture's "Finnish Education nexport strategy," (2010) outlined the aspirations for Finnish educational export as being:

- Finland's strengths in the education field must be utilised and education must be developed into successful export articles for Finland.
- Measures must be taken to maintain and enhance the international competitiveness of the Finnish education system.
- The aim is that Finland will be one of the world's leading education-based economies resting on the quality of the education system.
- By 2015 the proportion of education and knowledge exports will have grown significantly in overall exports.

Subsequently, the Minister of Education and Science set up a working group to draw up an action plan to promote education export, after the government approval of Team Finland's strategy in June 2013. In the strategy, the working group was tasked by the Ministry of Education and Culture to come up with an action plan to promote education exports by the end of 2013. This strategy we are informed would emphasize innovation, new technology and knowledge led services, while improving networking and activating higher education institutes as exporters of education (Opetus- ja kultturiministeriö, 2013). The working group also proposed a goal to increase the number of foreign degree students at Finnish universities and polytechnics to a minimum of 60,000 (at the time of publication the figure was 20,000). This working group it should be noted limited its focus to higher education institutions, with most of the working group's suggestions applicable to vocational education, and the main findings and recommendations of this group are also in large, limited to these same institutions.

1.3. Educational Export - Definition

The Ministry of education and Culture (2013: 7) defines educational export as "the sale of educational services to foreign based businesses, individual persons in the private sectors, or public sector representatives or organizations." Adding that "though the education/training itself does not need to happen outside of Finland's borders, educational export can also be training tailored 'to the customers' needs that is held in Finland. In these circumstances the customer or entity responsible for payment must be foreign."

The Finnish educational export offering it should be noted differs radically from the offerings of the traditional educational export countries where English is spoken as a mother tongue. In these countries a more accurate term may be educational import, as the most significant revenue sources of the education export business are expenditures associated with international students pursuing education in-country; consisting of tuition fees paid by international students to educational institutes, while also taking into account all other spending while pursuing this education. The Finnish educational export offering also includes (amongst others), consulting services and technological solutions for facilitating learning processes.

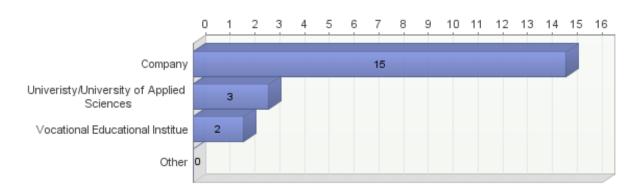
For the purposes of this report the term educational export is taken to refer to commercial education related export activities that are profit orientated, wherein educational expertise, educational services or educational products are sold by a Finnish company/organisation, and the entity responsible for payment is a foreign based business, an individual private person, public sector representatives or organizations.

The Current Situation in the Oulu region

Of the sixty companies that were identified and sent the initial questionnaire, three contact addresses were returned as being invalid, resulting in a total of 57 companies receiving the invitation to participate in the survey (a list of organisations contacted can be found in appendix I). Of this 57 organisations a total of twenty responses were received by the deadline date of the second of December, accounting for a response rate of 35%.

Of these respondents 15 (75%) identified themselves as companies, 3 (15%) were categorised as Higher educational institutions (University or University of Applied Sciences), and two (10%) identified themselves as being vocational educational institutes (Graph 1).

If educational institutions are removed from the results, company respondents can be summarised as being mainly micro and small to medium sized enterprises, with a small percentage of larger enterprises. 8 of the sixteen respondent companies could be categorised as being microenterprises, defined by the EU, as an enterprise which employs fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 2 million. Five companies are categorised as small to medium enterprises (SME's) enterprises, defined by the EU as an enterprise which employs between 10 and 250 persons and whose annual turnover does not exceed EUR 50 million or whose annual balance-sheet total does not exceed EUR 43 million. (European Commission, 2015)



Graph 1: Respondents (N: 20)

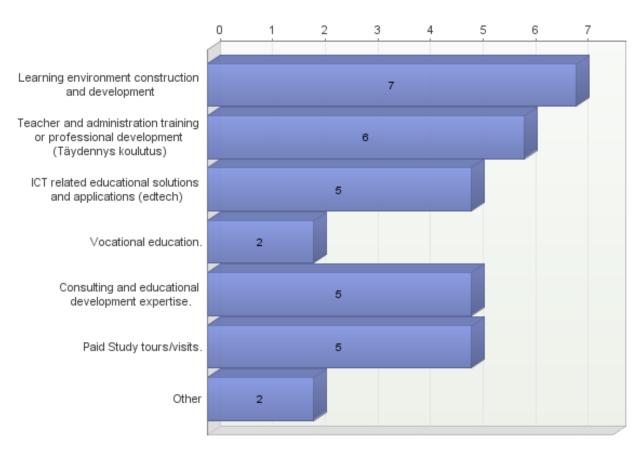
Twenty percent (20%) of respondents reported having over 250 employees in addition to over 50million euros in turnover. Of these four organisations that can be categorised as "large," (in terms of turnover and staff). Two of these were educational institutions, with both indicating that they have had previous experience concerning educational export. One company indicated that the main product/service that it had exported was learning environment construction, while second large company respondent indicated, that while it did not have experience of educational export, it was interested in participating in educational export related activities in the future.

Thirteen of the twenty organisations contacted responded that their organisation had been involved in educational export related activities, and will continue to be in the future, whereas the remaining seven organisations indicated that while they had not been involved in exporting their educational services/products they were interested in exploring the opportunity in the future. Of the remaining six company respondents, five were micro or small to medium sized companies, and one was categorised as a large company. Of the five business respondents that indicated that education accounts for over fifty percent of their revenue, four of these can be defined as micro sized, and one would be classified as a SME.

All respondents indicated that at least some portion of their turnover was education related. Eight of the twenty respondents indicated that over fifty percent of their turnover was related to education, seven organisations; from 1-20%, while the remaining organisations estimated that between 20 and fifty percent of their income stemmed from education related activities. If educational institutions are excluded six

companies estimate that between 1-20% of their turnover is education related, with one third indicating that education related turnover is estimated at contributing to over half of the company's total annual turnover. 60% of companies indicated that they had been involved in educational export related activities, and would continue to do so in the future, whereas the remaining 40% of company respondents indicated that they were interested in participating in such activities. Four out of five educational institutions indicated that they have had previous experience conducting educational export, and one indicated that while it had not had experience concerning educational export; it was interested in participating in such activities in the future.

A total of seven respondents (35%) from the total number of twenty answers indicated that they have no current or past experience concerning educational export. The remaining 65% indicated that they had been in involved in, or are currently involved in education export related activities. This 65% were asked to identify the main educational products or services that the company has sold to international entities. Products and services were loosely divided in to the following categories: Learning environment construction and development, teacher and administration training or professional development (Täydennyskoulutus), ICT related educational solutions and applications (Edtech), Vocational education, consulting and educational development expertise, paid study tours/visits, or other. These categories were deemed to provide a general overview of the major product and service areas concerning educational export. Additionally respondents were provided the opportunity, if they wished to provide their own additional observations if their product or service did not fall within these specific categories, via open text answers.

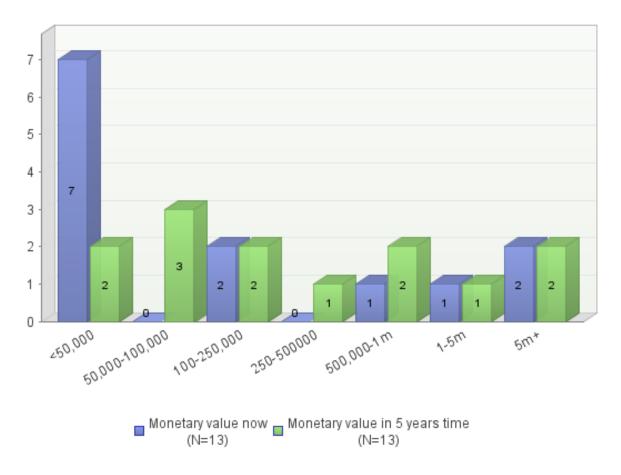


Graph 2: Educational products/services that have been exported (N=13)

Respondents indicated that educational services/products covering all areas had been, or are currently being sold internationally in the Oulu region. Over half (54%) of the companies and organisations involved in educational export have sold or are selling learning environment construction and development tools/services, forty six percent teacher and administration training or professional development, fifteen percent of respondents indicated vocational education, whereas ICT related solutions and applications, consulting and expertise and paid study tours were identified by 38% of respondents as areas in which they have experience of educational export. (See graph 2). University lectures and upper management education were other areas identified by participants concerning successful export related sales.

As the educational export industry in Finland is for the most part relatively young, it is not surprising that 38% of respondents indicated that they have less than 2 years of experience. What may seem surprising is that 31% of respondents indicated that they have had over 10 year of experience concerning educational export. However, it must be remembered that educational export does not suddenly come into being upon publication government related strategies, or other related documentation, and education export and related activities have been ongoing in the region for in some cases, decades. Additionally, 15% of respondents indicated that

they had between 2 and five years of experience concerning educational export and related activities. Forty four percent (44%) of company respondents with experience in educational export indicated that they have had over ten years of experience in selling their products/services internationally, with twenty two percent (22%) having between five and ten years' experience. One third (34%) of company respondents indicated that they have had under two years' experience selling their products/services internationally. Of the four educational that indicated that they have, or have had experience concerning educational export, these organisations have had relatively little experience in the area, with two of the organisations (50%) indicating that they have had under 2 years of experience and the remaining two (50%) indicating that they have had between two and five years of experience concerning educational export.



 $\textit{Graph 3: Monetary value of Educational exports at present and projected value in five years' time~(N=13)$

Income generated from educational exports

A recent TEKES report estimated the value of educational export in Finland in 2014 as being EUR 268 million, whereas in 2012 this figure was estimated as being EUR 4-5 million by CIMO (Sahlberg, 2012), which is a considerable increase. A reliable estimate for the Oulu region cannot be provided with any accuracy due to the small scale of the research and the proportionate lack of responses.

In general educational export related incomes do not account for any significant proportion of the respondents overall turnover. Of the thirteen respondents, only one entity (company) indicated that educational export related activity accounts for over fifty percent of their turnover. 2 (one company, one educational institution) indicated that educational export accounted for 0% of its turnover. The majority of respondents (6) indicated that between 0-5% (three companies and three educational institutions) of the companies' turnover could be attributed to educational export. Of the remaining respondents (all of which are companies) two respondents indicated that between 10-20% of turnover was estimated as being educational export related, and two indicated that 20-50% of turnover was estimated to be educational export related.

The estimated monetary value of these exports varies greatly amongst respondents. Seven (54%) respondents indicated that the value of their exports to date has been under EUR 50,000 (four companies and three educational institutions), whereas both entities that indicated that the value of their exports is estimated as being over EUR5 million, were companies categorised as being SME's. China, Russia, Sweden and Germany were identified as the markets to which these companies had sold their products/services. Of the remaining entities: 7,7% of companies estimated that the value of their exports to date was between EUR500,000-1m, 15% between EUR1-5m, and 15% of respondents estimated that the value of their exports to date was between EUR100-250,000, of which one was an educational institution. Respondents were asked to estimate the projected value of their educational exports in five years' time, and as can be seen from graph 3, the majority of respondents that currently estimate their current export sales to be valued at under EUR 50,000, expect their educational export related sales to at least double over the next five years, while other respondents believed that the value of their exports would remain at the same levels.

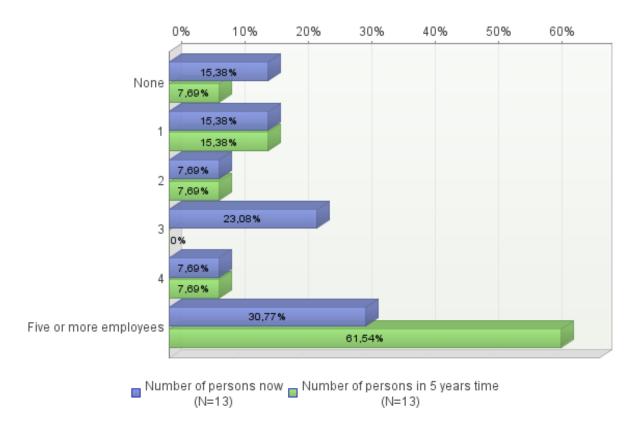
Educational export capacity

65% of organisations responded that they have an internationalising strategy. Four out of the five educational institutions confirmed that they had an internationalisation strategy, whereas 60% of companies indicated that their organisation had an international strategy, with 40% indicating that they did not. Interestingly, fifty percent of the respondents that indicated that they did not have such a strategy have experience in educational export activities. 46% of respondents that had engaged in educational export believed that their organisations capacity concerning educational export could be ranked as being very good or excellent. An identical number indicated that they believed that their organisations capacity could be rated as good or average, whereas only one respondent indicated that they would rate their organisations capacity as being poor. No respondents rated their organisations as having very poor capacity concerning educational export.

At present the majority of organisations that are engaged in export, have at least one employee that has responsibility, either full-time, or part-time concerning research and operations related to educational export. This calculation of employee's responsibility was calculated based on "How many employees have responsibility, either full-time, or part-time concerning research and operations related to educational export." Respondents were advised that if there are for example, 2 persons with 50% of their workload concerned with educational export, then tick the option for 1 person, 3 persons working 25% will be equal to 1, etc.)"

Two respondents indicating that no person in their organisation has responsibility for this role, one of which was an educational institution. The remaining educational institutions varied with between one and four persons holding responsibility for the role. Surprisingly close to one third (31%) of respondents indicated that they have in excess of five persons whose responsibilities were related to educational export, all of these respondents were companies, with two of these companies Micro sized and two considered as being SME's.

When asked how many persons the organisation estimates as having responsibility for educational export in five years' time, 62% of respondents indicated that they estimate that their organisation would have five or more employees working on educational export related activities full-time. Only one respondent (a micro company) estimated that they would have no person specifically concerned with educational export. (See graph 4)



Graph 4: Number of persons with responsibility for educational export at organisation (N=13)

Target customers and market awareness

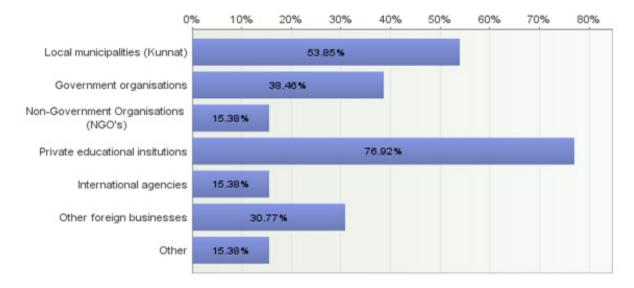
Graph 5 illustrates the target groups identified by respondents with experience of educational export. Respondents were asked to tick as many options as appropriate from the options provided, and as can be seen from the table all the target groups are accounted for. Adult/professional training was identified as the most frequent target market amongst respondents, while vocational and educational students were least frequently identified. Companies training environments were identified as being another target group concerning one entities products or services.

The main target customers identified by respondents' that have successfully sold products/services internationally were private educational institutions, with seventy-seven percent of the thirteen respondents identifying this segment as the main target customer for its products or services. Local municipalities were identified by 54% of respondents, government organisations and foreign businesses were identified by 38 and 31 percent of respondents respectively, while international agencies and Non-governmental organisations (NGO's) were identified by 15% of respondents as being the main target group. Other answers provided were Universities and enterprises.

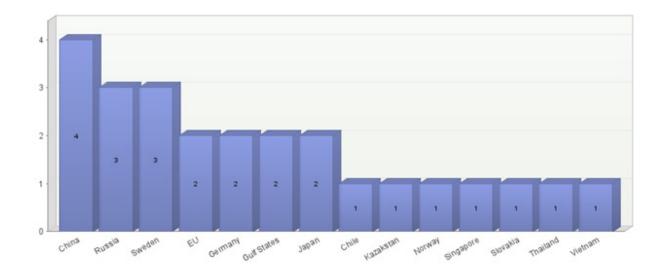
The main markets that respondents have had experience of concerning educational export were China, with four responses, followed by Sweden and Russia with three responses, and a number of respondents indicated that they have had experience of a number of other markets, throughout the globe, including South America, Asia and Europe, (see graph 6).

Of the respondents, two companies indicated that they have had experience of multiple markets, whereas only one educational institution indicated that it has had experience in more than one market. However, if we look at respondents international experiences that are not necessarily education export related (Graph 7), it can be seen that the majority of respondents have experience of doing business in, and with a number of different markets. Only three respondents indicated that their organisations experiences and capabilities have until now been limited to the domestic market. Half of respondents have experience of doing business in the Nordic market 45% in the European market and 65% of respondents indicated that they have had experience of doing business in and operating in the Asian market

While this experience is not necessarily related to educational export, and the author is aware that educational export brings with it a number of additional challenges, it does indicate that many organisations have existing experience of working with, and dealing with different cultures, languages, protocols and ways of conducting business. Existing networks and contacts that have been cultivated in international markets that are not necessarily education related could possibly be utilised further in order to explore additional education related channels and possibilities within these markets. Additionally, Naidoo (2010) notes that organisations with little international exposure tend to avoid taking risks, and underestimate potential returns, as these organisations have limited resources and capabilities, and the costs associated with internationalisation are high. With greater international experience, experienced organisations have the confidence and competence of managing uncertainties and costs of operating offshore.



Graph 5: Target Entities (n=13)



 $Graph\ 6: Markets\ to\ which\ educational\ services/products\ have\ been\ sold\ (13\ respondents)$



Graph 7: International experience (N=20)

The Main Educational Entities Concerning Educational Export in the Oulu Region

A total of five educational entities responded to the invitation to participate in this report, comprising of vocational and higher educational institutes from throughout the region. Oulu University and Oulu University of Applied Sciences were identified as being the most relevant institutions concerning educational export in the region, due to their networks, range of potential products, and focus on educational export.

Other organisations that should also be mentioned as either having had concrete educational export success stories or who have indicated that they are pursuing educational export related activities are Jedu: (Federation of Education in Jokilaaksot), who have been working with, and targeting China in particular, concerning practical nurse training. More information was sought as to this initiative and both the international coordinators of both Jedu and Ylivieska vocational college were contacted, but no further information was received.

The Oulu Region Joint Authority for Education (Osekk), are currently participating in a ministry of education and culture funded project to investigate furthering vocational educational export, coordinated by Omnia in which 14 vocational educational organisations from around Finland are involved. (Ammatillisen koulutuksen viennin edistämishanke, 2015). More information on this project can be obtained from the following address (http://www.ammatillinenkoulutusvienti.fi/.)

Law changes to allow the charging of fees at Finnish Higher Education Institutions

In December 2015, based on the recommendations proposed by the 2013 working group report: "Suomi kansainvälisille koulutusmarkkinoille – toimenpideohjelma koulutusviennin edellytysten parantamiseksi; opetus- ja kulttuuriministeriön työryhmämuistioita ja selvityksiä", (translated to English as International education markets and Finland), the Finnish parliament approved changes to existing laws concerning the charging of fees for higher education leading to a degree, and the removal of the legal restrictions placed on HEI's concerning the organising of customised training courses (tilauskoulutusta).

Minimum compulsory fees of 1500€ per year will be introduced for all Non-EU/EEA students enlisted in studies leading to a degree, which are conducted in a language other than Finnish or Swedish (The Parliment of Finland, 2015). This lack of a fee charging mechanism was seen by the working group as being the most significant barrier concerning educational export for higher education units, as globally educational export operations it is noted are often conducted through the sale to students of education leading to a degree This introduction of fees for Non-EU/EEA students the report informs, takes into consideration the growing global demand and interest in Finnish education and expertise, and will enable Finnish operators to compete on an equal footing on the international education

market. (Opetus ja Kultturi Ministeriö, 2013). Additionally the law changes remove the legal restrictions on customised training courses offered by HEI's, which considerably simplifies the offering of these course from the HEI's perspective, as they no longer have to be concerned as to whether the ordering entity is charging participants for this training, as was previously the case.

It is not possible at the present time to gauge what effect these changes in the laws will have on Higher education institutes in both Finland and the Oulu region, as there is no way of predicting how HEI's will take advantage of, or utilise this change in the decrees. As the introduction of fee charging mechanisms and the lifting of theses legal restrictions and their potential for educational export are not a specific brief of this report, they have only been briefly covered here, as any estimates as to their effect would be purely conjecture. However, it should be noted that the introduction of fees will result in even more competition between Finnish HEI's, and places Finnish HEI's in direct competition with the traditional HE superpowers, such as the UK, USA, etc., concerning International student recruitment. Educational institutions in Finland and the Oulu region will need to be prepared for this increased competition.

3.1. The University of Oulu

Founded in 1958, the University of Oulu provides education in the fields of humanities, education, medicine, dentistry and health sciences, natural sciences, economics, and engineering. There are 18 international Master's Programmes, and a university-wide graduate school. At present, 15 000 Bachelor or Master Students and 1600 Doctoral students are enrolled with an annual intake of 1800 for basic studies. With effect from the beginning of 2014, the University of Oulu has ten faculties: Oulu School of Architecture, Faculty of Biochemistry and Molecular Medicine, Faculty of Humanities, Faculty of Education, Faculty of Science, Faculty of Medicine, Oulu Business School, Faculty of Technology, Faculty of Information Technology and Electrical Engineering and Oulu Mining School, which began operations on 1 August 2014. The University of Oulu is an international research and innovation university, engaged in multidisciplinary basic research and academic education, in which in excess of 70 different specialist disciplines are represented. The fields of information technology, biosciences and health, cultural identity and interaction, environment, natural resources and materials have been defined as special scientific focus areas by the University (University of Oulu Strategy 2012-2015).

In recent years various departments of the University of Oulu have been involved in educational export related activities concerning a number of countries: most notably Armenia, The Arab Emirates, China and Thailand. Almost every faculty and department at the University of Oulu have engaged in educational export in some form or other,

with the main faculties and departments identified as being involved in these projects being: the Faculty of Education, the Extension school, the Teacher Training school, and the Martti Ahtasaari Business School. In addition there have been numerous projects, in which the University has collaborated on with international partners, most notably Namibia University, but these cooperation's and collaborations are not included as educational export, as they are invariably funded by Finnish government ministries, and or are seen as being part of the Finnish governments development agenda. Educational export efforts at the University of Oulu might best be described as being scattered, and faculty centred. As one person interviewed mentioned "the faculties make a lot of noise over these projects, but in reality they provide little in the way of financial returns" and in many cases the faculties are working outside of their core competencies, which are research and providing degrees, not project management. In addition departments are generally working independently from, and in some cases in competition with other faculties within the same organisation.

University procedures and strategy

The University of Oulu was a fee paying member of FLF from 2011 until 2013, but decided against renewing its membership fees in 2014. To date the University of Oulu educational board still have not come to a decision on whether to renew its membership in Future Learning Finland. In October of 2012, the extension school (TOPIK) represented the University of Oulu concerning an initiative involving representatives of OAMK, Oulu University and Business Oulu. The goal of this initiative was to present a proposal to the Oulu Innovation Alliance Board with the aims of clarifying objectives and goals of the organizations, resources, and in identifying products and services, and bringing to light areas in which the Oulu region excels, such as pedagogical content and methodology/environments, as well as fresh and innovative combinations of these. This initiative was short lived, as the group met only once, and no concrete cooperation or proposals emerged from this initiative.

The University of Oulu does not have, and indeed has never had a concrete strategy concerning educational export, and this has resulted in the majority of the educational export projects that have been conducted so far being sporadic and haphazard. In May of 2013 a multi-disciplinary and multifaculty working group was initiated to investigate educational export on behalf of the University of Oulu. This working group was tasked with providing a proposal that would take into account the forms of educational export, resource uses and internal procedures regarding educational export, and how these activities would bring added value to the Universities core operations. Various proposals were submitted by this group, on areas such as products organisation, use of resources and the future targets concerning educational export, and recommendations for future decisions concerning university strategy on educational export and procedures that should be addressed should the University decide that educational export was to be treated as significant activity, was submitted to the University board. The University board have still not made a decision on this.

In September of 2013, a funding application for the Manner-Suomen ESR programme was accepted by the Centre for economic development and transport (ELY) on behalf of the University of Oulu faculty of education, with the project title of "Universities educational export procedure development" (Yliopistojen koulutusvientitoimintojen kehittäminen). The goal of this project was to explore the possibilities of forming an educational consortium in cooperation with the University of Lapland, the University of Jyväskylä and other local educational providers such as OAMK and Luovi, as well as the city of Oulu. Research trips were undertaken to examine the potential of exporting teacher education to the main target markets identified as Peru, Mongolia and Chile. The Universities involved discussed combined marketing strategies, potential customer mapping as well as how these operations could be used to strengthen and enhance the universities everyday operations. The main findings of the project were that as a result of the project educational export products their pricing and realisation were realised. Educational export and international activity were identified as providing added value to the faculty, financially, culturally and pedagogically. Additionally working in a consortium offered better operational conditions when compared to working individually. At the end of the project future educational export products were agreed as being: Principal education, (wider leadership education), various pedagogical studies related to teacher education, learning environment development, inclusive education, actions to support school wellbeing, special education pedagogy and student care. (Council of Oulu Region, 2013; Eura 2007, 2013)

In summary the University currently has no concrete procedures or strategies in place concerning educational export. While there have been investigations and research, no tangible results have been shown concerning either potential sales or cooperation with other entities. Products and markets may have been identified at the departmental levels, and small scale projects have taken place, but there is no clear vision or focus concerning the University as an entity at present.

Successful educational export projects conducted within the University of Oulu

In recent years various departments of the University of Oulu have been involved in educational export related activities, with almost every faculty and department at the University of Oulu having engaged in educational export in some form or other. Here some examples are given from selected departments which were identified as being the most concrete examples of educational export from the University of Oulu.

Faculty of Education (Armenia)

As part of Higher Education renewal reforms in Armenia, the Armenian Centre for Education Projects (CEP), issued a tender in April 2010, looking for a European university with whom they could build a long-term partnership to raise and enhance professional quality of teacher preparation in Armenia, while enhancing the quality and relevance of the Armenian education system in line with the Bologna Higher Education reform Process. According to the tender, it was stated that the Armenia State Pedagogical University (ASPU) would take on a coordinating role, while the partnership arrangements would be extended to another 25 Armenian pedagogical institutes, and that the funding (credit) for the project would come from the World Bank's International Development Association (IDE).

As part of this cooperation the Partner European University (Oulu University) was expected to:

- Provide professional expertise in revision of Bachelor & Master programs for the majority of specialties delivered by ASPU to bring them in compliance with Bologna requirements.
- Provide Assistance in developing and further strengthening of the European Credit Transfer System (ECTS) for the specialties under revision.
- Assist in improvement of students' practical training system.
- Assist the ASPU staff in understanding the principles and benefits of education research work and introducing it into ASPU study programmes.
- Develop a model or relevant ASPU staff, in the framework of which research work schemes are part of Bachelor & Master study programs for students, as well as assist in implementation of related activities for introducing this kind of research works in ASPU practices.
- Present to ASPU the partner European university's model and procedures for internal Quality Assurance (QA) and assist in strengthening internal QA in the ASPU.
- Assist in creation of Career Centre in ASPU and its operation.
- Provide Consultancy on Training of university personnel (training of trainers) in new teaching methodologies and use of technologies, as well as student assessment modern practices. Provide the latest approaches in staff professional development and training programs.
- Organize exchange programs for the ASPU and regional pedagogical institutes' staff.
- Assist in development of good governance and transparency policy for ASPU and help implementing of the key aspects.
- Provide distance support and on-line clarifications on issues rising from new practices.
- Monitor the development and performance of the APSU activities and prepare evaluation reports. (World Bank, Accessed 28.11.2015)

The faculty of education of Oulu University submitted a tender, and were awarded the project, with the project beginning in September 2010 and ending at the end of 2013. A total of 12 consultants from the University of Oulu participated in the project. For the University of Oulu Faculty of Education the participation in the tender procedure was a strategic decision to become more actively involved in the export of educational expertise (educational export). Which was in line with the five primary aims for the internationalisation of Finnish HEIs set out in the Ministry of Education and Culture's (2009) policy document, "Strategy for the Internationalisation of Higher Education Institutions in Finland 2009–2015."

The five primary aims identified by the report concerning the internationalisation of Finnish HEI's are:

- Establishing a genuinely international Higher Education community.
- Increasing the quality and attractiveness of Higher Educational Institutions.
- Promoting the export of expertise.
- Supporting a multicultural society.
- Promoting global responsibility.

Separate working groups and subgroups were established by the institutions, with each group allocated a dedicated number of ASPU staff and 1-2 University of Oulu consultants. In addition exchanges were organised for ASPU staff members with Oulu University, while Oulu University also provided providing distance support on the tasks, and monitored the development and performance of the cooperation. (Törmänen, 2015)

Martti Ahtisaari Institute (Oulu Business School) (UAE/China)

In June of 2010, Oulu business school conducted an educational export pilot project in the United Arab Emirates (UAE). This particular opportunity arose through a number of co-incidences. One former member of staff from Al Ain University had joined the business school as a staff member and co-incidentally a member of the business school staff moved in the opposite direction, becoming a staff member of Al Ain University. Through these contacts, additional contacts were made within the UAE, and a niche market was identified, with a delegation from the Business school visiting the UAE to meet with local representatives, and contracts and other relevant documentation were signed.

While there were/are several activities ongoing in the region concerning Finnish educational, the focus of this project and its modules, was in providing a fully commercial educational package on advanced business training, containing several modules on innovation driven business management and development. These modules were aimed at executives from various industries and corporations in the Middle-East, and were delivered over a period of 5-6 weeks on site in Al Ain. Students and participants were not neces-

sarily UAE natives, as participants included foreign workers and experts, from Pakistan, Egypt, etc., from a variety of industries. None of the participants would necessarily have had access to this type of training over a similar time scale, in their respective home nations.

Professor Seppänen (Director of the Martti Ahtasaari Institute) pointed out that lecturers continuously travel all over the world giving lectures and classes all the time, primarily on a voluntary basis, as this is considered as being a part of scientific collaboration. In many faculties the University is not aware that there is a business opportunity when lecturers go abroad to give lecturers, thus there is a hidden educational transport that is not recorded or monitored, or seen as being an activity that the University would make use of. For these projects however, this process was adapted and turned into a product/service concept. No new material was needed, as this had been done many times before, and there was no need to tailor the content on religion/regional issues, and the lecturers were eager to travel, while passing on, and expanding on their own knowledge expertise. An additional financial benefit accruing from these projects was the recruitment of PhD students by the Business school. A number of the participants were accepted as doctoral students by applying through the normal processes, and supervisors were mainly those involved with the training project. To date six participants have defended their doctoral dissertations, resulting in a "double win" for the Business school as the current University budgeting model provides increased funding for departments for foreign doctoral graduates, when compared to domestic graduates.

Another example provided by Professor Seppänen, illustrates largely untapped network in Oulu, of people with knowledge of, and connections with foreign markets. Study tours are organised by one of the Chinese teachers at the Business school who has existing contacts with Universities in Shanghai. This teacher had previously lived in Estonia and had already had several Chinese groups visit Estonia. When this teacher moved to Oulu he brought these groups to Oulu as part of their "Scandinavian" study tour, including Copenhagen and Stockholm. The length of time these groups have stayed in Oulu has gradually increased, with the latest group spending a week in Oulu.

These groups have comprised of University students and faculty members, and they travel three times a year, and pay tens of thousands of euros for the trips, usually in advance. These groups are interested in seeing how businesses' are run in Scandinavia, and Finland is seen as being competent, corruption free, while having a good reputation, and image internationally. These groups are taken to business kitchen, as the Business school has an interest in this organisation and incurs no cost for these visits. A number of enthusiastic people are found to organise the visits and take the group, and again no additional costs are incurred. There have been 5-7 groups to date, and no extra work needs to be undertaken by anyone concerned. Again, everyone involved is

preforming their normal daily duties, while no additional material or content changes are needed.

Extension School (TOPIK) (Thailand)

The Extension school (TOPIK) has worked with two Thai entities concerning staff training and study tours to Finland. The Bangkok Metropolitan Administration (BMA), and the Institute for the Promotion of Science and Technology (IPST).

BMA is the sole organization at the local authority level responsible for the well-being of Bangkok residents with some financial support from the central government. To date a total of five groups from BMA have visited Oulu, under the direction of TOPIK, where they have attended lectures and visited a variety of establishments to gain an understanding of various topics related to Finnish education: such as, teacher training in Finland, teaching methods and approaches, inclusive education and leadership. This cooperation began in August of 2014, when a group of experts compiled by TOPIK, comprising of three experts from the faculty of education and one expert from the city of Oulu, travelled to Bangkok to conduct a workshop for a group of BMA staff compromising twenty five science and math teachers, and ten school directors and administrators. The same teachers and administrators then visited Finland as two separate groups for five days of training in Oulu which was organised by TOPIK, in cooperation with the faculty of education, the teacher training school, LUMA centre Finland, and the city of Oulu.

The Institute for the Promotion of Science and Technology (IPST) is an autonomous Thai government entity charged with the development of basic-education curriculum, methodology and evaluation on science, mathematics and technology; Training of science teachers, students and talents; Provision of science educational materials; Promotion of quality assurance and standard assessment for in-school science education; and Science education policy advisory. In October of 2014, three interns were sent from IPST to receive intensive training under the auspice of TOPIK, spending between six weeks and two months in Oulu researching their specific areas of interest. Additionally a tour of Helsinki and Oulu was organised by TOPIK for the management board of IPST with a tailored package designed involving school visits, and presentations. Again these programmes were executed in close cooperation with the other faculties and the city of Oulu.

This cooperation with BMA has been ongoing ever since, with a variety of additional cooperation projects being explored both in Bangkok, and in Thailand in general based on the success of these initial projects. Additionally a Memorandum of Understanding (MOU) was signed between the University of Oulu and BMA in May of 2015, to ensure future cooperation between the two entities. Future projects have also been discussed and planned with IPST. In October 2015, a delegation comprised of members of TOPIK, the

teacher training school and the City of Oulu have visited Bangkok, and met with representatives of both organisations regarding future cooperation and focus areas under the name of Team Oulu.

Future focus

There is virtually no likelihood of the University of Oulu starting its own company concerning educational export; however, the leadership of Oulu University are currently in discussions with Finland University, concerning Oulu University becoming a full member of this company. This decision will be taken by the University Board within the year 2016, but it seems as if the board may be more favourable to the idea of investing in being a member of this company, as the present educational and economic climate seems favourable to the concept of educational export. The University of Oulu believes that this model of operation concerning educational export could have the most potential concerning the Universities approach to educational export, as the University needs to identify products and services it can sell, and it is thought that a specialised export company such as Finland University would have persons and networks that would have the necessary expertise concerning the marketing, and selling of these types of products.

The Universities core competencies are not seen as being in export and the faculties and departments do not receive funding from educational export, they receive funding from the results of education (e.g. Bachelor and Master degrees) and research. The recent changes in University funding models, and the much publicized cuts to educational funding mean that the University will increasingly concentrate on education and research, as the current funding model does not cater for the Universities core societal tasks, and responsibilities. Some other organisations need to be able to bring funding concerning these tasks and responsibilities, and any University involvement must be justified in terms of research and material that the University can utilise.

However, there is still a huge untapped potential at the University of Oulu related to the selling of and marketing of educational products, services and expertise. The Rector of education at the University of Oulu, Professor Helka Liisa Hentilä identified architecture as being one area in which the University of Oulu could be seen as unique when compared to other Universities and educational institutions, which are mainly concentrated on pedagogic export or teacher training. There has been research conducted in the Oulu area on learning environment design and constructing using wood as the construction material, but not on how to export this, so there is great potential, but as with the prevailing trend in the Oulu region, there are no concrete results concerning this. Other areas, in which the University of Oulu has immense potential, are in analytic tools developed for Universities to use data, mobile and virtual applications to assist both administrations and students, and in utilising the vast numbers of international students and staff as a

potential future resource, in both identifying opportunities and possibilities for educational export.

Additionally both the University and the Oulu region have a strong ICT background and history, and the research into 5G networks, and the recent Nokia Foundation Award presented to Professor Matti Latva-Aho of the University of Oulu, have brought renewed focus on the Oulu region as a centre for technological research and innovation. The world's foremost experts on 5G are in Oulu and this 5G test network "will form a dynamic and heterogeneous platform for developing and testing new applications, services, algorithms, technologies, and systems" (5G Test Network, 2015). During our interview, Professor Seppänen, pointed out, that in his opinion these researchers and networks could quite easily be utilised as the focus for paid workshops, seminars or conferences, while in addition executive training programmes could also quite easily be created from this mobile and wireless expertise, and demand would most likely outweigh supply.

3.2. Oulun Ammattikorkeakoulu (OAMK) / Oulu University of Applied Sciences (OUAS)

Oulun Ammattikorkeakoulu (OAMK) or the Oulu University of Applied Sciences (OUAS) in English is an educational institution comprising 11 different departments and catering for 9,000 students. Practical education is provided in 29 different bachelor's degree programmes in five fields (Business, Culture, Health care, Natural sciences, and Social and Healthcare), with three bachelors' programmes taught in English.

OAMK educational export procedures and background

In 2009 the ministry of culture and education published its Strategy for the Internationalisation of Higher Education Institutions in Finland 2009–2015 (Ministry of Education, 2009) which recognised that Finnish higher education institutions are attractive and reliable cooperation partners who engage in high-quality and mutually beneficial international research, education and cultural cooperation. Higher education and expertise are nationally significant exports. One of the main aims of this strategy was that the export of competence and education by higher education institutions become a nationally significant export product and part of Finnish export promotion, and that this export of knowhow "serve to support the overall internationalisation of the higher education community, international networking and the visibility of Finland and Finnish higher education institutions abroad." (Ministry of education, 2009: 40)

In line with this internationalization strategy, in May of 2011 OAMK became a member of Future Learning Finland. In January of 2012, OAMK established an educational export working group with the goal of investigating how to

turn the existing OAMK offerings into developing products. In the same year OAMK was also involved in founding an export network with the other four vocational teacher education institutions (Jyväskylä, Tampere, Haaga-Helia and Hämeenlinna). Under the OAMK strategy, educational export related projects should support the development of OAMK, improve teaching and that export products should be an integral part of the institutions educational offerings. Educational products offered should be those that already exist, and that no new products need be created.

Additionally, in October of 2012, an working group comprised of representatives of OAMK, Oulu University and Business Oulu, presented a proposal to the Oulu Innovation Alliance Board, with the aims of clarifying objectives and goals of the organizations, resources, and in identifying products and services, and bringing to light areas in which the Oulu region excels, such as pedagogical content and methodology/environments and fresh and innovative combinations of these. In January of 2013, the OAMK educational export working group met with the aim of answering the questions of Why? What? and How? Concerning educational export and OAMK's strategy regarding this. These answers were sought using a number of CANVAS workshops, where additionally a business strategy and the potential productization of OAMK products and services were discussed.

The main results of the working group were that educational export should be viewed as a means to strengthen the organisations basic operations and productivity, as well as to create an authentic and high level international study environment for students, while simultaneously increasing and strengthening the regions businesses know how. The main products and services identified concerning educational export were virtual programmes, comprehensive educational solutions, and vocational teacher education, including the following items:

- Innovative Vocational Education and Training (iVET)
- Hello Future!- Educational baggage for interprofessional health promotion
- Simulation Learning
- Training of the Trainers
- fMBA: Masters Programme for female leaders and business women
- International Masterclass in Green thinking
- 300 foreign degree students, in three separate English language degree programmes
- · Oulu Game Lab

Offering expertise and education/educational concepts/ environments as well as later offering degrees via online courses and eLearning, and by networking (Nationally and internationally) were identified as being the main tools to achieving the successful export of OAMK's competencies, services and products. However, the main conclusion arrived at by the group was that OAMK was not yet ready to effectively compete on the global market.

Successful educational export projects conducted by OAMK

As is the case with almost every company/institution in the Oulu region there are very few success stories concerning educational export to relate. One concrete example of educational export was found, which took place in June of 2012, when twenty guests from Saudi Arabia visited the teacher education department of OAMK. The participants received training from OAMK experts with a specific focus on evaluation at the Teacher training college over a period of two days. This training was part of a larger training programme organised in cooperation with Educluster Jyväskylä and Future Learning Finland.

Various units (vocational teacher training school, the social and healthcare department, Natural resources department, and Media and performing Arts Departments) have worked in cooperation with other units, making a number of tenders, and bids concerning exporting educational expertise and services. The most notable example of this type of cooperation is the social and healthcare unit, who had submitted (amongst others) a tender concerning the Moscow Olympics. This particular tender did pass the initial stages of the tender process, but, was eventually beaten by stronger international competition, with the tender finally being awarded to a competitor from the USA.

Additionally there are a number of international projects that are ongoing or have ended at OAMK, and while none of these projects could be referred to as being educational export, as they are in large EU, or Nordplus funded collaborations with other universities or municipalities, some research conducted and networks established may have possibilities in the future if this research and networks can be combined and utilized in partnership with other local actors and interested parties. One example could be, for instance, the Sustainable Buildings for the High North, cross-border research and trade facilitation (SBHN). The objective of the SBHN project is to promote trade between the Scandinavian countries and Russia in the field of sustainable building industry in northern latitudes. The main focus is on the energy efficient renovation of the prevailing building stock, as buildings worldwide are responsible for one-third of total final energy consumption, and are also among the most significant creators of carbon dioxide emissions. Exploitation of energy efficient technological solutions and renewable energy sources provides environmental friendly and costeffective alternatives for the renovation of buildings and living. The results of the project stated as being "expected to promote various business opportunities and the development of close co-operation between the northern countries in the fields of building technology industry, innovative research and education among companies, universities, colleges and the authorities.

Future focus concerning educational export

In 2014, the rector of OAMK decided that that the educational export policy would be decentralized, and that responsibility would be given to the directors of the 11 separate educational units comprising OAMK. Directors of these units can now decide how they invest their budget concerning educational export related operations. To date, no unit has shown any significant interest in investing resources in educational export. There has been some interest and attempts by the vocational teacher training school, the social and healthcare department, Natural resources department, and Media and performing Arts Departments to export its expertise, however, the main focus at present, and for the future from the OAMK perspective is the lab-learning model concept, which is explained in more detail in the following chapter.

Oamk LAB model

Future learning Finland forecast that the educational industry is growing at 7% a year, while the educational games industry is growing at a rate of 30%, and the edtech industry's growth is estimated to be increasing at a rate of 23% annually. The health sector and health technology is also one of the fastest growing sectors in the world, and according to the Finnish Health Technology Association (FiHTA), exports in the health technology sector grew by roughly 23 per cent in 2013, amounting to EUR1, 65 billion, which is in stark contrast with many sectors in the current global economic climate (Good news Finland, 2013). The LAB model concept has huge potential as it is concentrating on the main growth markets related to educational gaming and Edtech, as well as the health and wellness sectors.

Background and goals

The majority of information concerning the lab concept included here is taken from the "Lab learning model introduction" published by OUAS, and can be found at: http://www.oamklabs.fi/news/2015/2/4/lab-learning-model-introduction-handbook-now-available.

Oamk LABs are an innovative and expanding pre-incubator program at the Oulu University of Applied Sciences that focus on entrepreneurship and multidisciplinary learning. In 2011 a survey was initiated by Business Oulu, into how gaming industry education could be established in Oulu, as ICT companies (Nokia chief amongst these) in the region would be dismissing several hundred product development employees in the near future, and the gaming industry with its increasing business opportunities was seen as a means to boost employment in the region. The results of this survey spawned the first of OAMK's Lab's "Oulu Gamelab," focused on the creation of multidisciplinary teams to build prototypes, products and start-ups targeting the global games industry.

Two more LABs have been added since then, both of which are of particular interest to the field of educational export: DEVLAB, which focuses on the health /wellness and energy/environment industries, creating multidisciplinary teams to develop a concept and create a demo, with project ideas coming from multiple industries including: health and wellbeing, the environmental field and tourism, and EduLAB, which is focused on "Edtech," or the use of technology to support effective education, where interdisciplinary teams are created to develop prototypes of educational technology solutions and tools.

The goals of the LAB learning mode have been to find employment and establish new businesses in the field. The learning itself takes place through these goals and practical results, as a kind of a by-product. The pedagogic models of the LAB model are project- based learning, problem-based learning as well as cooperative learning focused on research and development. Additionally the model involves a master-apprentice model and utilises the methodologies of coaching. LAB masters are in charge of the practical activities of the LAB learning environments, alongside the coaches.

The purpose of the LABs is to produce demos that indicate the primary features of the solutions –"Proof of Concept," while demonstrating the ability of the teams and individual participants, offering potential financers and employers concrete proof of capability and skill, and the possibility of working with these people in the future, or investing more resources to develop the demos.

The learning concept and LAB paths

The LAB learning model involves project-based learning implemented through multidisciplinary project teams. The cornerstones of the model are its orientation towards practical work, creative problem solving, concept development, learning by doing, internationality, entrepreneurial thinking as well as the participants' multidisciplinary background and wide range of experience.

The basic structure of the LAB learning environment consists of a concept development phase and a demo implementation phase. The goal of the concept development is to produce a project plan and content description for demo creation purposes. A demo is a demonstration of the developed solution. It is not ready for production or use, its purpose is to describe the solution and its value to the customer, providing concrete evidence of the professional skill of the team and the individual student for the purpose of obtaining financing or finding a job. In addition to this, the implementation phase demonstrates the path of an idea into a functional demo. LAB learning paths can also be established, during which demos will be developed into products and possible start-up companies.

Ideas and solution requests are required for the LABs, and these project ideas and solution requests are primarily obtained by the LAB master and coaches from partners, organisations and companies, both domestically or internationally though Labs expansive global network.

The LAB concept has two paths that can be followed depending on the readiness of the participants, and of the quality and potential of the Demo produced at the end of the first module. All participants complete a 30 or 15 credit Demo LAB module, and then a decision is made on whether the team and the demo should continue on to the product path, or stay on the demo path if they so desire, as show in figure 2

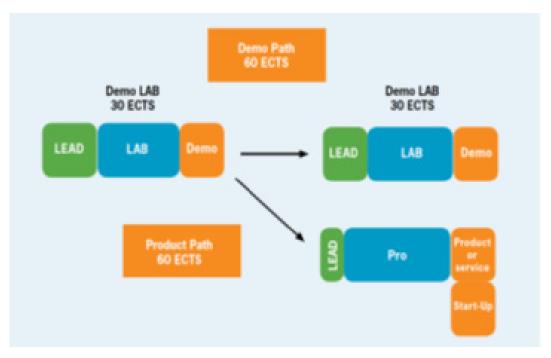


Figure 2: LAB paths Source: LAB learning model introduction (2014: 7)

The Demo LAB is divided into two basic modules: the concept development phase and the project phase that ends with the publication. The concept development phase and project phase are called LEAD and LAB, respectively. The LEAD phase typically lasts about a month (5 ECTS) while the LAB phase can take from one to three months (10 or 25 ECTS), depending on the desired result, with the ultimate goal of producing a Demo. In the initial demo phase, the purpose of the Demo Path is to provide the participants with a deeper understanding of the phases involved in developing a creative solution, to improve professional competence through the master-apprentice model and to provide experience on two different projects. In the second phase of the Demo Path, the participants have understood the LAB process and can, therefore, concentrate and focus on the correct factors and details during the LEAD development phase. They also understand the importance of the LAB phase and are familiar with the opportunities and challenges of teamwork. In the second phase, participants typically assume a more prominent role in their teams and carry more responsibility for the team's results. The goal of the demo lab is to produce a working demo.

Product Path

The Product Path consists of two parts: the initial Demo LAB provided to all students, and the Product LAB. In addition to generating a product, service or method, the aim of the Product Path is to create a start-up company with its own business operations. The Product LAB is a 30 or 15 credit course in which the project teams continue the development of their demos into verified products, services and operating models. The course entails coaching on business development, product testing and publications as well as voluntary business. The PRO phase provides the teams with the required facilities, tools and coaching. This phase differs from the Demo LAB phase in that the team works in a more business-like and professional manner.

Main Educational Export Related Companies in the Oulu Region

There are a number of companies that have huge potential and possibilities concerning educational export in the Oulu region. It is not possible given the scope of this report, and the size of the region to list all of these companies and actors. However, based on the responses to the questionnaire, the main companies in the region with experience of, or excellent potential concerning future educational export activities the following companies were identified as being, Pohto, Kontio and the Management Institute of Finland Oy (MIF). Additionally Lappset group, while headquartered in Lapland, are included based on their influence on educational environments in the Oulu region, and internationally, while, Lemminkäinen, being an international group are included based on their education related Public Private Partnership construction projects in the region.

The Oulu region has great potential and capacity focusing on all levels and areas of educational export, concerning educational environment construction, ICT related educational solutions and applications, consulting and educational development expertise, and professional training. While the response rate to the questionnaire was quite low and not all companies identified choose to take part in this report, the following companies in the Oulu region that were also identified, and that should be mentioned with references of, or potential concerning educational export, include, amongst others: Aac Global, Ab case consult, Alpakka media online, Lukkaroinen Oy, Uki architects, M3 architects, Next time solutions, Ludocraft, Gamify Finland, Finpeda, Rastor, Happywise Oy, Discendum Oy, Spinfy Oy, and Profin Oy. At the national and international level companies such as Elisa Value, Isku, Martela, 3stepIT should also be mentioned.

4.1. Kontio/Kontiotuote Oy

Kontio Oy is the leading log house company in the world in terms of both sales and manufacturing. Since 1970 Kontio have delivered more than 40,000 log buildings both domestically and internationally to more than 35 countries. The Kontio factory situated in the city of Pudasjärvi, in the Oulu region of northern Finland is the biggest in the world, and also the first such facility to use robot technology. Kontio has been awarded the European CE certificate, ensuring the high quality of Kontio structures in complying with the demands of the European Technical Approval (ETA) ratings.

In 2014 Kontio reported net turnover of EUR 50.7 million, and average personnel levels of 242 persons. Kontiotuote Oy is part of the PRT-Forest Group, whose main lines of business are mechanical timber and construction material industries as well as prefabricated housing. The Group comprises Kontiotuote Oy, Lappli-Talot Oy, Jukkatalo Oy, Mellano Oy, Piklas Oy and PRT-Wood Oy. The strong financial position of the company enables continuous and long-term investments in technology, quality and R&D.

Balance Consulting, the analysis unit of Kauppalehti Oy, awarded Kontiotuote Oy "Achiever status" for its financial performance in 2015. This status which is based on a comparison of key indicators, certificate reflects the financial strength and reliability of the company. Companies receiving Achiever certification are placed in the top tier of both their own industry as well Finnish industry in general.

Benefits of log over traditional building materials

The benefits of building schools and other public buildings using log, are being increasingly realised, and there has been wide spread interest in the Pudasjärvi area, and its policy of using locally sourced log (provided by Kontio Oy), and companies, in the constructing of its public buildings. The benefits accrued from using log as a building material are numerous, with research indicating that natural clean wood reduces stress, lowers blood pressure, generates positive feelings, improves sleep and helps recovery from everyday living. In addition to these benefits, using log as a building material also provides a number of additional benefits over traditional building materials:

Logs create a healthy and safe micro-climate in a building by balancing the heat and moisture fluctuations in the air. (See figure 3) Additionally, log is naturally anti-bacterial, with an in-built defence mechanism against harmful microbes and fungi, wood also prevents the build-up of dust and other particles.

Massive logs even out temperature variations ensuring comfortable indoor temperatures in all seasons. Wood has something called "thermal mass," a natural property in the logs that helps keep inside temperatures of homes comfortable in all seasons. This allows log walls to collect and store energy, then radiate it back into the home. Log homes are often quieter, thanks to the same thermal mass that provides energy efficiency and the sound deadening effects of wood walls. User experiences from the childcare centre in Pudasjärvi, Finland, (completed in 2013) constructed from Kontio pine provides strong evidence as to the excellent acoustics of Kontio Log Houses. In the childcare centre, the space totalling 1,300 square metres is divided into six departments, offering a total care area for approximately 100

children, with the director of the centre noting that feedback from visitors and staff alike has been very positive concerning the log walls ability to eliminate noise, and provide a peaceful learning environment.

Log is a safe and healthy building material. The building material of Kontio Log houses is clean, safe and healthy. In terms of emission classification of building materials, log belongs to the best M1 class. The M1 label shows that the product is found to be safe. Wooden materials like log do not release hazardous particles or chemical fumes in the air, and the safety of log houses has also been tested in real life, for centuries, and log structures have demonstrated their advantages over traditional materials in withstanding natural disasters across the globe. Kontio Arctic PineTM wood raw material is harvested from clean natural Finnish forests, and this natural raw material forms the foundation for healthy homes and the Kontio Healthy LivingTM programme.

Log is ecological, renewable and bio degradable. When a building is constructed from solid log the carbon contained in those logs is effectively being taken out of environmental circulation over the entire life of the building. In terms of emission classification of building materials, log belongs to the best M1 class, while wooden materials like log do not release hazardous particles or chemical fumes in the air. The safety of log houses has also been tested in real life, for centuries. Additionally Kontio Arctic $Pine^{TM}$ wood, has a life span of a minimum of 100 years, and is harvested from clean natural Finnish forests.

Log buildings reduce stress levels. On their website, Kontio state that in an Austrian study the effects of different building materials on the heart beat levels of the students

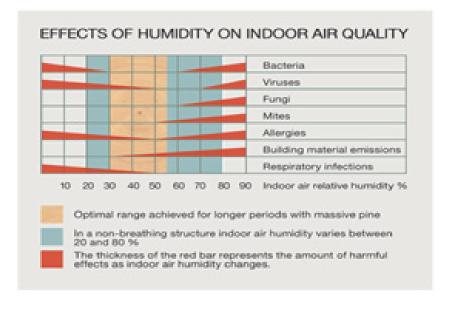


Figure 3: Benefits of using massive pine and indoor air quality Source: Simonson, Salonvaara & Ojanen (2001)

were studied, and that the results showed that the use of solid wood in classrooms can reduce stress levels. Children in solid wood classrooms had on average 8,600 heart beats less per day than children in a plasterboard classroom, and the stress peak common in the morning hours decreased for students in solid wood classrooms soon after arriving at school and did not return.

Recent studies concerning questions of "sag," fire and bad sound insulation concerning log buildings have also been proven to be unfounded, with wood being seen as, a simple, innovate, safe and inspiring material in school construction by both children and designers alike. The numerous ecological advantages of using log, the well-being benefits for students and teachers alike and the resulting additional benefits and savings for the municipalities/customers in using log as a building material, points to there being a great deal of potential, and possibilities for the exportation of this concept in the future.

While there are a number of other log producing companies in the region, such as Kuusamo Hirsitalot and Honka, Kontiotuote Oy was identified as the most important, due to its experience in large scale educational construction, international networks, and cooperation with Lemminkainen on PPP projects.

4.2. Lemminkäinen

Lemminkainen are renowned for their expertise in infrastructure construction and building construction in northern Europe. Lemminkainen offer insightful solutions and new cooperation models to demanding projects. Lemminkäinen had net sales in excess of two billion euros in 2014, and employ on average 5,600 construction professionals. The Group's parent company Lemminkäinen Corporation's share is quoted on NASDAQ OMX Nordic Exchange Helsinki. Lemminkainen is an established brand with more than 100 years of experience and while already seen as a reliable and respected player in Finland, the companies brand awareness is growing steadily in other key markets, such as the Nordic markets, Russia and the Baltic states. (Lemminkäinen, 2014)

PPP model

Lemminkainen have experience of projects that are based on new types of cooperation models and alternative financing models. The most interesting of these cooperation models and the area that sets Lemminkainen apart from its competitors concerning educational export related projects are Lemminkainen's Public Private Partnership's (PPP), and life cycle models, concerning school and public construction, and specifically projects concerning log buildings.

Development of Lemminkainen's learning environments always takes place in co-operation with users and designers in all of our school projects. Lemminkäinen also works in cooperation with local partners to ensure that schools offer pupils a positive environment for learning and growing physically, mentally as well as socially, and take into account the latest educational research to ensure that schools promote social well-being, are aesthetically and appropriately dimensioned while cherishing sustainability, and increasing physical health and safety. Modern studying environments have to be flexible and adjustable, and provide opportunities for teamwork, and diverse working methods. It is also important to notice that the need for versatile student care has increased and there is an increasingly extensive working community in schools. (Lemminkäinen, 2015a)

The International Bank for Reconstruction and Development (World Bank, 2014), has observed that private participation in education has increased dramatically over the last two decades across the world, serving all types of communities, with PPP's being identified as one of the main topic areas in addressing key themes concerning economics of education. The main rationale for Public-Private Partnership (PPP) programs is the potential role of the private sector for expanding equitable access and improving learning outcomes. By providing demand-side financing and contracting private organizations to provide support services, governments can provide better choices to parents and grant them an opportunity to fully participate in their children's schooling. The education market highlights the importance of effective regulatory frameworks and contractual instruments to ensure quality and effective use of public resources.

The life-cycle concept result in savings at all stages of the construction process, as the company takes on responsibility for the overall design, construction, property upkeep and maintenance services and basic renovation investments, among other things. The company is responsible for keeping the premises covered by the contract in good condition so that the comfort, safety, energy efficiency and functionality of the premises will improve. The PPP model is best suited for major private or public construction and renovation projects, in which the overall economic efficiency and total cost of ownership of the projects are optimally realised. The typical duration of contracts is 25 years. As Lemminkainen point out, by using the PPP model, construction expands into a comprehensive long-term service, while the customer can ensure that the property is operated, maintained and kept carefully over the long term, guaranteeing that the value of the investment is preserved. (Lemminkäinen, 2015b) When a PPP is implemented properly, the World Bank observes that it can increase efficiency as the sharing of risk results in more efficient operations, and any savings created are then available to be re-invested into educational provision. (The International Bank for Reconstruction and Development / The World Bank, 2009)

Lemminkainen's PPP and life cycle projects

Lemminkainen are involved in several building construction projects in Finland, related to education, in Kuopio, Hollola, Porvoo, Pudasjärvi and Oulu. In the Oulu region, the City of Oulu and Lemminkäinen have adopted the life cycle model, for the Kastelli community centre, which was completed in 2014. Kastelli community centre is the first Nordic school to be awarded the highly coveted gold level Leadership in Environmental Energy and Design (LEED) award for schools certificate. LEED certified buildings save money and resources and have a positive impact on the health of occupants, while promoting renewable, clean energy (LEED, 2015). The construction of Kastelli community centre also resulted in Lemminkäinen being awarded the Finnish Association of Civil Engineers (RIL) annual award, which is presented for construction projects whose planning and implementation demonstrate outstanding expertise in construction engineering, while also taking into account economic, social and environmental considerations.

The Kastelli community centre building houses a day-care centre, a comprehensive school, an upper secondary school, an upper secondary school for adults, an adult education centre, a library and a youth centre. Additionally Lemmin-kainen is currently constructing a log school complex in Pudasjärvi. This construction is the largest log building in the world and is due to be completed in May 2016. This project is covered in more detail later in the report.

Under the life cycle model, Lemminkäinen coordinates the cooperation between the building's users and service providers, such as cleaning and food service companies. Lemminkäinen also monitors compliance with safety regulations issued by the authorities, the operations of service providers, prepares operating plans and budgets for the property, and manages the maintenance of the building. Lemminkainen's responsibilities during the twenty five year service period are listed as: Property maintenance, cleaning services, maintenance of outdoor areas, security services, property equipment maintenance and repairs, food services, technical caretaker services, supervising after-hours use, supervision and cleaning services for competition events, and the provision of a Café service. By adopting this model, the initial investment required from the city of Oulu was reduced and

lifecycle costs for 25years, including the cost of construction total EUR 86 million. (City of Oulu/Lemminkäinen, 2014). Pudasjärvi school the world's largest timber school. (PPP)

A great deal of international attention has been focused on the construction of a new log campus complex being constructed in Pudasjärvi, which is expected to be finished by the end of May, 2016. The new 9800 square metre campus will comprise school space for 800 lower and secondary school students, as well as high school students, and will be constructed almost entirely from wood.

Upon completion, the building will hold the record for the largest log constructed premises of its kind in the world, and has received in excess of 1,000 visitors already, from places as far afield as Australia and South Korea, as well as multiple queries concerning the possibilities associated with the construction of schools using log material. Following on from the success and positive feedback from the 1200 metre square day care centre which was built in 2013, Pudasjärvi city has decided to continue with a policy of constructing public buildings using timber. The City of Pudasjärvi, wanted to invest in a healthy and modern versatile learning environment, as there were numerous indoor air quality problems with the city's older school buildings.

The Lemminkäinen "life cycle model" is being used concerning the school campus building, meaning that as well as the design and realisation of the construction, maintenance, care, user services and user and service contracts basic improvement investments will be the responsibility of Lemminkainen over the first 25 years of the service cycle. The pine timber for construction is supplied by Kontiotuote, and the timber is sourced from within an 80-kilometre radius of the construction site. Pedagogical consultation services are provided by Finpeda Oy, and architecture and design services are provided by architectural office Lukkaroinen Oy.



Figure 1: Pudasjärvi school campus, made out timber (logs). (c) Town of Pudasjärvi, Juha Nyman

4.3. Pohto (The Institute for Management and Technological Training)

Pohto is an Oulu based company with over twenty years of experience in offering customers business specific educational services, simulated management laboratories and workshops, as well as professional training (awarding over 2000, specialist and further qualifications (erikoisammattitutkinto ja ammattitutkinto) in the fields of Management, Maintenance, Paper manufacturing, Engineering, Product development, Power facility operation, Entrepreneurship and Business leadership). Pohto's services can be tailored and moulded depending on the business sector, using educational programmes, courses, and presentations as well as practical team and simulation exercises. According to information provided by Kauppalehti, Pohto had a turnover of EUR3, 15 million in 2014, and employed 26 persons. (Kauppalehti, 2015)

Business simulation program/Learning environment and training

The Pohto management lab concept is based on the principle of phenomenon based learning, where learning by doing, learning theories and abstract work are all combined to provide a learning simulation environment. Pohto has had over 9000 participants in its Green-Power simulator, in its subsequent simulation Pohto created a business simulation for rapidly growing companies, where new product development creates added value, in which there have been over 4600 participants. Pohto's latest venture, Future-Power simulation concentrates on the innovation process, with the goal of answering the question of "how to create new business?"

The idea behind the business simulation is to run a business on an accelerated timescale in POHTO's simulation environment. During the simulation process, the participants get to create a corporate strategy and a business plan, and analyse the company's operations and financial key figures. The objective is to profoundly understand how an organisation works as a whole and in cooperation with its various components.

The business operations are simulated using POHTO's Enterprise resource planning software (ERS) Oper-ex power: a business operation simulation, which was originally designed for the Electronics Industry in cooperation with the University of Oulu, Faculty of Economics and Industrial Management, Nokia and QPR Software Plc. In OperEx-Power, the operating of a company can be evaluated and experimented with in ways that are not possible in normal every day work. Time is accelerated and the scale altered. This opens completely new possibilities for the participants to observe the progress of the processes and the influence of component factors, as well as challenges. In the business simulation programme Thanks to compression of time, the long-term success factors of the company can be easily ob-

served. Simultaneously each individual can learn how their own actions affect these factors.

Potential services/products for international market

Pohto is currently working on offering three day business simulation programme training packages which will cover three business years, either at the Pohto premise in Oulu, or by creating a digitalised virtual learning environment. Additionally Pohto are currently developing "training for trainers" programmes. Under this programme customers would spend a week in Oulu at Pohto's premise, or Pohto would send experts to the customers premise to train personnel on how to use the Oper-ex software, and provide training on the business simulation process, and all aspects associated with it.

4.4. Lappset Group Oy

Lappset Group Oy is both Finland and Europe's leading business concerning play and activity related equipment and themed activity park production. Lappset was established in 1970, based on the founders' idea of developing a warmer and softer-looking play environment, by incorporating and using innovative wooden equipment in place of metal, to create a new kind of a play environment where children could climb, and have fun with the equipment, while simultaneously developing their balance and strength. Distances and the demands of efficient production presented challenges for Lappset in the early days, which were by developing solutions and innovative techniques, and adopting the latest technological tools, while also investing heavily in product and business development.

This investment and innovation in developing all-round environmentally sustainable design methods for play equipment and playgrounds – has proven to be astute, as the company has grown into an international group, with subsidiaries in six different countries and manufacturing facilities in three, employing a total of 350 staff. In 2014, the company had an operating turnover of 50, 5 million euros, with over 70% of the group's turnover comes from overseas. Lappset products have a distribution network encompassing more than 50 countries worldwide, including for example, Australia, Japan, China, Thailand and the UAE. Additionally, in 2014 Lappset have concluded co-operative agreements with HIT entertainment ltd., and Santa park Oy, (Lappset group annual report, 2014; Lappset group, 2015)

Product range

The Lappset business model is divided into three cornerstones: basic business, domestic business and thematic activity park business. The thematic park business adopted the name Lappset Creative during 2014. Lappset Creative is a designer and supplier of themed activity attractions for family entertainment locations, holiday destinations, theme parks as well as for shopping centres. The Lappset concept focuses

on play, which is in line with the philosophy behind the Finnish early childhood education and care concept (ECEC), which is built on an integrated approach to care, education and teaching, the so-called "educare" model, where learning through play is seen as being essential (Finnish National Board of Education, 2015). Lappset's Play Evolution is focused on finding new, fun perspectives for life and promoting a person's natural instinct for playfulness. Lappset recognise that play is also an important factor in improving wellbeing, as play gives people of all ages a sense of success and inspiration in conjunction with exercise and the joy of spending time together. In addition to these benefits, physical play also improves coordination, balance and body toning without the stress usually associated with exercising.

Lappset's product range includes innovative interactive outdoor play and exercise environments and equipment, yard, garden and street furnishings, for children of all ages, young people, adults and senior citizens. Lappset also provides playground maintenance services and playground design services which are customised and tailored to the customers' needs and requirements. Lappset takes its corporate responsibilities seriously, with environmental aspects taken into consideration early in the design process, products are durable and estimated to last for at least 15 years, and only wood from certified forests is used in the companies' designs. (Lappset, 2015)

Awards and recognition

Lappset Oy has received a host of domestic and International awards over its history. In 1993 Lappset received the Finnish award for exemplary entrepreneurship, while in 1995; the company received the national export award from the President of the Republic of Finland. International Fennia Prize design award was awarded to the companies Axiom product range in 2005. Axiom was also awarded as a top nominee in the Index awards competition the same year. IN 2007 the SmartUs playground concept received the NOT innovation award, and the same concept received an award from the Finnish association of exercise professionals (SLA), while the company was recognised as the Finnish employer of the year for 2007.

In 2008, the same concept (SmartUs) also reached the finals of the ICT industry Stockholm challenge innovation competition in 2008, and Lappset supplied playgrounds were awarded two golden swing awards in a competition for municipalities and cities, run by the Spanish design magazine "Diseño de la Ciudad." In 2010 the company was awarded with the Finnish prize for the best exercise product of the year for its Parkour concept. In 2011 Lappset were awarded the "Ornamo Ball" prize by the Finnish Association of Designers in recognition of the company's insightful product designs.

In 2014 the companies Fono outdoor DJ Table concept was awarded the largest international design prize in the world; the reddot prize or as it is also known as 'the Oscar of de-

sign, for its exceptionally functional design, robust and modern appearance.

In October 2015, Lappset's Halo playground received the prestigious German Design Award, with the distinction of a special mention. This award is the top prize awarded by the German Design Council, which is one of the most well respected design competitions in the world and is aimed at discovering, presenting and honouring unique design trends.

4.5. Management Institute of Finland/MIF Ov

MIF are the largest expert company in the Nordic countries combining management, communication, internationalization and ICT training. Providing versatile training and consulting services to offer a perfect solution for all matters related to development. In the summer of 2012, Fintra, Infor and JTO were merged to form the Management Institute of Finland (MIF). In the spring of 2014, prominent ICT companies Tieturi (Finland) and Informator (Sweden), and Aspectum, a consulting company specialized in customeroriented business development, joined the MIF mix, establishing MIF as the largest training and consulting company in the Nordic region. Additionally in the summer of 2014, Finland's leading internationalization consultant, Finpro Consulting, was merged into the Soprano Group.

According to Kauppalehti (2015) figures, the Management Institute of Finland, MIF Oy had a turnover of EUR4.9 million in 2014, employing 62 staff. MIF is part of the Soprano group, which is a Finnish NASDAQ OMX listed company.

Products/Services

In 2013, over 70 000 people participated in MIF organised training. MIF offer public and tailored trainings, official degrees, events and e-learning services ranging from two-year degrees to short, intensive seminars. MIF offices are located in Helsinki, Tampere, Jyväskylä, Oulu, Stockholm and Saint Petersburg. MIF experts provide high-quality training internationally, with MIF experts located in Finland and 52 other countries across the globe.

Training and coaching: MIF offer training and coaching solutions, in management and leadership, communication, International business and ICT, as both public and customized courses. Training solutions can be carried out in classrooms, at customer's offices, online or as self-study in the virtual MIF Academy. MIF also offers official vocational degrees in international trade, management, entrepreneurship, sales, product development and finance. MIF also offer EMBA's and Blue ribbon events through their partnerships with the world's leading business schools: IMD in Lausanne, Haas School of Business, UC Berkeley and Ashridge Business School in London.

Consulting, mentoring and workshops: Consulting, mentoring and workshops are relevant tools when basic skills and competences have already been acquired, but additional support is needed to solve practical issues or apply best practices. We help individuals and organizations to reach set goals through mentoring, facilitation, workshops and consultation.

MIF Placement: MIF works in cooperation with the Finnish employment services, to provide employers with a range of training services and solutions for employers carried out in cooperation with the Finnish employment (TE) offices, which take into account constant changes in company operating environments, and the ever present need for accomplished employees.

Competence mapping and testing: MIF offer comprehensive competence mapping at both the pre, and post-training stages, in order to evaluate and monitor how successful the training has been. Results are analysed together with the client, in order to ensure that the client has successfully developed their organisations operations.

Certification tests and courses: MIF provide internationally recognised certification courses, upon completion of which an internationally recognised certificate is awarded to successful participants. Certifications can also be structured in order to obtain a degree by passing several certifications and levels.

Certifications offered by MIT include:

- TIL® Foundation Certificate, ITIL® Intermediate-level certificate, ITIL® Expert
- ISTQB Foundation Certificate, ISEB Intermediate-level certificate, ISTQB Advanced Level -certificates
- Certified Scrum Product Owner (CSPO), Certified ScrumMaster (CSM), Certified Scrum Developer (CSD)
- Microsoft Certified Technology Specialist (MCTS), Microsoft Certified Professional Developer (MCPD), Microsoft Certified IT Professional (MCITP)

Main Target Markets

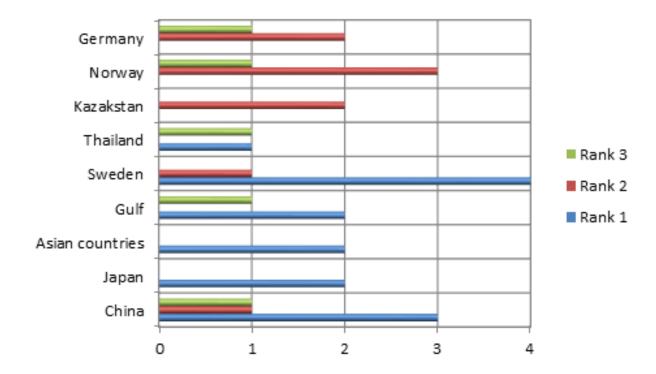
Respondents were asked which countries their organisation perceives as being their main target markets concerning educational export, and asked to list a maximum of five markets and rank these markets in order of the relative importance of that market from the organisations perspective. In excess of twenty separate markets were indicated as being target markets for respondents, with every continent being represented. In order to bring this number down to a more manageable level, and to provide focus, a number of filters were applied. It was decided that only the top three rankings would be used and the fifth and fourth placed rankings would be discarded, as very few respondents used this option. Additionally any market that was mentioned only once was also eliminated from the results. The results and remaining markets can be seen in graph 8 on the next page.

After the filters were applied an additional weighting mechanism was used to indicate the relative value of the rankings using a 50/30/20 weighing scale. When a market was identified as being the main target market it was allocated a score of 50, a second place ranking was awarded a score of 30, and a third place ranking was assigned a score of 20.

Sweden was identified as the main target market by respondents with a weighted score of 230, with China, and the Gulf states behind these. Norway was seen as being the second most important market by three respondents, while Asian countries also accounted for a significant proportion of responses. The Swedish and Chinese markets were identified as being the main potential target markets for educational export in the Oulu region, and these markets are briefly examined in the following chapters.

During the expert interviews, a number of additional markets were identified, but all interviewees agreed that the target market, and customer have to be specifically focused on based on the actual product or service that the organisation is offering. However more importantly, when this potential target market is identified, persons at the appropriate level, i.e. decision makers and local partners, with sufficient networks, market knowledge and political power, also have to be identified and persuaded to act on the organisations behalf.

Importantly many experts chose to focus on the issue of first identifying the products and services that are available on a commercial basis, and then focusing on the markets that the product/service is first of all compatible with, and where there is a recognised need for such products. The idea of selling such advances as 5g technology, or virtual learning environments to markets where the existing infrastructure does not support such innovations is futile, whereas local culture and traditions also have a huge bearing on whether for example, pedagogical, or learning environment innovations will be accepted by the local communities. Every market needs to be examined on a case by case, and product by product basis, as there are a huge number of variables that need to be taken into consideration when exporting education related services, products and expertise. In essence the main considerations identified by experts concerning potential markets are: where are the products needed, and who can afford to purchase them?



Graph 8: Major target markets

5.1. Target Market: Sweden

The Kingdom of Sweden is the third largest country in the European Union (EU) in terms of land size. Sweden has a population of 9.7 million of which about a quarter (23%) is under 20 years of age. The majority of the Swedish population is concentrated in urban areas, with roughly 85% of Swedes living in cities (including suburbs) and almost one-third living in Stockholm, Goteborg, and Malmö (OECD, 2014b). The population has increased by approximately 7% between 2005 and 2014, mainly as a result of immigration. In 2013 15% of the Swedish population were born abroad, putting Sweden among OECD countries with the largest foreign-born population. A further 5% of native-born Swedes had two foreign-born parents. (European Union, 2015; OECD, 2014)

The quality of Swedish education has been keenly debated over the past decade, following declining results among Swedish students in international comparisons, most notably the Organisation for Economic Co-operation and Development's (OECD) Programme for International Student Assessment (PISA) comparison tests. Sweden has made to improve performances and to raise the status of the teaching profession for long-term benefits, which can be seen by Sweden's commitment of investing a larger share of its GDP on education (6.8 per cent) compared with the OECD average (5.6 per cent) in 2014. (OECD, 2014)

International studies such as the Programme for International Student Assessment (PISA) and Trends in International Mathematics and Science Study (TIMSS) have indicated a deteriorating performance among Swedish children in recent years. Sweden's student performance in PISA tests have declined from being rated as average by the OECD in 2000 to rating as "significantly below average" by the OECD in 2012, accounting for the steepest declines of any participant nation over the same period. Concerned with this continued deterioration, in 2014 the Swedish government commissioned the OECD to perform a detailed review of Sweden's education system and to provide recommendations and policy actions to address this decline. The report "Improving Schools in Sweden: AN OECD Perspective" which was published in May 2015, confirms that Sweden needs to improve its quality of education and in particular raise the performance level of students in reading, math and science. (OECD, 2015a).

Sweden has instigated several reforms over the last number of years aimed at improving student results and raising the status of the teaching profession. The new Swedish Education Act of 2011 contains basic principles and provisions for compulsory and further education, pre-school, pre-school year, out-of-school care and adult education, aimed at promoting greater oversight, freedom of choice, and student safety and security. New curricula have been introduced for

compulsory schools for all students in 2011. The curricula contain new general goals, guide-lines and syllabuses. The pre-school curriculum includes clearer goals for children's linguistic and communicative develop-ment and for science and technology. Mandatory national subject tests are held in years 3, 6 and 9 of compulsory school to assess student progress. There are also new qualification requirements for areas including upper secondary school studies. A new grading system was also introduced which is similar to the European Credit Transfer and Accumulation System (ECTS), the standard grading system for higher education in Europe. Teacher qualifications have also been addressed, and efforts are being made to address the quality of teachers in Sweden. As of December 2013, professional certification is required for school and pre-school teachers on permanent contracts. This decision is aimed at supporting teachers' professional development, thus increasing quality in education. (Swedish Institute, 2015a)

Despite these reforms and changes to the educational system, the OECD (2015:7) report recommended that "consistent and coherent efforts" are still required at both national and local levels to make Sweden's "commitment to excellence and equity in education a reality for all schools and all students. The OECD (2015) report, recommend that Sweden address the role of learning environments, excellence in the teaching and principal profession, education priorities, education administration, and the development of assessment and evaluation arrangements, in order to create the conditions for quality with equity across Swedish schools, build capacity for teaching and learning through a long term human resource strategy; and strengthen the steering of policy and accountability with a focus on improvement. While the relevance of PISA results has been debated by many, the Swedish Government has taken this decline as a "wake-up call," and is actively seeking for ways to improve its education system. Finland has been identified by the Swedish government as a country that could possibly provide solutions to Sweden's current challenges, along with South Korea and the Netherlands. (Swedish Institute, 2015a)

The Swedish Economy

Sweden's Gross Domestic Product (GDP) is among the highest across OECD countries at USD 45 100 per capita, compared to the OECD average of USD 37 000. Sweden has a developed and diverse export-oriented economy aided by timber, hydropower and iron ore production, with large organisations dominating the Swedish economy, in both manufacturing and services (Ekonomifakta, 2015; OECD, 2015c).

Since the financial crisis of the 1990s, successive Swedish governments have been balancing the budget for over a decade, and have continued to do so even in the wake of the 2007–2008 global financial crises, implementing reforms that have met with broad support from across the political spectrum in Sweden. Sweden has among the EU's lowest le-

vels of national debt, low and stable inflation and a healthy banking system, with findings of the OECD (2015) Economic survey of Sweden, also reporting that Swedish output is well above pre-crisis levels, (Graph 9) even though GDP per capita has not grown at all during the same period.



Graph 9: Real GDP

2007 the Swedish Fiscal Policy Council (Finanspolitiska rådet) was established. This committee of audits the government's policy decisions regarding public finances and aims to ensure that they remain consistent with the goals of growth, employment and long-term financial sustainability. The Swedish government's credible management of the public finances has meant that Sweden remains in the top league of fiscally responsible countries in Europe. Commonly, governments with large budget deficits carry out austerity measures by increasing taxes and cutting public spending, however Sweden has avoided these difficulties. Sweden has also continued to invest in areas like healthcare, education and research, instead of having to cut heavily in these areas like in some countries. (Swedish Institute, 2015b)

In addition to maintaining competitiveness in goods and manufacturing, growth in modern service sectors such as information and communication technology has been strong in Sweden. Since 2008 the ICT sector has grown by 16 per cent and now employs over 4 per cent of the Swedish workforce. The sector is characterised by its many new and small businesses, and Stockholm has become known as one of Europe's hottest start-up cities for ICT companies. Sweden is the only EU country where each and every region has a higher GDP per capita than the EU average. (Swedish Institute, 2015b) Sweden today has a diverse, highly competitive and successful economy. The World Economic Forum ranks Sweden in the top ten of the most competitive countries in the world (World Economic Forum, 2015a), while Sweden is also ranked eight by the World Bank in its ease of doing business index (World Bank, 2015).

Conclusions

Sweden has a strong and stable economy, with high employment rates, increased GDP and sound fiscal policies that have been relatively unaffected by the current global economic crisis. Additionally Sweden is serious about implementing wide ranging changes in its education system, and has made considerable investment in improving its system. Additional large investments in education can be expected in the near future concerning further improvements, and Finland is one of the countries that Sweden is looking towards to provide solutions to these challenges

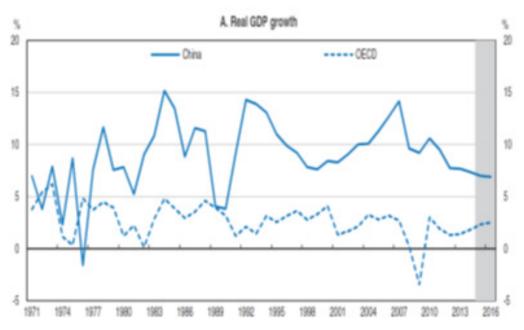
Sweden also has the added advantage of offering fewer "barriers" than many other countries frequently mentioned concerning Finnish educational export, as:

- There are strong historic and business links between Finland, and Sweden.
- In 2014 Sweden accounted for 41% of foreign direct investments in Finland, and almost 32% of direct investments from Finland were in Sweden (Statistics Finland, 2014), thus many Finnish companies and educational institutions have experience of doing business in the Swedish market, and experience of working with Swedish partners.
- The Swedish culture, language and business practises are familiar to the majority of companies and organisations.
- As Sweden is an EU member, issues concerning contracts, documentation and legislative procedures are minimal.
- Additionally the Swedish climate is similar to that of Finland, and problems associated with this can be easily foreseen and taken into account concerning any construction projects.

Sweden has a number of benefits relating to educational export, particularly for the Oulu region. Sweden may be the best target market for organisations looking to gain international experience concerning educational export, as it provides the least risk, and there are solid mechanisms concerning contracts and financial penalties. Additionally, concerning any pilot construction related projects; Sweden is suggested as being the main target destination, as in addition to having the least risk, it also has the added benefits in the forms of a familiar language, culture and legal/structural codes, and its relatively close proximity to the Oulu region.

5.2. Target Market: China

China is the world's most populous country with a population of almost 1, 39 billion. In 2014, China's GDP growth reached 7.4% in 2014, close to the target of around 7.5%, though for the first time in years, the target GDP level was not exceeded (Graph 10). Still, growth has been slowing, as has investment, which has partly reflected the lagged impact of earlier measures to restrain credit and the housing market boom. Growth and investment have been slowing which may signal a more deep-seated deceleration following an exceptionally long spell of very rapid growth (OECD, 2015b). Data concerning Chinese expenditure on education is sparse and unreliable, but, data released during the 2014 annual sessions of the National People's Congress and Chinese People's Political Consultative Conference showed the combined fiscal budget for education of governments at all levels was 2.4 trillion yuan (\$377.45 billion), while China had invested 4% of GDP on education in 2012.



Graph 10: Real GDP growth (1971-2015). Source: OECD (2015b).

The explosive growth of China's emerging middle class has brought sweeping economic change and social transformation. Research by McKinsey & Company (2013) suggests that more than 75 percent of China's urban consumers will earn 60,000 to 229,000 RMB (\$9,000 to \$34,000) a year, by 2022. The middle class's continued expansion is being powered by labour-market and policy initiatives that are pushing wages up, financial reforms that stimulate employment and income growth, and the rising role of private enterprise, which should encourage productivity and help more income accrue to households. This will result in more disposable income especially among the growing middle class, and a growing investment in private foreign branded education. However, it should also be noted that there is also the danger of China falling into a middle income trap or "a development stage that characterizes countries that are squeezed between low-wage producers and highly skilled and fastmoving innovators," (Flaaen, Ghani, & Mishra, 2013) due to its massive growth and rampant, and rising wages and inequality caused because of this growth.

Deloitte (2014) predict that the value of the private education sector in China will reach RMB640bn (US\$102bn) by the end of 2015. Up to now, education has been a major focus area for investment, but it has not always been easy for private investors to enter into the market, particularly foreign investors, because of legislation stating that "Privately-run schools belong to public welfare undertakings and constitute a component part of the cause of socialist education." (Law of the People's Republic of China on the Promotion of Privately-run Schools, article 3)

China's national plan for medium and long-term educational reform and development (2010-2020), (or the lifelong learning policy as it is also referred to) acknowledges that China is experiencing pressure from its vast population, limited natural resources, the environment, and changes to its recent pattern of economic growth, and that in order to meet these challenges, major reforms and investment in education are seen as a necessity.

To achieve these goals, China's lifelong learning policy targets all stages of the educational system from pre-school education to further education, (See figure 4) with the main targets listed as, to:

- Further popularize education by 2020 preschool education shall be universalized while popularization of nine-year compulsory education shall be consolidated and enhanced;
- Deliver equal education to everyone education should remain public welfare-oriented in nature, and equal access to it shall be safeguarded;
- Offer quality education in various ways dramatic improvement shall be sought in students' ideological awareness, moral conduct, scientific and cultural attainment, and physical health;

	2009	2015	2020
Preschool education			
Kindergarten enrolment (in millions)	27	34	40
Gross enrolment rate at three years prior to compulsory education (%)	51%	60%	70%
Gross enrolment rate at one year prior to compulsory education (%)	74%	85%	95%
Nine-year compulsory education (i.e. primary and jun	ior secon	dary edu	cation
Enrolment (in millions)	158	161	165
Graduation rate (%)	91%	93%	95%
Senior secondary education			
Enrolment (in millions)	46	45	47
Gross enrolment rate (%)	79%	87%	90%
Vocational education			
Junior secondary vocational enrolment (in millions)	22	23	24
Senior secondary vocational enrolment (in millions)	13	14	15
Higher education			
Total number of people studying in higher education (in millions)	30	34	36
Enrolment (in millions)	28	31	33
Master's degree students within the enrolment (in millions)	1.4	1.7	2.0
Gross enrolment rate (%)	24%	36%	40%
Continuing education			
Continuing education received by working people (in million times)	17	29	35

Figure 4: China's state guidelines for middle and long-term educational reform and development.

Source: KPMG. Education in China (2010:5)

Build a consummate framework for lifelong education

 diploma-based education shall develop in coordination with non-diploma education. Vocational education shall be connected with non-vocational education, linking pre-job and on-the-job education. The national plan also acknowledges that Non-government funded (private) education is a prominent source of growth for education and a staunch force behind education reform. Local governments should consider the developing of nongovernmental education as a priority, encouraging investment and donations in such schools, and urging private businesses to run schools independently or jointly. (17th Communist Party of China National Congress, 2010; KPMG, 2010)

It is virtually impossible to examine all aspects and areas of the Chinese education market, thus the areas of Kindergarten education and Technical and Vocational Education (TVET) were identified as being the two main areas that should be examined and focused on concerning possibilities for the Oulu region in the Chinese market.

Pre-school/Kindergarten education

Pre-school or kindergarten education (3-6 years old), is strongly encouraged by the Chinese government, but the availability of early childhood education still remains an issue. China's relaxation of its previous rules on the "one-child policy" in 2014 is expected to bring an additional one million babies every year, and this promises to fuel the expansion of private pre-school education.

As of the end of 2013, China had a total of 198,553 kindergartens, rising 17,302, or 9.5% from 2012. In China, private kindergartens have developed faster than public ones in recent years. By the end of 2013, there were 133,451 private kindergartens, a jump of 8,813 or 7.1% from 2012, accounting for 67.2% of the total number of kindergartens nationwide. 9,079,575 new entrants and 19,902,536 enrolments were recorded by private kindergartens in 2013, making up 46.1% and 51.1% of kindergartens all over the country (PR Newswire, 2014).

Kindergarten education in China is mostly provided by private institutions and is not as yet available country-wide. Private Kindergartens are major participants in the market, accounting for some 70 percent of all kindergartens. The number of both high-end kindergartens targeting well-off Chinese and foreign parents as well as low-end kindergartens for migrant workers' children is constantly growing, while middle-class families are placing an increasingly higher demand on kindergarten brand, teachers' qualifications and teaching programs. Wealthier Chinese customers usually place great value on brand and reputation when selecting education and training services and this holds true for children's education also. Chinese customers often favour foreign brands, which they associate with experienced staff and modern teaching methods, while customised training courses are also seen as being more effective in providing children with advantages over their peers, and are gaining in popularity.

China has issues concerning, curricula and the availability of early childhood educators as well as teacher qualifications concerning the industry. The ratio of pupils to teaching staff is often used as a proxy to measure quality in ECE (OECD, 2010) .A large body of research has found that the lower the child-staff ratio is, the better the children perform in cognitive (mathematics and science) and linguistic (language, reading and word recognition) assessments. On average, there are 14 pupils for every ECE teacher in OECD countries, but in China the ratio was twice this in 2010, with 24 pupils per ECE teacher. In rural China, access to ECE is still low, and while the teacher-child ratio may be considerably lower in rural areas when compared with urban areas, rural kindergartens always have oversized groups led by teachers that are not fully qualified. Research in ECE demonstrates that enriched stimulating environments and high-quality pedagogy are fostered by better qualified practitioners and that better quality pedagogies facilitate better learning outcomes (Xiumin, Peng, Ma, & Xin, 2015). While qualifications are one of the strongest predictors of staff quality in early childhood education, the role of what specialised and practical training and professional development education are available to and taken up by staff, and how many years of experience staff have accumulated, are more important indicators as to staff quality in ECE.

New Zealand Education's report on market opportunities in China, recognise that there is a serious shortage of preschool teachers resulting in a strong demand for teacher training. The main opportunities identified are targeting high end pre-schools teacher training, curriculum and consultancy services, as well as children's books and other publishing material. There is an existing Finnish presence in China concerning early childhood education, combining Finnish business and educational expertise, with Rovio, in cooperation with the University of Helsinki's Playful Learning Centre (PLC), opening Angry Birds Playground's, a kindergarten program for children aged three to six, in Shanghai and Chengdu during 2014.

Technical and Vocational education (TVET)

China now runs the largest VET system in the world. There are more than 15,000 vocational institutions at the secondary and tertiary levels combined, more than 22 million students in secondary VET and almost 10 million in post-secondary VET. This equals 47.6 percent of total tertiary education enrolments and 47.6 percent of secondary (Stewart, 2015). The TVET system in China has developed enormously in a relatively short period of time and there are significant possibilities in the areas of teacher training, standard, qualification and curriculum development, adult education, industry on the job training, and online education.

During the 2014 National Conference on Vocational Education, the Chinese State Council issued its Decision on Accelerating the Development of Modern Vocational Education, which called for further strengthening international cooperation in the vocational sector (State Council, 2014). One key point of the reform is to establish a new type of university, Universities of Applied Sciences (UAS), who issue Bachelor degrees in professional education; transition options between the vocational and academic career track, will be streamlined.

China's high-end vocational training market was worth RMB 67.4 billion in 2013 (Deloitte, 2014), the bulk of which was business management and IT training. This subsector will maintain a compound annual growth rate of 7 percent over the next three years. With the exception of the slow growing financial, accounting and IT training segments, IT, computer graphic and online marketing training will maintain double digit growth in the coming years, thanks to a huge demand for persons skilled in Internet applications

As individual industries are developing and the job market breeds intense competition, vocational education of advanced degree holders and employed staff is becoming a bigger priority for the government, companies, and social organizations alike, and since the employed population is more financially flexible and willing to learn, these are seen as being prime targets for vocational online learning services.

The Chinese government's development strategy roadmap for China's dual track education expresses the government's commitment to strengthen the vocational education career track. Currently, 45% of junior high school graduates (end of the 9 year compulsory education in China) enter the professional career track, while 55% follow high school education towards an academic university. The strategy sets a goal to reach a ratio of 50%:50% in the near future. According to the strategy, the priority areas for vocational education lie in modern agriculture, advanced manufacturing, service industry, strategic industries, energy, transportation, ocean industry, social management and creative & culture industry. (Stewart, 2015).

Yang (2014) believes that by constructing a modern vocational education system at various degree levels (certificate/diploma, associate degree, bachelor's degree, and master's degree) and opening up collaboration possibilities for faculty/student exchange, joint degree programs, co-development of vocational qualification framework and curriculum standards, these new policy initiatives open doors for new international players, who have recently changed their international education policies from "Aid to Trade model" and have a strong university of applied science sector such, amongst others, Finland.

There has been long-term cooperation between a number of countries and China regarding vocational education: Sino-Germany cooperation has been sponsored by governmentsubsidized groups such as Gesellschaft fuer Technische Zusammenarbeit (GTZ), supported by the German Federal Ministry for Economic Co-operation and Development (BMZ), which has partnered with China on VTE projects since 1982. The British Council has also sponsored a variety of vocational training programs in China, to improve curriculum, institutional capacity and leadership in vocational institutions, and introduce British vocational qualifications to China. Canada has been developing its strategic advantage in working with the Chinese vocational sector for more than two decades, with a number of sponsored programs in cooperation with Canadian institutes, university colleges and polytechnics, and a host of Sino-Canadian institution cooperation initiatives. Ministerial level TVET policy dialogues with Germany, the UK and the Netherland have been announced, together with additional plans to expand TVET cooperation with the U.S., Australia, African and South American countries. Project-based cooperation on TVET with the Asian Development Bank and UNICEF were also listed as a priority during 2014. The Netherlands have also recently created the position of "Education Counsellor" in charge of TVET at their Embassy in Beijing. (Embassy of Switzerland in China, 2014; Yang, 2014)

Finnish presence in TVET in China includes, a consortium consisting of Omnia, Haaga-Helia and Educluster which established the China-Finland Centre of Excellence in Vocational Education in Shanghai, with the aims of promoting integration, development, excellence and achievement of vocational education in China with experts from China and Finland. The centre cooperates with Finnish multinational companies operating in China, such as KONE and Valmet and utilises state-level cooperation between China and Finland

Conclusions

Doing business in China is incredibly complex, due to (amongst others) language, culture, regulatory and legal considerations, business practises, and market size. Additionally there are huge variations in education, income and infrastructure between regions and cities. The relative differences between cities of various sizes, and urban and rural area development and infrastructure is startling, and each specific target market, and justifies intensive research, Deloitte (2014) believe that the rapid development of the Chinese education and training market, has seen the emergence of some leading brands in every segment of the market, as business groups, both local and international, that have entered the market early have established learning centres and reinforced their brand standing through more powerful marketing, and networks. (Deloitte: China Research and Insight Center, 2014). This is mainly true concerning the education markets in the major tier I cities, such as Shanghai and Beijing, which are indeed saturated, with international and domestic brands and corporations competing vigorously for a share of the market. However, in tier II and tier III cities, there is considerably less competition and a huge, increasingly affluent market that has not been "tapped." This market could provide a huge number of opportunities for education export from the Oulu region, at all levels from pre-kindergarten to adult professional education.

Knowledge of the Chinese market is the main precondition for any future cooperation between Finnish and Chinese partners. There are a host of conflicting policies and statistics concerning the Chinese market, provided by both the Chinese government and a host of other organisations. While some areas such as Early childhood education are very loosely administered, Zhang and Jinjie (2013) (Stewart, 2015) report that the administrative structures concerning for example TVET are so complex in China that nobody understands them. During my interview with a local Chinese educational export focused business owner, that concerning the language and culture, what is not been said is often more important than what is being said, and only someone with the appropriate experience of the language and the culture is best qualified to interpret these rules and regulations, thus the role and importance of involving Chinese local partners, Chinese experts and both Finnish and Chinese governmental organisations is vital when doing business with, or in China. Additionally there also needs to be research and discussion, concerning compatibility between Finland's and China's systems and institutions. The dominant discourse of export readiness is a one-dimensional concept, emphasizing Finland's capacity to deliver educational services in China, nevertheless, a successful cooperation needs two partners.

Many countries, and companies have had existing educational relationships with China that have been built up over decades, and Finland does not have this history, or brand recognition in China that countries such as the UK, Germany, Australia, or its other Nordic neighbours, Denmark and Sweden have. Finland needs to build its national and educational brand in the Chinese market, as the majority of Chinese people are in many cases unaware of both Finland, and the quality of Finnish education. It should also be noted, that these countries have used Chinese students and business links extensively in building and cementing these relationships. Overseas Chinese students have been recruited for decades by countries such as Australia and New Zealand, after or during their studies in these countries, as they are seen as a valuable resource, as they are familiar with the language and culture, and the education systems of both countries. This does not seem to be a trend that is emulated in Finland on any large scale.

There has been some movement on the diplomatic front lately in this regard, as in June of 2015 the Chinese premier of the People's Republic of China, Liu Yandong, and the Finnish minister for Education and Culture, Sanni Grahn-Laasonen signed a cooperation agreement between Finland and China, to promote teaching, education, learning environments, research and development, as well as promoting educational export and educational technology. Springing from this was the creation of the Sino-Finnish Leaning Garden. A new education cooperation platform initiated by the Ministry of Education of the People's Republic of China and the Ministry of Education and Culture, Finland, with the aims of the network being "to coordinate and connect Finnish and Chinese actors and stakeholders in the fields of research on education policy, management and pedagogy, as well as training programme development for education institutions' administrators and professionals. "Additionally the network aims to facilitate information sharing and enhancing the relevance and quality of Finnish training for Chinese educational administrators and professionals.

Another government supported entity that can be utilised by organisations in the Oulu region concerning the Chinese market, is the Finland-China Education Association (FICEA), based in Tampere, which is a national level, non-profit organization with the mission to assist governmental sectors, schools and individual actors to expand their network and to enhance their knowledge in the field of education between Finland and China. FICEA will support the development of the Finnish-Chinese cooperative relationship by

providing resources and contacts for educators from both countries. FICEA is supported by a number of key actors within the Parliament of Finland and the Ministry of Education and Culture, the Embassy of the People's Republic of China, local governments, several universities, schools, companies and high-level organizations. (FICEA, 2015). In addition to these governments supported initiatives there are a number of Chinese natives in the Oulu region, business owners, lecturers and students (past, present and future) that can be and should be used as future resources concerning both customer identification, targeting and market analysis.

The Chinese market is growing and thus has huge potential for educational export, for both educational institutes and companies, at all levels of education. However, the Chinese market is huge, and incredibly complex, with a number of obstacles that need to be examined and overcome, such as language, culture, and legal and business barriers, but these obstacles can be, and have been overcome. Numerous success stories of Finnish educational export initiatives abound, achieved by utilizing local and government agencies expertise and networks to access these markets. The vast majority of these success stories again come from Southern Finland, nevertheless, there are companies and originations in the Oulu region that are currently working on educational export projects with China, and these networks and expertise should be utilized.

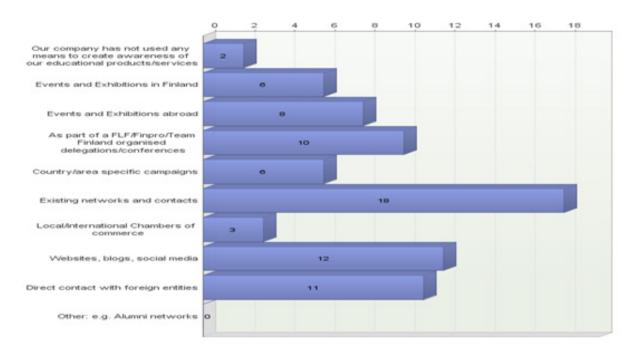
Marketing Channels

Respondents were asked which means they have used to create international awareness of their products or services, and were given a list of possible channels that could be utilised in creating product or service awareness on international markets. Respondents were asked to select as many of the options listed as were applicable to their organisation. Additionally respondents were given the option of adding their own channels, via the other option, which was not utilised by any respondent.

As can be seen from graph 11, two respondents indicated that they have not used any means to create awareness of their products/services. The most important channels that have been utilised are existing networks and contacts with eighteen responses, of these eighteen respondents five have had no previous educational export experience. Fifty percent of respondents, (four educational institutions, and six companies) indicated that they had been part of a FLF/Finpro/Team Finland organised delegation or conference, with two of the companies involved in these delegations or conferences having none of their turnover being accounted for by educational export. Websites, blogs and social media, and direct contact with foreign entities were the additional main channels used by respondents.

Local/international chambers of commerce were utilised by only three respondents. Awareness of local chambers of commerce and their roles concerning educational export, and their utilisation seems to have been somewhat overlooked. Local chambers of commerce are a central actor in local Team Finland networks, which also consist of the "Ministry of Employment and the Economy, the Ministry for Foreign Affairs, the Ministry of Education and Culture, and the publicly funded organisations and service points abroad operating under their guidance (Finpro, Tekes, Finnvera, Finnfund, Finnpartnership, Finnish Industry Investment, VTT, the Finnish Patent and Registration Office, the Centres for Economic Development, Transport and the Environment, Finland's cultural and academic institutes, the Finnish-Russian Chamber of Commerce, the Finnish-Swedish Chamber of Commerce). Team Finland local teams gather together the Finnish authorities, publicly funded organisations, and other central actors representing Finland in the particular region." (Team Finland, 2015a)

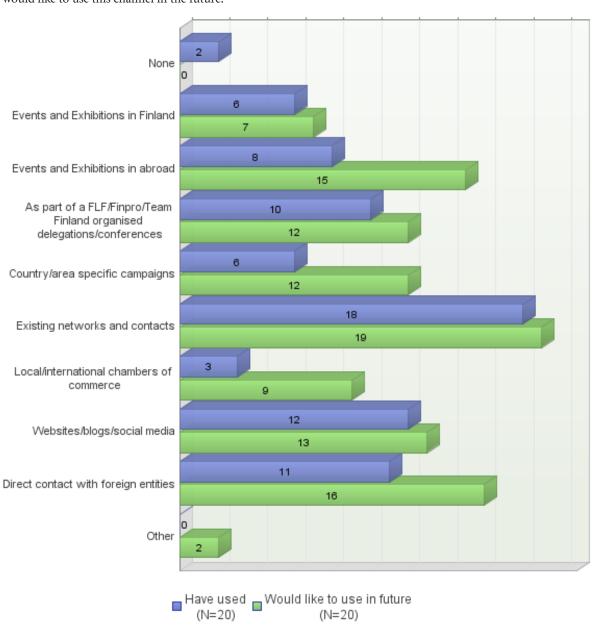
Respondents were then asked what channels from this same selection they like to use in the future to create International awareness of their products/services, and the results are compared with the answers previously supplied concerning existing channels.



 $\textit{Graph 11: Channels used to create international awareness of products/services} \ (N=20)$

As can be clearly seen from graph 12, organisations would like to utilise additional channels in the future to create awareness of their products/services. All respondents apart from one would like to utilise existing networks and contacts, which based on my interviews and research is still the main mode of discovery concerning educational export opportunities, at both the company and the educational organisation level. Respondents would also like to particularly increase direct contact with foreign entities, with 80% of respondents indicating that this was a channel they would like to utilise, and 75% of respondents indicated that they would like to attend events and exhibitions abroad. Interestingly the number of respondents that indicated that they would like to utilise local/international chambers of commerce has also increased threefold from three respondents that are currently utilising this channel, to nine respondents that would like to use this channel in the future.

Two answers were supplied by respondents in the other section, which were "an education export network with partner companies and organizations," by a company, and "a national network of vocational colleges" by an educational organisation focused on vocational education. It should be noted that the network of vocational colleges is in reference to current research, (Ammatillisen koulutuksen viennin edistämishanke, 2015) concerning fourteen vocational education networks in cooperation with, and funded by the Finnish National Board of Education (FNBE), concerned with examining the potential advancement of educational export possibilities for vocational education (Vocational education export advancement project 2015, 2015)



Graph 12: Comparison of existing channels used, and future channels that organisations would like use

Cooperation and Collaboration

When asked if their organisation was currently working in cooperation with any domestic or foreign entities concerning educational export projects, seventeen of the twenty, or 85% of respondents indicated that their organisation was working in collaboration with or in cooperation with either another Finnish or international entity. Of the three respondents that indicated that they were not working with any other entities, all three were Micro sized companies.

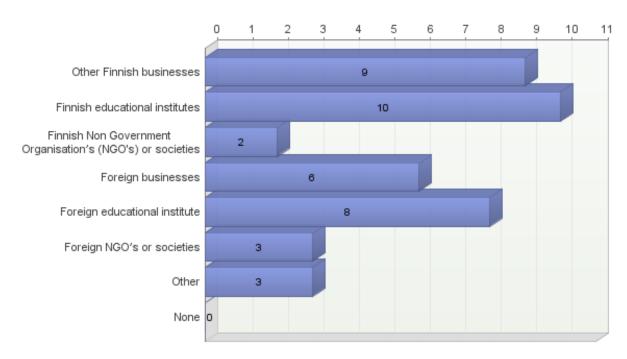
The seventeen respondents that indicated that they were working in cooperation with other entities concerning educational export were asked to indicate which entities they had/have worked with domestic and foreign. Options provided were Finnish and foreign businesses, educational institutes and Non-Government Organisations (NGO's) or societies, and an additional option of other was provided for any organisations deemed to fall outside of these options, and respondents were asked to mark a maximum of three organisations that they have worked with, or are working at present concerning educational export.

As can be expected other Finnish businesses and educational institutes are the main partners that both companies and educational organisations, receiving nine and ten responses respectively. Upon deeper investigation it was revealed that half of the company respondents indicated that they have had worked in cooperation with foreign businesses or educational institutes, while half also indicated that they had worked in cooperation with Finnish educational institutes concerning educational export projects. Four of the five educational institutes had worked with domestic educational institutes, while no educational institute indicated that it had experience of working with foreign businesses, or either Finnish or foreign NGO's. Other organisations that were mentioned were Finpro and Embassies, which one or-

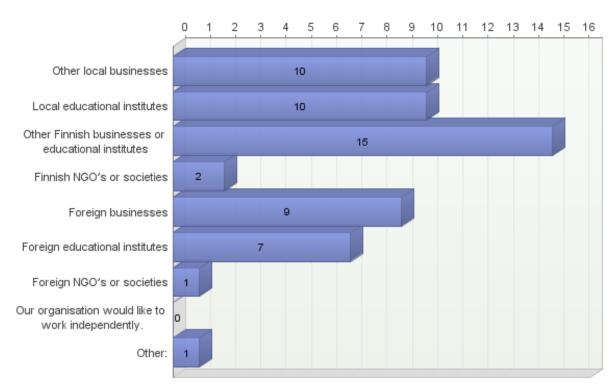
ganisational entity indicated it had worked with, VTT, Future Learning Finland and ELY-keskus (Centre for Economic Development, Transport and the Environment) were also mentioned as other organisations that companies had worked with or are currently working with. (Graph 13)

Respondents were then asked what organisations they would be interested in working in cooperation concerning international educational export activities, and asked to identify a maximum of three entities that their organisation would be interested in cooperating, or collaborating with in the future. Local businesses were identified by fifty percent of respondents as being entities that they would like to work with in the future, while 75% if respondents indicated that they would like to work with other Finnish businesses and educational institutions (Graph 14).

All five educational institutions were interested in working with other Finnish businesses or educational institutions, whereas only three were interested in working with local educational institutions. Two of the five indicated that they would like to work with foreign educational institutions. No educational institutions indicated that it was interested I working with foreign businesses or domestic/foreign NGO's. Companies were primarily interested in working with other Finnish businesses or institutes, local and foreign businesses and local and foreign educational institutes. Only one company respondent indicated that it was interested in working with a foreign NGO, and one respondent indicated another entity that it was interested in collaborating or cooperating with outside of these options were foreign communities/cities.



Graph 13: Co-operation organisations (N=17)



Graph 14: Entities which respondents would be interested in cooperating/collaborating with in the future

Opportunities for bigger collaboration/cooperation and networking

There are numerous opportunities available for organisations in the Oulu region concerning collaboration/cooperation and networking at both local and international levels. A vast "hidden," and for the most part untapped international network exists in the Oulu region, where as there are a number of publicly funded initiatives and entities that should be utilised, concerning potential collaboration with both domestic and foreign entities in addition to identifying marketing and networking channels.

The role of cities, towns and municipalities in collaboration and networking

The majority of towns and cities in the Oulu region have existing networks and partnerships with regions and municipalities internationally, usually in the form of twin towns or sister-cities. These agreements between cities, usually take the form of a legal and social agreement between towns, cities, municipalities, or regional authorities, in geographically and politically distinct areas to promote cultural and commercial ties, as well forming strategic international business links between member cities. (International Cooperation Agency of the Association of Netherlands Municipalities (VNG International, 2007)

Being the largest city in the region, the City of Oulu for example has an international network of partner and "twintowns" or sister-cities, in countries including: Scotland, Japan, Sweden, Germany, France, Tanzania, Nicaragua, Norway, Ukraine, Hungary, Turkey, Russia, Italy, Kazakhstan, and China, whereas for example the city of Raahe has "sister cities" in Estonia, Denmark, Norway, Slovakia, Sweden and Russia. These links and partnerships could possibly be used as a springboard for cooperation and collaboration concerning educational export, wither in cooperation with the Cities, by utilising existing networks and channels that have been formed due to these links and cooperation, or indeed looking at how to develop new ones working with the partner cities and their various departments and networks.

Local regional business development entities networks and projects

Local regional business development entities such as Business Oulu also have wide international contact networks, as well as experience concerning international business, that could be utilised by regional companies concerning educational export. Business Oulu are responsible for the city of Oulu's business policy implementation, in addition to providing support on innovative entrepreneurship, as well as cooperation with international, local and national partners. Business Oulu's main roles are in "supporting growing companies in creating jobs, promoting export, refining competencies and developing different lines of business," in addition to "serving as a hub of industries and company

networks that provides Oulu-based companies with connections around the world." Business Oulu's primary focus is on SME's. (Business Oulu, 2015)

Business Oulu implements its strategy for the advancement of business in Finland with a variety of projects and programs, aimed at promoting and increasing entrepreneurship in the region. In addition to providing global networks of actors in a variety of industries, Business Oulu also provides export services, which support and develop organisations' export competencies, in order to help companies enter and increase exports in countries like the US, Great Britain, France etc. Other services provided include, helping to survey potential target markets and international contacts and networks, and collecting and dissemination of information concerning export-related issues and markets. Business Oulu conduct export promotion trips to international events, meet potential partners and financiers, organize B2B matchmaking events and assist in sales negotiation arrangements where necessary. Currently business Oulu has various projects and programmes concentrated on various areas. Two of these programmes/projects, which are currently under way, are quite interesting and may have some potential concerning educational export, in the context of creating and expanding networks and offering additional opportunities of working in collaboration with both local and international entities.

Finnish Business Hub: These Hubs are business centres established by Business Oulu and the City of Oulu with the aim of building connections and networks between Northern Finland and the target country, in order to promote new business operations, especially in industrial production, the ICT sector and construction. Finnish Business Hubs are also tasked with disseminating information concerning the labour market of the target areas. These hubs are currently serving in Astana (Kazakhstan) and Tromsø (Norway). (Both of these markets were identified as potential target markets for educational export)

International Sales Force (ISF): is a project that aims at increasing the number of international contacts, tenders and new deals for SMEs based in Northern Ostrobothnia. The project helps enterprises to become more international, to find and open new sales channels on the international market and open, activate and develop new processes for sales and international operations. (Business Oulu, 2015)

While Business Oulu programmes are not specifically related to, or targeted at educational export, the goals and ambitions of these projects stand in tandem with the goals of increasing networks, activities, cooperation and sales of education related exports in the Oulu region. Business Oulu is provided as an example here, as it is the most visible, but many other towns and cities also have their own business development agencies, for example Raahe Business District

Services. A variety of other public sector organisations, such as the Centre for Economic Development, Transport and the Environment, (ELY), Finnvera, and the Council of the Oulu region (amongst others) all have a variety of networks and channels that could also be utilised in identifying cooperation/collaboration opportunities and channels.

Educational organisations and companies existing contacts and networks

Companies and educational organisations in the Oulu area have existing networks that could and should be utilised in order to increase collaboration and cooperation opportunities concerning educational export.

Oulu University has an partner network covering the globe though its involvement in a variety of exchange programmes including, Erasmus: Europe FIRST: Russia ISEP: United States, International to International ISEP: North America, South America, Asia, Bilateral exchanges outside Europe: North America, South America, Asia, Australia, North to north: Universities in North America, Nordic Countries and Russia in the North, Nordplus: Nordic Countries, and North-South-South: Africa. Additionally other educational organisations in the region, such as OAMK, OSEKK, and the federation of education in Jokilaaksot (JEDU) also have partner institutions worldwide at both tertiary and vocational educational levels. While these networks are mainly utilised for student and staff exchange, these networks could be expanded further and utilised for networking and possible collaborations with local partners.

Partner universities, educational institutions and regional companies' local knowledge and expertise should all be further utilised in order to find opportunities, niches, and potential for educational products, services, or educational solutions particularly in the main target markets identified. These entities have local market, culture and business practise knowledge, in addition to language skills, and awareness of other practises that non-local partners would not be aware of. As mentioned previously, the majority of companies in the region indicated that they have experience of working in international markets. While these entities may not be directly connected to the educational industry in that market, they may have other partners or networks that are that they may be willing to contact or work in collaboration with on behalf of the company or educational institution.

Another possible resource that is frequently overlooked concerning cooperation/collaboration opportunities are foreign students living in the area, and indeed foreign workers working for companies and educational institutions in the area. A number of micro sized companies in the Oulu region are comprised of a small number of foreign business owners/present/former students, either working alone, or working with Finnish partners, that have seen the potential of exporting Finnish educational services/products to their home countries. These companies are small, and in general

do not have the necessary expertise, resource, or finances to fully exploit market niches that either they or their home networks or contacts have identified. However, these companies, students and workers do bring market knowledge, contacts, language skills, cultural awareness and knowledge of local business practises.

Additionally, these foreign workers/students/business owners can also gain access to information that is not readily available to non-natives, as English translations are not readily available, and if they are, they generally do not provide anywhere as near as in-depth an analysis as information or reports in the local language(s). Similarly, these persons have the added benefit of being able to interpret the data from the cultural perspective, as in many cultures what is not being said, may be as important as, if not more important than what is.

Websites, blogs and social media were identified as tools that only 60% of respondents were using as a marketing channel at the moment, and only 65% would like to use this medium in the future. These media have been shown to have a number of benefits such as increased brand recognition, and decreased marketing costs, and the relative cost to the organisation of using these types of media is minimal. Regional social media mobile applications such as WeChat and I Line, and social networks such as Weibo (China), VK (Russia), and Mixi (Japan), and other prevalent social media networks and tools. Blogs, etc. can be written in the local language to specifically focus on that target market or region to create product/service/brand awareness.

Finnish Chambers of Commerce

There are twelve thousand chambers of commerce world-wide that form a global network, reaching millions of companies and potential partners across the globe. Chambers of commerce cooperation networks also exist at EU, Baltic and Barents regional levels. While the domestic Finnish chambers of commerce do promote internationalisation, and support investment initiatives made by enterprises, what may be of particular interest for company and educational entities focusing on educational export, are the network of Finnish chambers of Commerce abroad, or the FinnCham network, as the organisation refers to itself, which cooperates with Team Finland to promote Finland's economic interests and country brand throughout the world.

In relation to internationality and business, the FinnCham network provides the following services:

- Arbitration: Finland Chamber of Commerce's Arbitration Board helps with trade-related dispute matters, even on the international level.
- Documents for Foreign Trade: The chambers of commerce grant and confirm documents related to international trade. These include foreign trade documents, confirmations of commercial invoices, Force Majeure certificates, and recommendations for export compa-

- nies and personnel.
- Foreign Trade Folders The foreign trade folders help businesses in matters related to international trade. They contain the most important and useful information to facilitate foreign trade.
- Model Contracts: The International Chamber of Commerce's (ICC) model contracts help companies draw up foreign trade-related contracts quickly and safely.
- Training: The chambers of commerce organise versatile training regarding international affairs.
- FinnCham networks: The global FinnCham network gathers up trade associations, chambers of commerce and guilds in order to encourage the internationalisation and promote the export efforts of Finnish companies. (International FinnCham Network, Accessed: 10.12.2015)

The goals of FinnCham are creating a strong image of Finland worldwide and establishing business contacts in target countries. The FinnCham network also helps foreign companies acquire contacts in Finland. The global FinnCham network establishes contacts between Finnish companies operating out of the country, and Finnish companies that are going abroad, by opening doors, and strengthening economic relations with nations

Team Finland networks

Team Finland is a state run, and state funded network consisting of the Ministry of Employment and the Economy, the Ministry for Foreign Affairs, the Ministry of Education and Culture and the Prime Minister's Office, as well as all organisations operating under their guidance. Domestically these organisations include, Finpro, Tekes, Finnvera, Finnish Industry Investment, the Centres for Economic Development, Transport and the Environment (ELY), VTT, Finnfund, Finn partnership, Finnish-Russian Chamber of Commerce, Finnish-Swedish Chamber of Commerce and various culture and science institutes. Team Finland efforts are a part of these ministries' export programmes and other projects supporting internationalization of Finnish companies

While publicly funded actors make up the core of the network, cooperation with for instance, chambers of commerce, organizations and higher education institutions are highly important. The Team Finland network aims to bring together members operating in the region and other key parties with ties to Finland, via seventy local teams whose role is to gather together the Finnish authorities, publicly funded organisations, and other central actors representing Finland in the particular country, and offer corporate customers easy access to all the information they need. (Team Finland, 2015c)

The goal of team Finland network is to promote Finland and boost Finnish enterprises abroad. The network brings together all services offered by state-funded actors which work for the internationalization of Finnish enterprises, advance investment in Finland and promote Finland's country brand. The services offered by Team Finland comprise of market analysis, advice and training, financing (loans, grants and guarantees), networking, official contacts through participating in trade missions, and visibility by offering the facilities of the Finnish representatives in foreign countries for functions, as well as helping with media contacts. (Team Finland, 2015c); (Team Finland, 2015b)

As one expert pointed out, the region should collaborate more with Finnish embassies around the world in order to promote the Oulu region. Accessibility to interested parties is always the key, so working with the embassies would be an important first step for the region, and create awareness not only at the local level, but also at the diplomatic level of Oulu's expertise and goal of promoting educational export. Many diplomats tend to focus on their own hometowns, and networks, which invariably tend to be south centred, and are unaware of the opportunities offered by the Oulu region.

Future Learning Finland

Finpro which is a part of team Finland promotes export Finland, whose mission is to promote international business operations by Finnish business companies. One growth programme that export Finland uses to promote Finnish educational export is Future Learning Finland (FLF). FLF was formed in 2011 with the aim of forming an educational export cluster that would bring together and link players in the educational export field.

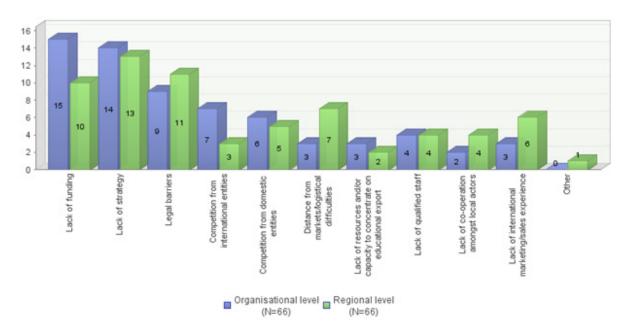
Future Learning Finland consists of over 40 private companies, vocational institutions, universities and universities of applied sciences, offering Finnish educational know-how and learning solutions globally. The aim of FLF is to match Finnish educational exporters with potential partners in other countries, in line with their areas of expertise. FLF has been working on making contacts and identifying potential customers with an interest in purchasing Finnish education related products/services and solutions since its inception, and has had a number of success stories globally. More information can be accessed at the FLF internet pages.

It should be noted that FLF's operational model has changed recently. Previously a membership fee was charged for the use of FLF's services, but this is no longer the case. Membership of FLF is free, and it is recommended that all organisations concerned with educational export become members of FLF.

Main Barriers Facing Companies and Educational Institutions in the Oulu Region

A lack of resources, and/or capacity to concentrate on educational export, and a lack of funding were identified by 75% of respondents as being the main obstacles to their organisation engaging in, or in expanding their educational export operations. The lack of resources and capacity is somewhat understandable considering the current global economic climate, and that the majority of company respondents are SME's or micro sized organisations. Additionally when talking with business representatives, it became clear that the company perspectives and approach to educational export and the educational institutions radically differed. In the current economic climate there is increased scrutiny placed on companies investments and strategies, and companies need to know that something concrete and profitable will accrue from the time and money invested. (Graph 15)

This lack of resources and capacity also affects educational institutions. There have been much publicised cuts to funding at all levels of education, and higher education funding models have been drastically revised. Employee co-operation negotiations (Yt-neuvottelut) have affected almost every HEI in Finland. This pressure on HEI's to find additional means of funding, while increasing efficiency, maintaining standards and competing with other HEI's at both International and domestic levels, (even more so now, with the introduction of the new fee initiative for Non-EU citizens), has resulted in number of HEI's forming strategic alliances, or partnerships. The most recent being the strategic partnership between the University of Oulu, University of Eastern Finland, the University of Tampere and the University of Turku, (the members of Finland University) with the aim of jointly "creating a model that enables the continuation of high-level and cost-efficient research and education throughout Finland." What this cooperation means for the Oulu region and educational export is again, impossible to say at this juncture, but this cooperation does increase the likelihood of Oulu University joining forces with these same organisations as part of Finland University.



Graph 15: Main barriers at the organisational and regional levels (N=20, max 5 answers)

The issue of funding is not unique to businesses and educational entities in the Oulu area. A recent survey commissioned by Tekes reveals that "education export start-ups will need EUR 26 million in capital investments in the next two years, and for example a hundred export experts." There are a host of funding mechanisms available concerning (in particular) company internationalisation and expansion, at EU, domestic and regional level. This information is however not readily available and the funding mechanisms are somewhat hidden, and rarely clear. Funding mechanisms that the ministry of culture identifies concerning educational export include TEKES, EU development (EAKR/ERDF) and social funds (ESR/ESF), Finn Partnership, ELY centres, whereas TEKES identified venture capitalists, "Business Angels", EU, Finnvera and TEKES funding as the most important sources of funding utilised by micro businesses.

International funding mechanisms may also be available through the Nordic development fund, African Development Bank, the World Bank (utilised by Oulu University faculty of Education for the Armenia projects), the European Investment bank, and a host of EU, and United Nations initiatives concerning development and culture such as UNESCO and the UNDP. The development of higher education in the EU's neighbouring partner countries and improved student and academic mobility is among the key areas of EU support. Thus, there are also a number of EU related initiatives that can be targeted by HEI's, notably Erasmus+, Erasmus Mundus and TEMPUS.

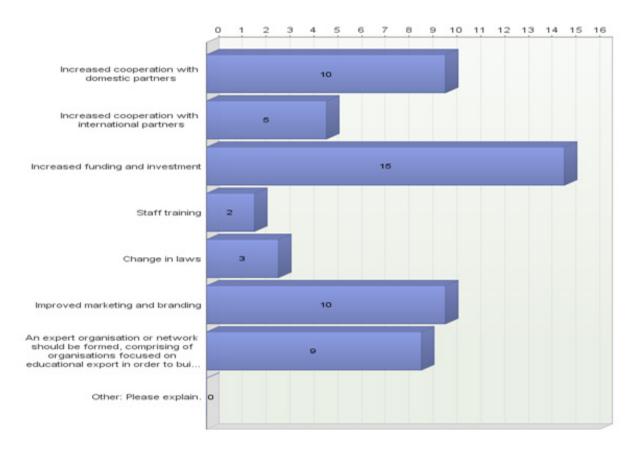
Another mechanism that has been used successfully by Finnish HEI's notably Omnia (joint authority of education and a regional development centre in Espoo) is the European

Commission Twinning initiative, "designed to help candidate countries acquire the necessary skills and experience to adopt, implement and enforce EU legislation. Twinning projects bring together public sector expertise from EU Member States and beneficiary countries with the aim of enhancing cooperative activities." Omnia have worked with local and international partners on twinning projects in Kosovo and Egypt. While these types of projects are EU funded, and thus could be considered more international cooperation than educational export, they do provide organisations with International experience, funding and networks that can be utilised to expand the organisations capacity and future export operations. Twinning projects are not just limited to the EU/EEA area but also include, European Neighbourhood Policy (ENP), which are Algeria, Egypt, Israel, Jordan, Lebanon, Morocco and Tunisia, Armenia, Azerbaijan, Georgia, Moldova and Ukraine.

A lack of international marketing or sales experience was identified by almost half (45%) of respondents as being a barrier to engaging in or expanding educational export related activities in their organisation. As mentioned there are entities that provide assistance offering advice on international marketing and sales, such as Business Oulu, that should and could be utilised, along with a number of other entities that support micro and SME's attempts to internationalise and market their products, such as Business kitchen, polar pitching, etc. Legal barriers were identified by one in three as being one of the major obstacles concerning educational export. In relation to Educational institutes, as mentioned earlier the biggest obstacle that the Ministry of Education and Culture foresaw concerning this has been removed, with the imminent introduction of fees for non EU/EEA

students. However, this introduction of fees has been the only change made to legislation concerning Finnish educational export, and this only applies to Higher education and international students coming to Finland to study while fees are not charged for instruction in Finnish or Swedish regardless of the nationality of the student. Additionally, organisations that are hoping to operate under the Finnish curriculum abroad, at compulsory levels of education, are unable to offer any form of qualification recognised by the Finnish government that would set them apart from local and international players in the same market, which can offer such qualifications. So, in essence Finnish education still cannot be sold abroad.

At the regional level a lack of resources and capacity, a lack of funding and a lack of international marketing or sales experience were identified as being the main obstacles. A lack of a clear strategy was seen by over one third of respondents as being an obstacle, while competition from domestic entities was seen as the least pressing issue. A lack of pro-activeness was cited by one respondent, as being one of the main challenges. Competition from domestic or international entities were also not seen as being an important consideration for the region, with only 10% and 25% of respondents respectively viewing these as a challenge.



Graph 16: How can these barriers be overcome? (N=20, max three answers)

When asked how organisations and the region could best overcome these barriers, the majority of respondents indicated that increased funding and investment was needed in the region. Half of all respondents indicated that they viewed increased cooperation with domestic partners, and improved marketing and branding as being possible solutions to these barriers, while 45% (9) responded that they believed that the forming of an expert organisation comprising of organisation focused on educational export should be formed, with, seven of the respondents being companies and two educational institutions (Graph 16).

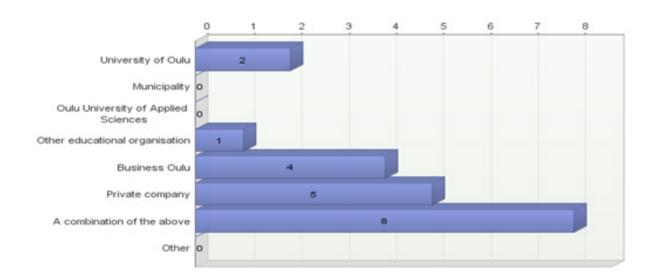
Concerning this expert organisation, respondents were then asked if such an organisation or network were to be established, which organisation from the options provided should lead this this organisation or network.

A combination of entities and organisations was the most popular choice qualified to lead an educational export organisation or network in the Oulu region, with 40% of respondents choosing this option. (Graph 17)

Additional comments

AT the end of the questionnaire, participants were afforded the opportunity to provide additional comments, and the following responses were provided:

- A network of Edu Export should be built. International Skilled workers could be employed for understanding the culture. (Micro sized company with less than two years of educational export experience)
- Regarding the previous question...one private company will not do...(Educational institute with between two and five years' experience in educational export)
- To be successful in this area I believe it would be useful
 to form a combined group with background strengths
 in education planning and implementation, and international business (sales/marketing/exporting services).
 In addition, it should be recognised that education cannot be 'exported' as an entire entity. (Micro sized company with 10+ years of educational export experience)
- In Education Export Business activities and Research (training) activities should separate and turn focus into business!)Micro sized company with between 5 and 10 years' experience in educational export)
- Educational export has to be done within a (national) network. (Educational institute with no previous experience of educational export)
- Finland needs educational export as export generally. Skills are limiting the export growth. (SME with between 5 and ten years' experience in educational export.)



Graph 17: Entity best qualified to lead an educational export organisation or network

Conclusions and Recommendations

9.1. Conclusions

There is no doubt that there is an abundance of educational expertise, potential and innovation in the Oulu region, and turning this expertise into a significant industry in the form of education export should be a goal for the region. All experts interviewed unanimously agreed that educational export can be turned into a significant and profitable business in the region.

There is a strong will among organisations in the region to pursue and engage in educational export, with sixty five percent of the organisations that responded to the question-naire indicating that they had been involved in educational export. All respondents that indicated that they did not at present have educational export experience were interested in pursuing educational export in the future. The majority of respondents indicated that they had an internationalisation strategy, and that they see their educational export related sales, and the number of employees with responsibility for these exports increasing within the next five years.

In general players in the region are small, and the resources invested and the returns from educational export have to date been extremely modest. Nevertheless, respondents indicated that believe that this will change in the near future, with income from educational export related activities increasing, and organisational focus on educational export increasing. This small size and relatively small returns may play some part in the relative scarcity of "success stories" concerning educational export in the region. These types of references and stories concerning educational export related activities by both educational institutes and companies alike

in the Oulu region, are incredibly hard to find, in contrast with the seemingly weekly success stories emanating from southern Finland. The reasons for this lack of references and success stories are still unclear, as many companies indicated that they had experience in educational export, as well as in international business. While there are some references and success stories from the region concerning educational export, they are few and far between.

Educational export does not for the most part seem to be taken seriously, or treated as a legitimate business in either Finland as a whole, or within the region by private of public bodies alike. There has been a great deal of research conducted by organisations such as TEKES, FLF, and the Ministry of Education and culture, on educational export but there needs to be a concrete strategy, and concrete steps taken at both national and regional levels, concerning the sale of Finnish educational expertise and products/services.

At the national level there has been a great deal of publicity regarding the introduction of fees for HEI offered Bachelor and Master's course taught in a language other than Finnish or Swedish, and removing the last remaining obstacles concerning educational export. However, educational institutes in the Oulu region are in general not ready, or prepared to compete on the international markets, and most have had very limited experience of educational export to date. How these educational institutions deal with and take advantage of the "removal of the last obstacle to educational export" remains to be seen.

A recent TEKES report identified that micro sized entities make up the majority of educational export related organisation in Finland, while the same can be said concerning the Oulu region. Many micro enterprises or SME's in the region have experience and the networks to be successful in the educational export field, but, in general they are lacking the capacity, as the main obstacles identified by respondents at the organisational and regional levels were a lack of funding, and a lack of strategy. Possible solutions to overcoming these issues were identified as being increased funding and investment, increased cooperation with domestic partners and improved marketing, which demonstrates the need for increased cooperation and coordination amongst local actors and institutions of all sizes, and the role of public organisations in creating a strategy and facilitating this strategy via increased funding.

Educational export in the Oulu region at the moment could best be described as passive educational export, as there is great potential and expertise in the area, but in the current economic climate no one is really willing to take too many chances or risks. Mainly educational export in the region is run as a "side-business" meaning that it is generally not the company or organisations main interest area. The general operation model is re-active, meaning that if interest comes from abroad, then there is a rush to react to this by hastily putting something together in cooperation with a number of "friendly" companies or organisations, however, this is neither a very professional, or sustainable business model for the future.

The formation of a network or cluster was seen by almost half of respondents as being one solution to the general lethargy observed concerning educational export in the region. The vast majority of experts interviewed identified the need to seriously investigate the feasibility of forming such an organisation or network, in order to increase the regions offerings, and spread costs, as organisations in the region do not have the capacity, in the current economic climate to concentrate on this aspect themselves. During my research and interviews, it became clear that there have been a number of initiatives in the past concerning moving educational export in the region forward, mainly involving the Oulu University of Applied Sciences, the University of Oulu, and Business Oulu, but, again a lack of funding seemed to be the major stumbling block concerning these initiatives, and they were all short lived.

9.2. Recommendations

Finland, and the Oulu region, are entering the international education market at a relatively late stage, and while Finland may claim to have the best education system, products and services, this is of little use if no-one is aware of them. International competitors have for the most part been building networks and expanding on these for decades, and many nations have a multitude of state funded organisations targeting all areas of the educational industry, with large investments, and large returns on these investments.

To increase awareness of, and promote educational export in the Oulu region the following concrete recommendations and development plans are suggested:

1. More research is needed on the topic:

There has been an over emphasis on research to date at the national level, and action rather than discussion is sorely needed. However, concerning educational export in the Oulu region, some additional research is needed on this topic, with a combination of different stakeholders being involved in the process. A variety of perspectives from both business and educational viewpoints need to be brought together to discuss their views and objectives concerning educational export, as at the regional level there seems to be a general lack of cooperation and trust among, and between business and educational entities. The Council of Oulu region has made positive steps in bringing these entities together, but more concrete steps are needed in the near future.

2. Products and modules need to be identified:

The products, expertise and services that are available in the Oulu region need to be identified, and focused on. Target markets and customers can only then be identified based on the specific product or services identified.

Additional research should be undertaken concerning the log campus concept, and of investigating the possibilities of utilising this concept as an export product. This concept which has received international attention could be marketed as the "whole school concept," combining a number of the regions strengths in pedagogy, construction and design. This model may be particularly appealing to international customers, as combined with the ecological, health and learning benefits, private involvement in education is growing at an increasing rate worldwide in the form of Public Private Partnerships, and governments and municipalities are continuously seeking cost effective solutions concerning both educational and ecological issues. Towards this end, public procurement opportunities concerning school construction particularly in the Barents area should be actively monitored and examined to study the feasibility of submitting a tender in cooperation with local educational and business entities, and local partners.

Additionally, research, development and innovation (RDI) funding should be sought to increase the competitiveness of local organisations through the expansion of, and development of co-operation initiatives among universities, higher education institutions, research institutions, vocational institutions, general government actors and enterprises, in order to productise and market regional educational innovations such as architecture, design and construction, virtual and physical learning and educational environments, as well as pedagogical and consulting services/solutions. Funding is also needed to ensure that further research and testing into next generation educational solutions is conducted. Without this funding these solutions may never reach the product phase, as academic references and research are needed in order to substantiate and highlight the advantages of these innovative solutions over traditional ones.

3. A strategic agenda or plan needs to be developed for the region, with clarity and information being readily available concerning services and funding mechanisms available to local organisations:

This necessitates cooperation among the vested local and domestic entities, such as the Council of Oulu region, Future Learning Finland, TEKES, the relevant cities and municipalities in the region, and the relevant ministries. The Oulu region is already lagging behind the rest of Finland, and indeed the rest of the world in promoting itself and its educational expertise, and it needs to act fast or be left behind altogether. Additionally, state and regional funding, marketing channels and mechanisms need to be collected together and information on these has to be readily available, particularly for micro sized companies and SME's. Larger companies and education institutions are largely familiar with these mechanisms, and in many cases are the main recipients of these funds, whereas smaller organisations and start-ups in many cases have no knowledge of these mechanisms and the services that they provide. At the moment these services and mechanisms are scattered and without prior knowledge incredibly difficult to find, especially for foreign and micro business owners, which puts them at a distinct dis-advantage in increasing and expanding their operations. It should be remembered that these plans or agendas are created to facilitate educational export, and that the responsibility for creating a self-sustainable future model lies with the organisations themselves, not with public bodies.

4. The possibility of starting a regional cluster or network specifically focused on educational export in the region should also be seriously examined, as soon as possible:

The majority of experts interviewed indicated that in their opinion there needs to be such an organisation or network, as some entity needs to be responsible for promoting and highlighting the region and its expertise. This cluster or network is needed as existing expertise in the region needs to be identified, and then focused on, whereas the ecosystem and cooperation amongst entities concerned with educational export, also needs to expand, and be developed.

Successful clusters mostly involve a complementary mix of three kinds of businesses:

- Internationally active companies which are particularly strong in the market and are technological leaders,
- Suppliers or supplementary businesses (often small or medium sized enterprises – SMEs),
- Innovative, dynamic knowledge-based specialists, and market experts (e.g. research facilities, advanced training institutions, ICT specialists, etc.).(Scheer & Von Zallinger, 2007)

EU Economic and regional policy supports this type of cluster or network formation and development by: establishing or promoting necessary infrastructures, by offering funds to improve business expertise and internationalisation skills, as well as investments and development projects concerning SMEs that promote growth, internationalisation and competitiveness. EU structural and social fund, as well as domestic funding channels should be utilised to provide resources to investigate and start this type of cluster/organisation, as organisations in the area do not have the resources or capacity to coordinate and fund this type of initiative themselves. This network needs a "leader," who this leader should be however, is still unclear. Based on the results of the survey a combination of interests was favoured by 40% of the respondents. Whatever form this leader takes, be it a consultant company, or for example, a group of various stakeholder representatives (some of the options suggested), there needs to be a number of persons specifically focused on dealing with international contacts and potential partners, as building both personal and professional relationships with these contacts and partners is of paramount importance. Having one or two persons with shared responsibilities on other tasks is a mistake that has hindered the progress of both Finland's and the regions education export to date, as this task should be pro-active, not re-active.

The formation of such a cluster will not be easy, as there are a huge number of questions that need to be answered concerning the formation of such a cluster, such as business plans, decision making processes, intellectual property rights, operational models, ownership, resource allocation, etc. Some form of participation restriction is also required in order to identify organisations that are actively willing to work in collaboration with other organisations, and importantly that are willing to invest both time and resources into educational export. Future Learning Finland could play a role in organising for example networking events, and bringing together the players, as well as identifying and highlighting the value of each organisation. A database is not the solution, as this is incredibly time consuming, needs to be constantly updated, and databases are very selective. Additionally, it is not feasible to identify all of these organisations as many of them it seems do not want to be found, and based on the success stories attributed to the region from organisations promoting Finnish education abroad, this approach has obviously not worked in the regions favour in the past.

If such a cluster or network is to be established, it is the author's recommendation that all initiatives at the EU level are examined and funding tenders submitted for example for Twinning initiatives. Utilising these mechanisms would provide much needed international experience and networking opportunities, in addition to providing an ideal testing ground for procedural, operational and cooperative models.

5. Organisations educational expertise, training and services need to be available in (at least) English:

An obvious recommendation, but one that needs to be made nonetheless, is that companies that are interested in educational export, need to provide training and services that use the local languages, or at the very least English as a learning medium. The availability of training and education in languages other than Finnish in the Oulu region is a major obstacle to this at the moment. In order to take advantage of the recent changes in fee charging laws, educational institutions need to focus on offering degree, diploma and certificate level courses in areas such as early childhood education, vocational training and K-12 teaching qualifications. Additionally professional training and development courses (Täydennyskoulutus) need to be made available in at the very least English, and where possible modified for the local culture, and infrastructure. These courses should be offered and marketed as Finnish teaching/management courses, and need to be offered via distance learning, on-site in the target country, in Finland, or a combination of these.

6. Organisations in the region also need to make better use of marketing and promotion channels, and in identifying potential customers and market niches:

Firstly, success stories and references from the region need to be collected and promoted on both national and international media: there seems to be a reluctance to share these stories and references, and they have been incredibly hard to come by during this research, but, these stories and references are needed if the region wants to compete with both domestic and international competitors. International customers want, and need these references, and it would also be helpful if these success stories were available in English. Additionally, it is generally better to utilise someone familiar with the local language, marketing and promotion channels, the local business culture and the local educational culture in identifying possible market niches that can be exploited, in addition to identifying potential customers, and creating brand awareness. This can be done by hiring a local company/consultant, with the necessary media and business contacts, but this is invariably expensive, and is no guarantee of success. Existing Company and educational institutions networks along with "hidden" networks need to be collected, coordinated and utilised through any entity that takes responsibility for any future educational export network or cluster in the region.

There are a great number of these experts in the Oulu region, and there are existing networks of Finnish teachers/ principals that have taught abroad, who are first-hand experience and insight of the educational needs of these markets, and have built up networks while working in these countries that should be utilised. Foreign citizens, students and graduates living in the region are also being overlooked regarding market research, marketing channels and opportunity identification. Organisations at very little cost can utilise, regional based social media, websites, blogs, and press releases in the local languages, to create product and brand awareness in the target markets, by utilising native language speaking persons from that region. Additionally, native speakers often have access to existing networks and contacts, and a cultural understanding of official documents and information that a non-native can never hope to emulate, concerning market research, and promotion channels.

Entities concerned with, or interested in educational export should also become members of the relevant publicly funded organisations, such as FLF, and the FinnCham network (amongst others). Membership is (at present) generally free, and provides possible additional opportunities to utilise these organisations expertise, and in particular networks, local contacts and marketing channels in specified target markets.

7. The focus of Educational study tours should be on creating awareness of the regions educational products and innovations, and local actors need to work in cooperation with one another in order to achieve this:

Finland has been basking in international praise of its education system for a number of years, and delegations from all over the world have visited here to see the "Finnish miracle." While these tours and visits do generate income, these delegations and visitors are not a sustainable model, as people only come to see the "Miracle" once. There needs to be a focus on highlighting the commercial value of education to these tour groups and the international market in general, and creating awareness that the regions educational innovations and expertise are not just nice to look at, but are also available as products.

Additionally, important educational delegates and key decision makers from the main target markets should be invited to the Oulu region, and experience first-hand the opportunities and innovations that are exist within the region. Key actors and players concerning educational export in the region can then be provided the opportunity to meet with, and begin to establish relationships with these key delegates and decision makers. These personal and professional relationships are crucial in establishing long term trust and cooperation, as business is generally is conducted between people, and these relationships are a major factor in all forms of business, including the education business.

8. Above all funding is needed:

All of the above recommendations require in many cases large scale operational changes for many organisations, and as mentioned repeatedly the main barrier to many organisations in expanding or utilising its capabilities is funding. Maintaining existing business operations in addition to identifying, adapting and modifying existing products and services, and creating new ones, for the international market takes both educational and business know how and expertise, and financial investments if it is to be done successfully. This investment is in the majority of cases beyond the means or capacity of the majority of companies and educational institutions in the current economic climate.

EU funds to improve business expertise and internationalisation skills, as well as investments and development projects concerning SMEs that promote growth, internationalisation and competitiveness are available, and these structural and social funds have been utilised by other regions concerning educational export related projects, and initiatives within the region. Additionally domestic funding should also be applied for where possible. Regions in the south have successfully used these funding sources to internationalise, and expand educational export in the region, and educational export in the Oulu region should be the main target of this type of funding in the future.

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Appendix I: Questionnaire

Introduction

This questionnaire has been sent to your company as part of a report on educational export in the Oulu region commissioned by the Council of Oulu region. (Pohjois-Pohjanmaan Liitto)

The purpose of this questionnaire is to provide a brief overview of companies that are either actively engaged in, or are interested in the exporting of educational related services or products in the region. The results of this survey will be used as part of a larger report to be submitted to the Council of the Oulu region, concerning educational export in the Oulu region.

Information provided will be strictly confidential and no further follow up contact is required from your company. Your company can also choose to answer this questionnaire anonymously if they wish, by leaving the name of the organisation (Question 1) blank.

Educational export definition

Educational export is defined for the purposes of this report as: "Commercial education related export activities that are profit orientated, wherein educational services or products are sold by a Finnish company/organisation, and the entity responsible for payment is a foreign based business, an individual private person, or public sector representatives or organizations."

1. Name of Organisation				
*				
ompany				
niversity/University of Applied Sciences				
ocational Educational Institute				
ther				
rees *				
10				
1-50				
1-250				
0+				
urnover				
2m,				
10m				
-50m				
m+				

5. What percentage of this turnover is estimated as being education related? *

О

None

O	1-10%
O	10-20%
O	20-50%
O	50%+
6. Is your orga	nisation currently involved in educational export related activities, or is you organisation interested in parti-
cipating in edu	acational export in the future? *
O	Yes, my organisation has been involved in educational export related activities, and will continue being involved in this area in the future.
O	No, my organisation has not been involved in educational export, but we are interested in participa ting.
Ο	No, my organisation has never been involved, and has no wish to be involved with educational export activities.
7. What are the	e main educational products or services your company provides that have been sold to international entities?
(Tick as many	as appropriate) *
O	Learning environment construction and development
O	Teacher and administration training or professional development (Täydennys koulutus)
O	ICT related educational solutions and applications (edtech)
O	Vocational education.
O	Consulting and educational development expertise.
0	Paid Study tours/visits.
O	Other
8. Which entit	les does your organisation identify as being the main target customers concerning your products or services? *
O	Local municipalities (Kunnat)
O	Government organisations
O	Non-Government Organisations (NGO's)
Ö	Private educational institutions
0	International agencies
0	Other foreign businesses
O	Other
9. What is the	main target group identified by your company concerning their products or services? (Tick as appropriate) *
O	Pre-school (ages 3-6)
O	Basic education (ages 7-16)
O	High school (ages 16-19)
O	Vocational education students
Ö	University University of Applied Science students
0	Adult education/Professional training
0	Other
10. How many	years of experience does your company have concerning Educational export? *
Ο΄	0-2
O	2-5
Ö	5-10
Ö	10+
O	101
11. To which c	ountries has your company sold, or are currently selling educational products or services? (Max 3)
	Country 1 *
	Country 2

	Country 3
	u estimate has been the monetary value of these exports to date? (all values are in Euros) *
0	<50,000
0	50,000-100,000
0	100-250,000
0	250-500000
0	500,000-1m
O O	1-5m 5m+
13 What percen	ntage of company turnover do you estimate stems from education export related activities? *
O	0
O	0-5%
O	5-10%
O	10-20%
O	20-50%
O	50%+
How many emp	employees at your organisation are focused on educational export related activities? * bloyees have responsibility, either full-time, or part-time concerning research and operations related to edu- ? (If there are 2 persons with 50% of their workload concerning educational export, then tick the option for sons working 25% will be equal to 1, etc.)
O	None
O	1
O	2
O	3
O	4
О	5+
15. What do yo in Euros) *	u estimate will be the value of your companies' educational related exports in 5 years' time? (all values are
O	None,
O	<50,000
O	50,000-100000
O	100-250,000.
O	250-500000,
O	500,000-1m,
O	1-5m.
O	5m+
16. How many j	persons do you estimate will be working on educational export related activities at your organisation during
O	None
O	1
Ö	2
Ö	3
O	4
O	5+
17. How would	you rate your organisations present capacity concerning educational export? *
O	Excellent
O	Very good

	O	Good
	O	Average
	O	Poor
	O	Very poor
18. Does		ganisation have an internationalisation strategy? *
	O	Yes
	Ο	No
19. Whi	ch of the f	following channels has your company utilized in order to create international awareness of your company's
	s or servi	
1	O	Our company has not used any means to create awareness of our educational products/services
	O	Events and Exhibitions in Finland
	O	Events and Exhibitions abroad
	0	As part of a FLF/Finpro/Team Finland organised delegations/conferences
	0	Country/area specific campaigns
	0	Existing networks and contacts
	0	Local/international Chambers of commerce
	O	Websites, blogs, social media
	O	Direct contact with foreign entities
	O	Other: e.g. Alumni networks
	t channel	s would your organisation like to use in the future to create International awareness of its products/ser-
vices? *		
	O	Our company has no interest in using any means to create awareness of our educational products/ services
	O	Events and Exhibitions in Finland
	O	Events and Exhibitions abroad
	O	As part of a FLF/Finpro/Team Finland organised delegations/conferences
	O	Country/area specific campaigns
	O	Existing networks and contacts
	O	Local/international Chambers of commerce
	O	Websites, blogs, social media.
	O	Direct contact with foreign entities
	0	Other: e.g. Alumni networks
21. Whi	ch of the	following markets does your organisation have existing experience of? *
	O	Nordic market
	O	European market
	O	Russian Market
	0	Baltic market
	0	North America Market
	0	South American Market
	0	Asian Market
	0	African Market
	O	Oceania
	О	None of the above
22. Whi	ch countr	ies does your organisation see as being the main target markets concerning educational export? (Please list
		ranked in order of importance)
		Country 1 *

		Country 2 Country 3 Country 4 Country 5
22 T		
23. Is yo projects		pany currently working in cooperation with any domestic or foreign entities concerning educational export
projecto	· O	Yes
	O	No
		e following entities has/does your organisation work in cooperation with concerning educational export?
(Max 3)	O	Other Finnish businesses
	0	Finnish educational institutes
	0	Finnish Non-Government Organisation's (NGO's) or societies
	0	Foreign businesses
	0	Foreign educational institute
		Foreign NGO's or societies
	0	· ·
	O O	Other None
		organisation like to work in cooperation with any of the following entities concerning international educativities? (Max 3) *
	O	Other local businesses
	O	Local educational institutes
	O	Other Finnish businesses or educational institutes
	Ö	Finnish NGO's or societies
	O	Foreign businesses
	O	Foreign educational institutes
	0	Foreign NGO's or societies
	0	Our organisation would like to work independently.
	0	Other:
		n believe are the main barriers or obstacles to your organisation engaging in, or in expanding its educational ? (Max 5) * Lack of funding.
	O	Lack of strategy
	O	Legal barriers
	O	Competition from International entities
	O	Competition from domestic entities
	O	Distance from markets/Logistical difficulties
	O	Lack of resources, and/or capacity to concentrate on educational export
	O	Lack of qualified staff
	O	Lack of cooperation amongst local actors
	O	Lack of International marketing or sales experience
	O	Other
27. Wha	O	believe are the main challenges facing the Oulu region concerning educational export? (Max 5) * Lack of funding.
	O	Lack of strategy
	O	Legal barriers
	O	Competition from International entities
	O	Competition from domestic entities

O	Distance from markets/Logistical difficulties	
O	· · · · · · · · · · · · · · · · · · ·	
O	Lack of qualified staff	
O	Lack of cooperation amongst local actors	
O	Lack of International marketing or sales experience	
O	Other: Please explain	
28. How do you	a believe that these barriers can be best overcome? (Click maximum 3) *	
O	Increased cooperation with domestic partners	
O	Increased cooperation with international partners	
O	Increased funding and investment	
O	Staff training	
O	Change in laws	
O	Improved marketing and branding	
O	An expert organisation or network should be formed, comprising of organisations focused on	
	educational export in order to build an identity, a strategy and a brand for the Oulu region.	
O	Other: Please explain	
qualified to lead OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO	d this organisation or network? * University of Oulu Municipality Oulu University of Applied Sciences Other educational organisation Business Oulu Private company A combination of the above Other	
Additional com	nments	
30. Please prov	ide any additional thoughts or comments in the space provided below.	

Appendix II: List of Companies Contacted

3step IT	Finnish Consulting Group	Microsoft Finland
Aac Global	Finpec	Nextime Solutions Oy
Academy of Nordic Oy	Finpeda Oy	Oulu 3D Oy
Adminotech Oy	Gamify Finland	Oulu University of Applied Sciences
Alfasoft Oy	Green Building Partners Oy	Oulun Osaamiskeskus Oy
Alpakka media online	Happywise limited	Oulun seudun ammattiopisto (OSAO)
Ammattiopisto Luovi, Oulun yksikkö	Isku Group Oy	Oulun seudun koulutuskuntayhtymä (Osekk)
Archeus Oy Arkkitehtitoi- misto	Kimmo Kuismanen Architects	Playsign Oy
Arkkitehtitoimisto Lukkaroinen Oy	Arkkitehti toimisto Perko	Kontiotuote Oy
Pohto Oy	Lappset Oy	Profin Oy
Bid consulting group	Lemminkäinen Oy	PSK Adult education centre
Claned Group Oy Ab	Lenovo Group Ltd.	Qroom Oy
Cubicasa Oy	Linja Arkkitehdit Oy	Rastor Oy Oulu
Cyber lighting Ltd.	Ludocraft Ltd.	Ros Cooper Oy
Discendum Oy	Luo Arkkitehti Oy	Spinfy Oy
Dreamschool Finland	M3 Architects Oy	Stormbit Oy
Educloud Alliance	The Federation of Education in Jokilaaksot (JEDU)	Elisa Value
Martela	UKI Arkkitehdit Oy	Fair Share Scandinavia Oy
Me and my city	University of Oulu	Finland school of education
Management Institute of Finland Oy	Medieco Oy	Viope Solutions Oy

Appendix III: Questions for experts

Educational export is defined for the purposes of this report as: "Commercial education related export activities that are profit orientated, wherein educational services or products are sold by a Finnish company/organisation, and the entity responsible for payment is a foreign based business, an individual private person, or public sector representatives or organizations."

- In your opinion can the educational export sector in the Oulu region be turned into a significant industry?
- · Could you describe your organisations history of educational export, and its plans for the future?
- What are your organisaiotns core products/services concerning educational export?
- What do you believe are the Oulu region's main strengths concerning educational export?
- What do you believe are the main obstacles and challenges facing educational export in Finland/the Oulu region? How do you think these obstacles can be overcome?
- What do you identify as the main "Target markets" concerning educational export?
- What do you believe are the main threats to Finland/Oulu region concerning educational export? What can be done concerning these threats?
- · What do you think Finland/Oulu region needs in order to develop or push its educational export capacity?
- What steps do you feel could be taken in order for the Oulu region to develop and increase its educational export footprint?

Appendix IV: List of Experts Interviewed

- 18.11 Petri Karinen: Head of International affairs, Business Oulu
- 19.11 Markku Oikarinen: CEO Pohto Oy
- 20.11 Allan Perttunen: Head of International Affairs. Oulu University of Applied Sciences.
- 23.11 Seppo Keränen: Finpro, Programme Director, Future Learning Finland.
- 26.11 Helka-Liisa Hentilä: Dean of education, University of Oulu.
- 26.11 Professor Veikko Seppänen: Director. Martti Ahtasaari Institute, Oulu Business School.
- 27.1 Jussi Haukkamaa: LAB educational concept, development manager. Oulu University of Applied Sciences.
- 30.11 Blair Stevenson: EduLAB/Oulu University of Applied Sciences. (Skype)
- 03.12 Janne Pihlajaniemi: University of Oulu, school of architecture/Partner M3 Architects.
- 15.12 Teuvo Laurinolli: Former principle and mathematics teacher (Retired). Oulun Lyseo High school. Educational export expert.
- 18.12: Professor Kongkiti Phusavat: Recipient of the "Order of the Lion of Finland, Knight, First Class" award for services in promoting Finnish education in Thailand. Thai national educational reform council member, Finnish Educational export expert. (Email)

Appendix V: SWOT-analysis

STRENGTHS

- There is a lot of existing expertise in the educational sector in the Oulu region
- There are a lot of people interested in selling education in the Oulu region
- Oulu region has more expertise than other areas in its core competencies, and these should be exploited. (5G, wireless, learning environments)
- The Oulu region has strong capabilities and a strong history in a number of areas that are highly sought after on international markets such as ICT, Healthcare, teacher education, educational infrastructure and innovation.
- The majority of companies concerned with educational export in the region, have existing international networks, and contacts, and thus have experience of international business.
- There is a huge network of experts and organisations in Oulu, that have remained hidden and this network can/needs to be exploited.
- There are a number of large educational institutions in the region concerning both Higher and vocational education, in addition to hundreds of start up's, and related companies that could work as potential facilitators or content providers.

WEAKNESSES

- Nobody is taking charge. There has to be a common company whose job it is to sell education, in cooperation with the Universities, and then there are a lot of smaller companies needed that provide services, with the Uni's. Degree, premises, design are all part of the service.
- There is no willingness to take a risk.
- While there's a lot of potential, knowledge and know-how there are no business groups concerned with educational export in the region
- Modules, services and products have to be identified and developed.
- The Oulu region may have superior knowledge/products/services compared with existing and potential competitors, there is a lack of know how in how to make or develop products/services out of these core competencies.
- The understanding of Edu export has to change, and be taken as a serious business.
- Lack of cooperation among local businesses and educational organisations
- Lack of cooperation amongst local educational organisations.
- Lack of success stories
- Any form of network or cooperation is not going to be easy to build.
- Lack of funding and
- Companies and organisations competing over access to markets and profits, whereas in reality there are no existing profits at the moment.

OPPORTUNITIES

- The worldwide education market is growing every year.
- Opportunity to become international and provide increased visibility for organisations, and the region.
- There's a huge need for knowledge, and it's not only needed by developing countries. Also European and 1st world levels.
- Huge number of potential products and concepts that have not been, or identified.
- History of educational, healthcare, edtech, ICT, and gaming research in the research, leading to continuous new innovations.

THREATS

- Domestic competition
- International competition
- Lethargy or general disinterest.
- Digitalisation is constantly emerging, and education is constantly changing.
- Other Educational businesses are developing content, and then building a network around this content, acting as a barrier to entry.
- Oulu region is entering the market at a late stage; soon it may be too late.





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