

Academic venture development as the basis of regional success

The picture of Finnish entrepreneurship is very much based on a huge number of small and medium-sized (SME)- and microenterprises. There is over 260000 registered businesses, 93,3% of which are microbusinesses with less than 10 employees. Additional 5,5% are small and 0,9% medium-sized enterprises. This leaves only 0,3% (or about 650 companies) to have more than 250 employees. (Yrittäjät 2009).

Only a fraction of the SME's have growth ambitions. About 7% of enterprises define that their business strategy aims for high growth numbers, while additional 34% aim for modest organic growth. These numbers have been on a very stable level for the whole 21st century. Growth is mainly sought by developing new products, improving sales and marketing as well as by active networking. (Lindholm & Hietala 2009)

When the study is widened into whole population, i.e. to hold both already existing entrepreneurs and wage-workers the numbers become even more alarming. Only about 0,3% of the adult population seek for high-growth, while in Sweden this number is almost twice higher (0,5% of population) and in the USA almost five times higher (Autio, 2007). Finland has by far the lowest level of aspiration for high-growth entrepreneurship of the structurally relatively homogenous Nordic countries – Iceland 1,3%, Denmark: 0,7%, Norway 0,6%, Sweden 0,5% and Finland 0,3% (Autio, 2009).

The amount of growth ambition is even more curious in the view of the socio-economical situation and cultural bias toward entrepreneurship in Finland. According to Global Entrepreneurship Monitor –survey Finnish people “have little fear of failure, they perceive good opportunities for entrepreneurship, and they consider that successful entrepreneurs are well respected. Such attitudes are not only positive in absolute terms – they are also positive in respect to Finland's level of economic development” (Autio, 2009 p. 16).

To conclude, SME activity in Finland is very high. However, they have very little desire to grow and actively seek for new business opportunities. At the same time the cultural situation is considered to be positive and should give the entrepreneurs a relative safe ground on which to test for new business ideas. Still, birth of a new high-growth business is rarer phenomenon in Finland than in most of the other countries with related socio-economical situation.

Thus: Finland lacks growth entrepreneurs. People, who want to transform the world by providing customers innovative services and products in a globally competitive way.

A need for academic entrepreneurs in Finland

Entrepreneurs need a large number of varied competencies - substance skills both in the selected business branch and in doing business in general (Opetushallitus, 2001a, 2001b) as well as more psychologically-oriented entrepreneurial skills like motivation. For example, an IT-entrepreneur needs to have both some technical competence and the ability to turn those competencies into profit via product development, sales and marketing. In addition she would also need competence to solve problems, have tolerance for obstacles and high-level of inner motivation etc.

This master's programme focuses only on general entrepreneurial business skills and entrepreneurial skills, not on substance skills of the particular businesses. Entrepreneurship is seen as a holistic experience for the student (Ojasalo 2004). The programme is built on an assumption that the students have acquired or will acquire their substance skills from other sources.

Business skills

The substance skills developed in the master's programme in business management and entrepreneurship are focused on general business competence required from a successful entrepreneur. It should be noted, that there is a major difference between the skills required from an entrepreneur or an entrepreneurially operating person and a wage-worker. Entrepreneurs need to be “jacks-of-all-trades” that are competent enough in several fields of activities. They must be able to answer for all the grey areas that no-one else takes care of. For example Lazear (2005) has shown that individuals with balanced and wide skill-sets are more likely to become entrepreneurs than those that are focused on one role at work or one subject at school. Thus entrepreneurs should have at least a rough understanding of all sides of business and they should not focus only on one area of business skills.

The Finnish ministry of education has defined very broadly the general competence requirements of an entrepreneur in the professional degree of entrepreneurship (Opetushallitus, 2001a, 2001b). They have divided the

skills into three main categories: i) defining a business idea, ii) creating a business plan, and iii) implementing a business plan. An entrepreneur must thus be able to define the scope of her business, plan on how to implement it and then just do it.

A more detailed definition is given by Wickham (2006). As a conclusion of several studies, he has defined that entrepreneurs need following general business skills:

- Strategy skills, which refers to the ability to consider the business as a whole. How can the business fit into the market place and deliver value to its customers. It is also important to understand how the business can be better than its competition.
- Planning skills, which refers to the ability to make feasible plans to overcome potential obstacles and be able to think how the business will operate in the future.
- Marketing skills, i.e. understand what it is that the customers really want and how that offer can be made to them
- Financial skills, which refer to the ability to plan and control the use of money and assess financial risks and possibilities
- Project management skills, i.e. ability to set reachable objectives and then plan and share the work accordingly
- Time management skills, which refers to ability to prioritize and use time effectively.

These skills give an entrepreneur a wide array of abilities to work both on future and contemporary challenges.

All of the skills mentioned above are well in line with the business skills defined in the Advanced Diploma in Entrepreneurship of University of Cambridge (Advanced Diploma in Entrepreneurship, 2009). The program handbook states that, among other things, their graduates should be able to:

- “network and communicate effectively with other entrepreneurial individuals
- take an analytical approach in developing an innovative idea for market
- critically assess and evaluate their own business ideas using tools and techniques to indicate whether there is real commercial potential, and then make decisions based on that analysis
- investigate their chosen industry sector in order to recognise new business opportunities by understanding the trends and drivers of change which can allow for new opportunity
- develop plans for, and undertake, some initial market and other research to support an evaluation of their business ideas
- assess key issues and areas for action
- prepare an initial commercial feasibility study, which could be shared with potential investors
- build a deep understanding of potential customers and the strategy they might take to reach those customers
- develop an appropriate business model for their idea to underlie the structure and operation of their enterprise project
- make financial projections to assess the viability of their business plan and determine the appropriate sources of financing of the next stages of development of their enterprise project
- critically assess their own personal strengths and weaknesses enabling them to build a team with complementary skills to take their ideas forward
- develop a pitch for their business ideas and deliver it clearly and concisely to potential investors and customers
- provide leadership for their idea and their entrepreneurial team, motivating and inspiring them to deliver their business vision
- implement entrepreneurial projects with confidence
- negotiate with confidence in strategic business situations, such as seeking investment from venture capitalists, licensing technology or products, or working in partnership with larger organisations in collaborative business-to-business situations
- sell their product to customers.”

By combining the lists above, it is easy to see that the business skills required from entrepreneurs are holistic and extremely wide-ranging. However, long and demanding these lists are, even the command of general business skills are not enough for a successful entrepreneur.

In addition to the clearly defined business skills the research has unveiled that successful entrepreneurs need also other competencies, personal traits and methods of working. For example, Schumpeter (1926) stated that successful entrepreneurs should be innovative, creative and risk taking. This view later has been supported in follow-up studies, like the one by Wickham (2001), which stated that successful entrepreneurs are creative, seek and discover niches for market innovations, bear risks, are growth oriented and are driven to maximize profit or investors' returns. Barringer and Bluedorn (1999) have described entrepreneurship as a process of “creative destruction”, in which the entrepreneur continually displaces or destroys existing products or methods of production with new ones. Shook, Priem and McGee (2003) have stressed the importance of exploitation and stated that entrepreneurship is about entrepreneurial individuals interacting with their environment, and thus discovering,

evaluating and exploiting opportunities.

Covin and Slevin (1988,1989) have a good definition on entrepreneurial know-how: Risk taking abilities, proactivity and innovativeness are traits that are demanded from successful entrepreneurship.

It may be that willingness and a capability to take risks is related to the identification of entrepreneurial opportunity i.e. entrepreneurs see opportunities where other people see risks. Caglio and Katz (2001) have defined opportunity identification as being the most distinctive entrepreneurial behaviour separating entrepreneurs from wage-workers. Also Kirzner (1979) has concluded that entrepreneurial alertness is a key area for entrepreneurial skills as constant automatic opportunity recognition gives entrepreneurs the possibility to formulate a mental image of the future (Kirzner, 1979, Suomala et al., 2006). Entrepreneurs also have a habit to underestimate the potential negative sides and overestimate the positive possibilities more than wage workers are likely to do (Baron, 1998, Simon et al., 1999). The combination of these mechanisms may give an entrepreneur the required amount of self-trust for decision making in an unclear situation. This is because she believes that she can already “see” the goal and the path to take and, due to being able to visualize them, thus has increased confidence. However, the underlying reasons for this behaviour are still unknown (Baron, 1998).

The combination of mental images and the overestimation of the up-side may also lead to a high level of self-confidence, another typical entrepreneurial trait (Denslow and Giunipero, 2003). Successful entrepreneurs believe strongly in their ideas and enjoy sharing those ideas with others. Plus, because they trust their own instincts they can be very persuasive in swaying others to accept their ideas. Successful entrepreneurs are able to convince and inspire the required network members into reaching shared goals, i.e. they need to have both good networks and networking competence (Peters, 2005, Platt, 2004).

Entrepreneurs are also willing to take calculated risks and can make decisions with a limited amount of information as they have an ongoing desire to set and reach increasingly challenging goals (Denslow and Giunipero, 2003). Gürol and Atsan (2005) as well as Koh (1996) found out that entrepreneurially oriented students are found to have a higher risk taking propensity, an internal locus of control, a higher need for achievement and higher innovativeness than other students with no entrepreneurial desire.

One key attribute associated with entrepreneurship is change (e.g. Schumpeter, 1926). Entrepreneurs seem to have a high tolerance for ambiguity and changing situations in the environment in which they most often operate. This ability to handle uncertainty is critical because they are constantly making decisions using new, sometimes conflicting information obtained from numerous unfamiliar sources (Zimmerer and Scarborough, 2002).

In the heart of the programme are the real business cases of the students. In order to support their development, the students are directed to develop their knowledge and acquire new tools in:

- analyzing and understanding the business environment in which they operate and recognizing business opportunities
- planning and making strategic choices in order to grow their business profitably
- implementing their strategy by changing the existing status quo through hands-on leadership
- selling and marketing their products, services and business
- acquiring financing and keeping financial control over their business
- presenting their business case to potential investors and other critical stakeholders.

In addition to these general business skills, the students are also directed in developing their psychologically-oriented entrepreneurial competencies as discussed earlier.

In the background of the programme lies the ultimate learning goal: that the students would reflectively analyze their own business on constant basis and then be able to exploit the understanding they have created about the situation. This will give the students the ability to push their business further also in the future. Focusing on the reflective analysis will open up possibilities for limitless learning, i.e. the learning goals are not predetermined, but will become ever more challenging over time.

Growing into expertise

The masters' programme on entrepreneurship and business development is designed to support both the development of the psychologically-based entrepreneurial skills and general business skills. Acquiring entrepreneurial competencies is a pragmatic learning process (Dewey, 1929, 1963, Taatila, 2010). The goal of learning is not to be taught about the “ultimate entrepreneurial process” but the aim is to secure both long and short-term success of business.

Acquiring knowledge in real life situations is neither inductive nor deductive, but an abductive process (Peirce, 1958, Suomala et al., 2005, Thagard and Croft, 1999, Thagard and Shelley, 1997). The abductive process also becomes a knowledge-creating process, as a part of knowledge acquisition requires that an acquirer creates new beliefs or representations of meanings for the collected and combined pieces of information (Dazzani, 2005). An

entrepreneurial student constantly learns via real experiences and creates new personal knowledge by producing creative solutions that solve emerging problems.

Learning via a pragmatic process creates an entrepreneurial learning cycle that leads into abductive creation of new situational knowledge (Taatala, 2010).

An important part of the entrepreneurial learning cycle is that learning should be inner-directed (Hänti et al., 2008, Römer-Paakkanen and Pekkala, 2008). If learning is based on personal interest, and the surrounding environment empowers the student, it creates a strong internal motivation. The motivation leads to the development of the enterprise, and learning (often tacit), is created as a by-product of the development project.

Studying in the programme is very goal oriented and the students are given a high degree of autonomy. The lectures and work shops are designed to give the students practical information on how to develop their own real-life business plans. The meetings are always voluntary, i.e. the students are not graded based on their attendance on the classes but on the expertise shown in the accomplishment of particular tasks. This will support the student's learning of prioritizing and carrying the personal responsibility.

The students are formed into peer-support teams to enhance internal networking and learning from multiple business development cases. This will further develop their interpersonal skills and capability to self-managed team work. Each team will have an experienced mentor supporting the students both in their business development case and learning.

Learning by Developing -model

Becoming an expert in a pragmatic situation requires integrating knowledge, understanding and doing with the competence to work autonomously in evolving real life situations (Raij, 2000, 2003). Based on Raij's research and the pragmatic theory of knowledge Laurea University of Applied Sciences has selected "Learning-by-Developing" (LbD) as its principal pedagogic approach (Laurea 2006). LbD is based on five principles: i) authenticity, ii) partnership, iii) experiencing, iv) investigative approach, and v) creativity (Fränti and Pirinen, 2006, Laurea 2006, Raij 2006, 2007).

The term "authenticity" means that all the learning-situations are simultaneously real-life developing situations. In the beginning of a project no participant has a clear picture of the outcomes or the working procedures. This is a very typical situation in new business development, when there are several possible paths to choose from and no knowledge about where they will lead. "Partnership" is required due to current networked way of making business. Each entrepreneur is constantly required to work with partners in a loose network organization. Thus LbD guides the students to learn in a group and network setting. "Experiencing" refers to every student's personal learning experience and taking the responsibility of her own work and learning. The "investigative approach" means that the development projects are based on scientific research methods and results. "Creativity" is the backbone of development; the goal is to create new answers to problems faced. (Laurea 2006, Raij, 2007)

The connection between learning and Innovation, Development and Research (IDR)

Learning-by-Developing model supports growth of the students into personal mastery of growth entrepreneurship. The whole point of the programme is implementation of new potential businesses in a global context. This task is relatively close in business context to definitions of innovation, like the definition by Stähle et al. (2004): "the sum of a new idea, implementation and value creation" or the one provided by the European Union: "the successful production, assimilation and exploitation of novelty in the economic and social spheres" (EU, 1995). Thus the primary innovation-related goal of the programme is to add value by implementing new ideas in global market place.

The innovation process is strongly dependent on research and development activities. Also open innovation and networked economy have in short time become standards on how new innovations are made. In order to use this knowledge, the students are networked to researchers and research organizations in their field of interest in order to exploit the latest research findings. The students will also be educated in ways of using their customers and other stakeholders as partners in product and service development. Thus the programme will give the students both competence to use open innovation and networks effectively and an access to these tools.

As their thesis, the students will make a study in the field of their own business case. As a part of the thesis they will create a theoretical framework for growth entrepreneurship and use it to analyze their personal growth in expertise as well as the business case. These reflective studies will be used for acquiring new knowledge about growth entrepreneurs and pedagogical solutions that should be used to support their learning. New knowledge will be published in academic papers and used for improving the future programmes.

Studying in the programme

All studies in the master's programme in business management and entrepreneurship are related to the student's personal business or business idea. In addition to the educational goals of the programme, it also aims at development of the businesses into faster growth and/or higher profitability.

The programme is open to all eligible individuals (bachelor's degree and required work experience) who are considering embarking on an entrepreneurial career pathway – whether that be forming a business based around new technology, developing a social enterprise, pursuing an opportunity in the arts or creative media, or taking an innovation forward within a larger or more established organisation.

Students are encouraged to bring their own business ideas with them to the programme, along with a clear ambition and desire to take them forward. This will enable them to have the most effective learning experience by providing a clear and meaningful focus for project work, formal assessments, networking assignments and presentations.

The master's programme in business management and entrepreneurship consists of three phases:

- The Planning phase,
- The Implementation phase
- The Analysis phase.

Assessment in the study programme

The assessment of the programme takes place with a scale of 0-5. Students are graded as

- Excellent (5) when they can prove superior mastery of the competence area both in practice and conceptually;
- Good (3-4) when they demonstrate mastery in practice, while certain deficiencies are allowed in the theoretical competence;
- Satisfactory (1-2) when proof is provided of the student's ability to complete practical tasks related to the competence area and to apply related concepts professionally.

Each of the three phases will require the submission of a number of assignments as follows:

- Planning phase: Filing of an implementation plan that contains:
 - o student's own business plan
 - o a project plan for the execution of the business development case over a defined period of time (5-9 months)
 - o an oral presentation to sell the idea to investors/financiers and customers.
- Implementation phase: Evaluation criteria agreed between the student and the tutor. The student must demonstrate practical mastery of entrepreneurial skills through independent work
- Analysis phase: Master's thesis in which the student
 - o demonstrates the application of theories, concepts and knowledge to students' own enterprise project
 - o reflects on learning during the programme to facilitate personal development.
 - o creates further development plans for his business

Assessment criteria - Written reports

The emphasis will differ for each of the written assignments, but the general criteria are as follows:

- Knowledge – understanding of the theories, concepts and frameworks, ability to select appropriate concepts for assignments, evidence of additional reading to deepen understanding
- Application – ability to apply theories, concepts and frameworks correctly, evidence of research to enable the effective application of theories, concepts and frameworks to the case
- Critical analysis and evaluation – ability to interpret data apply insights resulting from the application of frameworks or concepts, identify issues, make valid assumptions where appropriate with relevant justifications
- Synthesis – building arguments or recommendations or application of creative thinking to the development of the case as a result.
- Structure – demonstration of a clear logic trail which can be followed throughout the report
- Format and presentation – follow established guidelines and the detailed requirements of the assignment

Assessment criteria - Oral presentations

Two formal oral presentations are assessed during the programme:

1. the presentation of the implementation plan in the end of the planning phase, and
2. the presentation of the master's thesis.

In addition to the criteria for written reports, the following also apply:

- Slides, visual aids and handout material – clear and well thought out both in terms of the individual slides and overall presentation to provide good support to verbal delivery.
- Presentation style – clear and concise verbal articulation

- Performance in discussion – effectiveness in responding to questions and utilising discussion time with panellists

Programme implementation and student tutoring

The planning phase of the programme consists of 12 individual workshops. Each of these has a nominated teacher that will plan and implement the workshop. The teacher may bring in guest lecturers to support the workshop.

By the end of the planning phase a tutor will be assigned to each student. The tutor will be selected based on expertise on the business branch as well as personal preferences of the student and the tutor.

The tutor will support the student both in pedagogical and substance learning. Pedagogical guidance will support the learning process of the student. Substance guidance will support the student in becoming an expert in her own field of business as well as in general entrepreneurship. The goal is that the student will evolve into an active developer of his selected business area.

The tutor will also guide the student in the thesis project. The tutor will assess the thesis according to Laurea's master's thesis instructions in co-operation with another principal lecturer of Laurea.

Development and quality assurance in the programme

Development of the programme is based on monitoring the whole process frequently according to the principles defined in Laurea's general quality assurance process.

The general evaluation metrics for master's degree-programmes are:

- Attractiveness
- Completion rate
- Amount of credits achieved
- Average time of completion of studies
- Employment of the students

These metrics will be measured and reported as a part of the programme. The attractiveness will be measured after the application period is over. Amount of credits achieved will be measured annually. Completion rate and average time of completion of studies as well as employment of the students will be measured after the completion of the programme.

In addition, feedback will be collected from the students after each workshop and completion of each phase of the programme. The feedback will be collected about content, delivery, guidance and expected effectivity of the evaluation target. Also the personal efficiency and work load of the student will be monitored via feedback process. In addition to numerical feedback, free-form feedback is collected to support the development of the programme.

Information received from the feedback will be used for development of the programme and guidance of students. A summary report of the feedback will be distributed both to staff and students and it will be reviewed during the following work shop.

In the completion phase of the studied the affectivity of the programme will be evaluated from the points of view of the student, their business case and the needs of the region.

Summary results of all the above mentioned information will also be reported to the pedagogical development team of Laurea. They will be used for sharing best practices and improving pedagogical process.

Sources

Autio, E. (2007). GEM 2007 Report on High - Growth Entrepreneurship, GEM Global Reports. London: GERA.

Autio, E. (2009). "The Finnish Paradox: The Curious Absence of High-Growth Entrepreneurship in Finland".

ELinkeinoelämän tutkimuslaitos ETLA, Discussion papers, No. 1197. Available at: http://www.tem.fi/files/24937/ETLA_DP_1197.pdf, fetched 27.1.2010.

Advanced Diploma in Entrepreneurship (2009). The programme contents and brochure. <http://www.cfel.jbs.cam.ac.uk/programmes/diploma/index.html>, fetched 9.10.2009.

Baron, R. A. (1998), "Cognitive mechanisms in entrepreneurship: Why and when entrepreneurs think differently than other people", Journal of Business Venturing, Vol. 13, p. 275-295.

Barringer, B. R. and Bluedorn, A. C. (1999), "The relationship between corporate entrepreneurship and strategic management", Strategic Management Journal Vol. 20 No. 5, p. 421-444.

Bennis, W. G. and O'Toole, J. (2005). How business schools lost their way. Harvard Business Review 83(5): 96-104.

Caglio, C. M. and Katz, J. A. (2001), "The psychological basis of opportunity identification: Entrepreneurial alertness", Small Business Economics, Vol. 16, p. 95-111.

Dazzani, V. (2005), "Learning and Abduction", Semiotica, Vol. 153, No. 1-4, p. 73-84.

Denslow, D. L. and Giunipero, L. C. (2003), "Improving purchasing success through entrepreneurial behaviour".

ISM's 88th Annual International Supply Management Conference. URL:<http://www.ism.ws/DocumentArchive/index.cfm?PublicationID=2> & View=2.

Dewey, J. (1929), *The Quest for Certainty: A Study of the Relation of Knowledge in Action*, Minton, Balch, and Company, New York, NY.

Dewey, J. (1963) (1938), *Experience and education*, Collier Books, New York.

EU (1995) "Green Paper on Innovation. December 1995", European Commission. Available <http://europa.eu.int/en/record/green/gp002en.doc> 22.11.2004

EU (2003). Commission of the European Communities. 21.1.2003. Green Paper Entrepreneurship in Europe. Brussels: Commission of the European Communities. http://eur-lex.europa.eu/LexUriServ/site/en/com/2003/com2003_0027en01.pdf.

European Survey of Higher Education Institutions (2008), Survey of Entrepreneurship in Higher Education in Europe, [PDF-document]. http://ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/highedsurvey.pdf (Fetched 19.01.2009)

Fränti, M. and Pirinen, R. (2006). Tutkiva oppiminen integratiivissa oppimisympäristöissä – BarLaurea ja REDLabs, Laurea-ammattikorkeakoulun julkaisusarja B-10, Laurea, Vantaa.

Giunipero, L. C., Denslow, D. and Eltantawy, R. (2005), "Purchasing/supply chain management flexibility: Moving to an entrepreneurial skill set", *Industrial Marketing Management*, Vol. 34, No. 6, p. 602-613.

Stenholm, P., Pukkinen, T., Heinonen, J. & Kovalainen, A. (2008), *Global Entrepreneurship Monitor 2007 Report, Finland*. Turun Kauppakorkeakoulun julkaisu B2-2008. Turun Kauppakorkeakoulu, Turku.

Grousbeck, I. (1997), "What it takes to run your own show", *Christian Science Monitor*, Vol. 89: 200, p. 9.

Gürol, Y. and Atsan, N. (2005), "Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey", *Education + Training*, Vol. 48, No. 1, p. 25 - 38

Hallituksen politiikkaohjelmat: Yrittäjyys. (2006). Yrittäjyyden politiikkaohjelma. Helsinki: Valtioneuvoston kanslia. <http://www.vn.fi/toiminta/politiikkaohjelmat/yrittajyys/ohjelma/fi.pdf>

Hänti, S., Kairisto-Mertanen, L., Kallio-Gerlander, J. and Rantanen, H. (2008), Identifying entrepreneurial competences in three different cross-disciplinary environments. In: Ingle, S. and Neuvonen-Rauhala, M. (Eds.) *Promoting Entrepreneurship by Universities. The Proceedings of the 2nd International FINPIN 2008 Conference*, Hämeenlinna, Finland, April 20-22, 2008. p. 299-306.

Jamieson, I. (1984), "Education for enterprise", in Watts, A.G., Moran, P. (Eds), CRAC, Ballinger, Cambridge, pp. 19-27.

Kirzner, I. (1979), *Perception, opportunity and profit*, University of Chicago Press, Chicago.

Koh, H. C. (1996), "Testing hypotheses of entrepreneurial characteristics: A study of Hong Kong MBA students", *Journal of Managerial Psychology*, Vol. 11, No. 3, p. 12 - 25

Lambing, P. and Kuehl, C. R. (2000), *Entrepreneurship*, 2nd ed., Prentice-Hall Inc., USA.

Laurea (2006). *LaureaFacts – a guide for Laurea students and staff*. Vantaa: Laurea University of Applied Sciences/Applications Office.

Lazear, E. P. (2005), "Entrepreneurship", *Journal of Labor Economics*, Vol. 23, No. 4, p. 649–680.

Lindholm, T & Hietala, H. (2009). "PK-yritysbarometri. Kevät 2009". Helsinki: Suomen yrittäjät & Finnvera.

Lopez-Claros, A. (2006), "Executive Summary of Global Competitiveness Report", [online], World Economic Forum, http://www.weforum.org/pdf/Global_Competitiveness_Reports/Reports/gcr_2006/gcr2006_summary.pdf.

Minniti, M. and Lévesque, M. (2008), "Recent developments in the economics of entrepreneurship", *Journal of Business Venturing*, Vol. 23, Iss. 6, p. 603-612.

Myint, Y. M., Vyakarnam, S. and New, M. J. (2005). The effect of social capital in new venture creation: the Cambridge technology cluster. *Strategic Change*, vol. 14, p. 165-177.

Ojasalo, J. (2004). Attractiveness and image of entrepreneurship: an empirical study. *International Journal of Entrepreneurship*, vol. 8., pp. 73-92.

Opetushallitus. (2001a). Yrittäjän ammattitutkinto tutkinnon perusteet. DNO 49/011/2001.

Opetushallitus. (2001b). Yrittäjän erikoisammattitutkinto tutkinnon perusteet. DNO 48/011/2001.

Otaniemi Development (2006), *Otaniemen alueen yrityskartoitus*, Otaniemi Marketing Oy, Espoo.

Paasio, K & Pukkinen, T. (2006). Akateemisen yrittäjyyden kokonaiskuva tutkijan näkökulmasta. Turun kauppakorkeakoulun PK-instituutti. http://www.ktm.fi/files/16155/Oma_yritys_alustus_29031.pdf

Pajarinen, M., Rouvinen, P. and Ylä-Anttila, P. (2006), Uusyrittäjien kasvuhakuisuus. KTM julkaisu 29/2006, Ministry of Employment and the Economy, Finland.

Peirce C. S. (1958), *Collected Papers*, vol. VII., Harvard University Press, Cambridge, MA.

Peters, M. (2005), "Entrepreneurial skills in leadership and human resource management evaluated by apprentices in small tourism businesses", *Education + Training*, Vol. 47, No. 8/9, p. 575-591.

Platt, L. (2004), "Accepting Risk - Daring Greatness", *Vital Speeches of the Day*, Vol. 70, No. 17. p. 541–543.

Puustinen, T. (2004). Avain omaan yritykseen. Keuruu: Otavan Kirjapaino Oy.

Raij, K. (2000). Toward A Profession. Clinical learning in a hospital environment as described by student nurses. Helsinki University: Department of Education. Research Report 166.

Raij, K. (2003). Osaamisen tuottaminen ammattikorkeakoulun päämääränä. in Ammattikorkeakoulupedagogiikka, ed. Kotila, H., 42 – 58. Helsinki: Edita.

Raij, K. (2006), "Kehittämispohjainen oppiminen ammattikorkeakouluosaamisen mahdollistajana – Learning by Developing ammattikorkeakoulu kontekstissa", in: Erkamo, M., Haapa, S., Kukkonen, M., Lepistö, L., Pulli, M. and Rinne T. (Eds.), Uudistuvaa opettajuutta etsimässä, Laurea ammattikorkeakoulun julkaisusarja B-11, Vantaa, pp. 17-34.

Raij, K. (2007). Learning by developing. Laurea publications A-58. Vantaa: Laurea University of Applied Sciences.

Ray, D. M. (1997), "Teaching entrepreneurship in Asia: impact of a pedagogical innovation", Entrepreneurship, Innovation and Change, 6(3), 193-227

Römer-Paakkanen, T. and Pekkala, A. (2008), Generating entrepreneurship from students' hobbies. In: Ingle, S. and Neuvonen-Rauhala, M. (Eds.) Promoting Entrepreneurship by Universities. The Proceedings of the 2nd International FINPIN 2008 Conference, Hämeenlinna, Finland, April 20-22, 2008. p. 340-347.

Schumpeter, J. A. (1926). Theorie der wirtschaftlichen Entwicklung, Duncker & Humblot, Leipzig.

Segal. (1985). The Cambridge phenomenon : the growth of high technology industry in a university town. Segal Quince & Partners, Cambridge.

Shook, C. L., Priem, R. L. and McGee, J. E. (2003), "Venture creation and the enterprising individual: a review and synthesis", Journal of Management, Vol. 23, No. 3, p.379-99.

Simon, M., Houghton, S. and Aquino, K. (1999), "Cognitive biases, risk, perception, and venture formation: How individuals decide to start companies", Journal of Business Venturing, Vol. 15, p. 113-134.

Ståhle, P., Sotarauta, M. and Pöyhönen, A. (2004) "Innovatiivisten ympäristöjen ja organisaatioiden johtaminen", Tulevaisuusvaliokunta, Teknologian arviointeja 19, Eduskunnan kanslian julkaisu 6/2004, Helsinki, Finland.

Suomala, J., Taatila, V., Siltala, R. and Keskinen, S. (2005), "Salapoliisimetodologia innovaatiotutkimuksen strategisena valintana", in: Jokivuori, P. (Ed.), Sosiaalisen pääoman kentät, Minerva kustannus Oy, Jyväskylä, p. 359-377.

Suomala, J., Taatila, V., Siltala, R. and Keskinen, S. (2006). "Chance Discovery as a First Step to Economic Innovation". Proceedings of the 28th Annual Conference of the Cognitive Science Society, p. 2204-2209. <http://www.cogsci.rpi.edu/CSJarchive/Proceedings/2006/index.htm>

Taatila, V. (2010). "Learning Entrepreneurship in Higher Education", Education & Training.

Thagard, P. and Croft, D. (1999), "Scientific discovery and technological innovation: Ulcers, dinosaur extinction, and the programming language Java", In: Magnani, L., Nersessian, N. J. and Thagard, P. (eds.), Model-Based reasoning in Scientific Discovery, Kluwer Academic/Plenum Publishers, New York, NY, p. 125-137.

Thagard, P. and Shelley, C. P. (1997), "Abductive reasoning: Logic, visual thinking, and coherence", In: Chiara, M. L. Dd. (ed.), Logic and scientific methods, Kluwer Academic Publishers, Dordrecht, p. 413-427.

Tilastokeskus. (2007a). Palkansaatajat ja yrittäjät 1990-2007. <http://pxweb2.stat.fi/>

TKK (2010). TKK-Where Innovation Meets Tradition. A Slideshow available at http://www.tkk.fi/fi/yleista/kansainvalisyys/kansainvalinen_tkk_pahkinankuoressa/tkkslides.pdf. Fetched 27.1.2010.

Vuorela, P. (2007) "Value-Added Incubation and Acceleration Services", presentation at Technopolis Ventures on 5 March 2007

Wagner, T. (2008), "RIGOR redefined", Educational Leadership, October 2008.

Wickham, P.A. (2006), Strategic entrepreneurship, 4th ed. Pearson Education Ltd, Harlow.

Yrittäjät (2009), Yrittäjyys Suomessa. Suomen yrittäjät. <http://www.yrittajat.fi/fi-FI/suomenyrittajat/yrittajyys Suomessa/>, fetched 16.10.2009.

Zimmerer, T. and Scarborough, N. (2002), The Essentials of entrepreneurship and small business management, Prentice Hall, New Jersey.

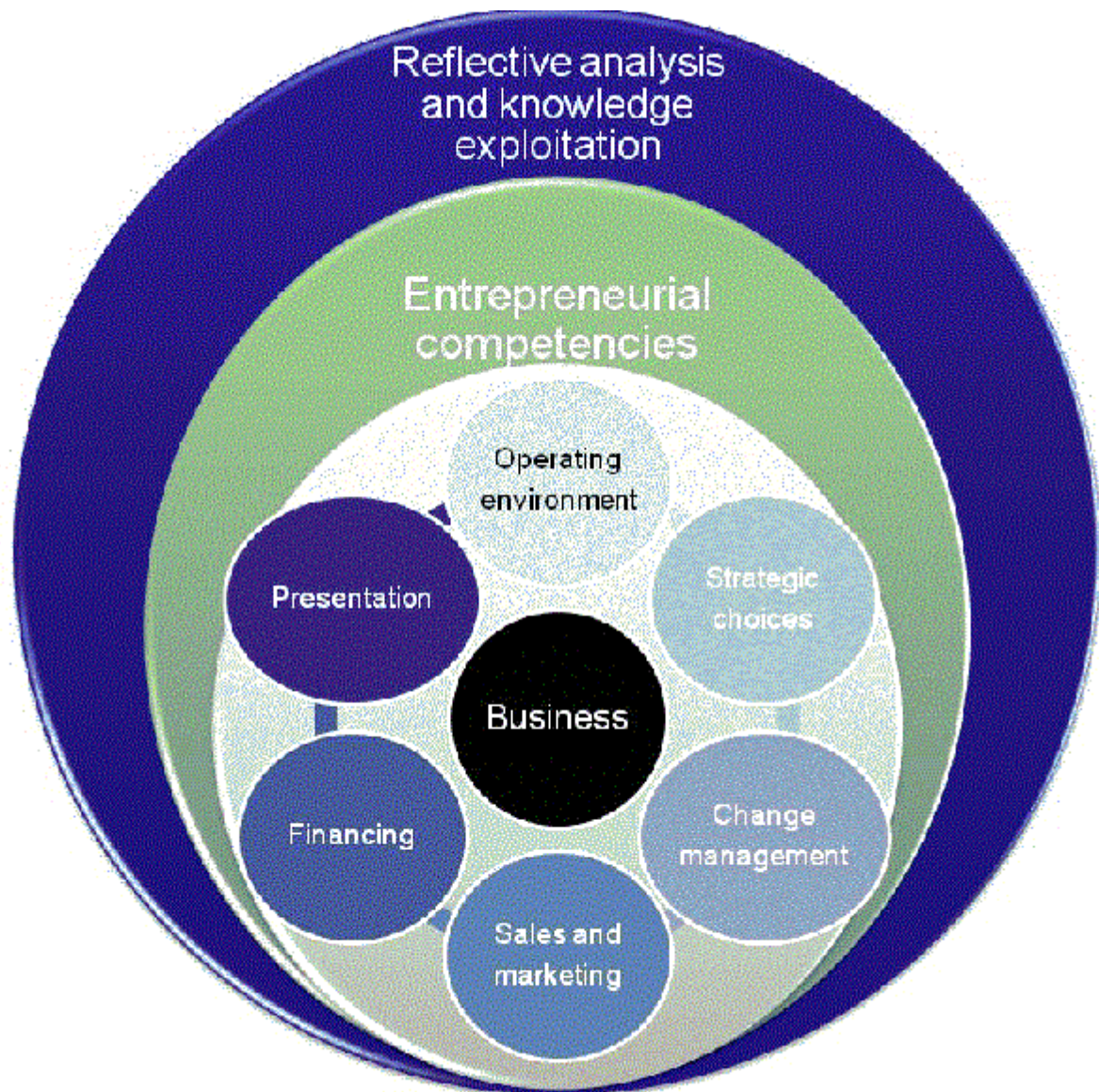
Competences developed in the programme

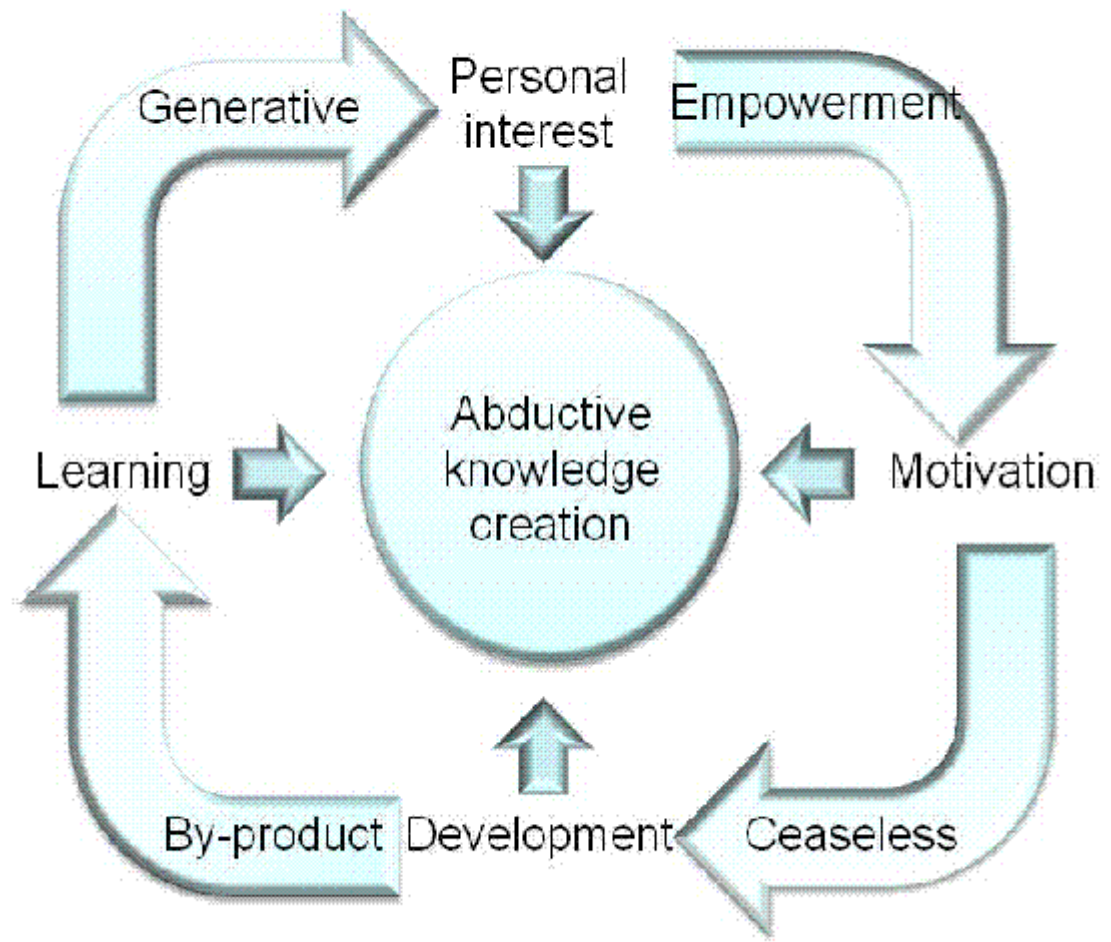
Based on the discussion above, the programme aims to support the students in developing a wide variety of competencies that support the growing of their business.

The actual assessment criteria and tasks are targeted at the participants' business skills development, but at the same time the guidance and the structure of the study programme are aimed at improving the students' individual entrepreneurial skills. The latter objective will be pursued by situating students continually into different situations, where they will have to prioritize their activities, take responsibility for the results and to make decisions and communicate them within their network. Students are also directed to look for new solutions in the situations

experienced and to use the study program actively to improve their own business.

The entrepreneurial skills





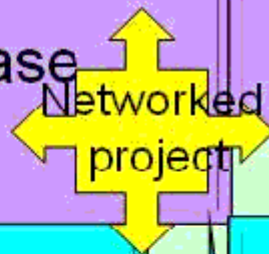
The business (idea) of a student

Analysis phase



Business developme
plan

Implementation phase



Business

Planning phase

Workshops

Implementation
plan

		1. year	2. year
OP	STUDIES	60	30
G071	TOOLS FOR BUSINESS DEVELOPMENT		
G8162	Challenges in the business environment	5	
G8166	Change management and strategy in action	5	
G8163	Developing e-business	5	
01034	Management Accounting and Control in Services	5	
G8167	Legal Issues	5	
G8164	Customers and Consumers	5	
G058	BUSINESS DEVELOPMENT		
G059	ANALYSING THE BUSINESS DEVELOPMENT / THESIS		
		60	30

G071 TOOLS FOR BUSINESS DEVELOPMENT, 30 cr

G8162 Challenges in the business environment, 5 cr

G8166 Change management and strategy in action, 5 cr

G8163 Developing e-business, 5 cr

01034 Management Accounting and Control in Services, 5 cr

The student is able to:

- understand the importance of cost accounting and budgeting for decision making
- use key performance indicators in services
- prepare a cash budget, budgeted income statement and balance sheet for a small company
- use activity-based costing to analyse customer profitability
- set a price for a new service

Contents of the study unit:

- Profitability of new services and customers
- Budgeting and its role in planning, control and decision making
- Financial reporting that supports management decision making
- Pricing methods

Study unit description:

There should be a tight link between the budget and the strategic plan of an organization. New or changed service concepts will be exposed to a business analysis, including market viability and profitability analysis. Management accounting introduces several methods and tools to analyze profitability and make budgets and forecasts to help the decision-making process of the management.

Management accounting is undergoing changes and faces several challenges in the future. There is a need to integrate management accounting more into the business and operations of an organization, as part of development and innovation teams, and not only as a separate specialist function. A key objective is to develop students' competences in management accounting, cost and revenue management, as well as budgeting and financial reporting. The students will also discuss the use of different methods in pricing services.

G8167 Legal Issues, 5 cr

G8164 Customers and Consumers, 5 cr

G058 BUSINESS DEVELOPMENT, 30 cr

Description:

Toteutusvaiheen tavoitteena on opiskelijoiden suunnitelmien toteuttaminen käytännössä sekä toteutusprosessin jatkuva reflektiivinen kehittäminen.

The student will be able to:

Toteutusvaiheessa pyritään kehittämään opiskelijoiden osaamista seuraavilla osa-alueilla:

- liiketoiminnan kehittäminen käytännössä
- liiketoiminnan toteutussuunnitelman noudattaminen ja jatkuva päivittäminen
- henkilökohtaiset- ja yrittäjyystaidot, joita tarvitaan yrityselämässä menestymiseen ja ideoiden viemiseen eteenpäin
- viestintä erilaisissa liiketoimintatilanteissa
- henkilökohtaisen ja ryhmässä toteutettavan reflektion käyttö liiketoiminnan kehittämisessä
- liiketoimintahankkeen jatkuva analyysi
- muutosten hallinta.

Henkilökohtaisten oppimistavoitteiden päätarkoitus on määritelty henkilökohtaisessa toteutussuunnitelmassa.

Content:

Toteutusvaiheessa oppimisen päätavoitteena on jatkuva kehittyminen toteutusprojektin reflektion avulla. Opiskelijat seuraavat henkilökohtaisia liiketoiminnan kehittämissuunnitelmiaan ja ratkaisevat kohtaamiaan käytännön haasteita. Mentorit arvioivat säännöllisesti opiskelijoiden kehittämishankkeita ja uusia opittuja taitoja. Kuukausittain järjestettävässä seurantatapaamisessa opiskelijat ja mentorit jakavat keskenään tietoa käytännön kysymyksistä ja niiden ratkaisuista.

Opiskelijat jatkavat myös omien hankkeidensa reflektioa vertaisryhmissä. Joka kuukausi järjestetään yksi tai kaksi ohjattua tiimitapaamista, joissa opiskelijoilla ja mentoreilla on mahdollisuus oppia toistensa kokemuksista ja kehittää liiketoiminnan analysointi- ja konsultointitaitojaan.

Opiskelijat osallistuvat myös yhteen intensiiviseen opetusviikkoon, jonka aikana he analysoivat kokonaisvaltaisesti toteutushankkeiden tilan. Mukana on myös asiantuntijoita, jotka antavat neuvoja toteuttamiseen ja hankkeiden eteenpäin viemiseen liittyvissä asioissa.

Learning process:

Toteutusvaiheen oppimisen arviointi perustuu täysin toteutushankkeen aikana osoitettuun osaamiseen. Opiskelija ja mentori sopivat arviointikriteereistä ja -menetelmistä toteutussuunnitelmassa.

Liiketoiminnan kehittämisen opintosuoritukset kirjataan tähän teemaan liittyvinä opiskelijan projekteina. Yhteensä projektisuorituksia on tehtävä 30 op. Yksittäiset projektit voivat olla laajuudeltaan 5-30 op.

Toteutusvaiheen oppimisen arvioinnissa painotetaan käytännönläheisyyttä. On tärkeämpää osoittaa osaaminen käytännössä kuin teoreettisesti. Arviointi voi perustua osittain kirjallisiin raportteihin, mutta myös käytännön näytteitä edellytetään.

Arvioija laatii jokaisesta arvioinnista raportin, jossa luetellaan arvioidut osaamisalueet suhteessa toteutussuunnitelmissa mainittuihin alueisiin sekä arvioinnin tulos ja arvosana. Raportti annetaan opiskelijalle ja koulutusohjelman johtajalle arkistoitavaksi.

G059 ANALYSING THE BUSINESS DEVELOPMENT / THESIS, 30 cr

Description:

Analyyysi- ja opinnäytetyövaiheen tavoitteena on se, että opiskelijat analysoivat kehittämissuunnitelmansa, sen toteutuksen ja oppimisprosessinsa koulutusohjelman aikana. Näin opiskelijat syventävät ammattitaitoaan, joka auttaa heitä tulevaisuuden liiketoiminnan kehittämishankkeissa. Lisäksi opiskelijat saavat laaja-alaista tietämystä liiketoiminnan kehittämistoiminnasta.

The student will be able to:

Analyyysivaiheessa pyritään kehittämään opiskelijoiden osaamista seuraavilla osa-alueilla:

- liiketoiminnan kehittämishankkeen arviointi kehityksen jatkamiseksi
- analyyttiset menetelmät ja tieteellinen ajattelu
- uusien menettelyjen ja osaamisen kehittäminen
- eri alojen asiantuntemuksen yhdistäminen
- liiketoiminta-analyysi
- reflektiometodit
- henkilökohtaisen kehityksen ja kehittämistarpeiden analysointi
- käsitteelliset yrittäjysteoriat
- liiketoiminnan ja oman yrittäjyyden kehittäminen edelleen

Content:

Oppiminen perustuu opiskelijoiden ryhmissä luomaan liiketoiminnan kehittämisen teoreettiseen viitekehykseen, jonka pohjalta jokainen opiskelija analysoi oman liiketoiminnan kehittämisprojektinsa.

Opiskelijat aloittavat laatimalla tiimeinä hankkeiden analysointia koskevat metodologiakäsikirjat. Käsikirjat perustuvat asianmukaisiin tieteellisiin lähteisiin ja niiden olisi tarjottava opiskelijoille käytännön menetelmät kehittämisprosessien arvioimiseksi sekä esitellä yleisiä liiketoiminnan kehittämismenetelmiä. Analyysivaiheessa järjestetään opiskelijoiden ja mentorien kesken kolme seuranta tapaamista, joiden aikana käsikirjoja työstetään yhteisöllisesti. Niiden lisäksi järjestetään säännöllisiä tiimitapaamisia, joissa opiskelijatiimit kehittävät metodologiakäsikirjojaan itsenäisesti.

Kun metodologiakäsikirjat ovat valmiit, jokainen opiskelija analysoi oman hankkeensa käsikirjan metodien pohjalta. Analyysin tavoitteena on laatia liiketoimintahankkeelle toteuttamiskelpoinen jatkokehittämissuunnitelma sekä valmistaa tieteellisesti kattava projekti- ja oppimisraportti.

Learning process:

Käsikirjan ja oman kehittämisprojektianalyysin sekä jatkokehittämissuunnitelman sisältävä loppuraportti muodostaa opiskelijan opinnäytetyön. Valtionneuvoston asetuksen (423/2005) mukaan opinnäytetyön tavoitteena on kehittää ja osoittaa kykyä soveltaa tutkimustietoa ja käyttää valittuja menetelmiä työelämän ongelmien erittelyyn ja ratkaisemiseen sekä valmiutta itsenäiseen vaativaan asiantuntijatyöhön.

Opinnäytetyötä laatiessaan opiskelijat hankkivat ja tuottavat erikoisalan osaamista yrittäjyydestä ja liiketoiminnan kehittämisestä sekä perustietoja itsenäisestä ajattelusta ja tutkimuksesta. Opinnäytetyön ohjaa ja arvioi opiskelijan henkilökohtainen mentori. Mentorin tehtävänä on tukea yrityksen niin tieteellisessä kuin käytännöllisessä analysoinnissa sekä arvioida opinnäytetyö. Lisäksi opinnäytetyön arvioi toinen ohjaajaryhmän jäsen Laurean opinnäytetyöohjeiston mukaisesti.

Opinnäytetyö esitellään julkisesti joko koulutusohjelman viimeisillä viikoilla tai jonkin verkostokumppanin kansainvälisen yrittäjyysviikon aikana. Opinnäytetyöt julkaistaan Laurean opinnäytetöiden julkaisemista koskevien ohjeiden mukaisesti.

Analyysivaiheen oppimisen arviointi perustuu opinnäytetyöhön. Arviointi tapahtuu Laurean Intranetistä löytyvän opinnäytetyöohjeen mukaisesti.

Arviointikriteerit ovat:

- autenttisuus
- tutkimussuuntautuneisuus
- innovaatio
- käytettävyys.

Opinnäytetöiden on myös osoitettava opiskelijoiden saavuttaneen EQF:n tason 7.