



Supporting the entrepreneurial potential of higher education

<http://www.sephHE.eu>
info@sepHE.eu

Case Study No. 19:

**Tampere University of Applied Sciences,
Finland:**

**Team learning and team
entrepreneurship**

May 2015

Author: Karsten Gareis

About the sepHE Study

The study "Supporting the entrepreneurial potential of higher education" was based on a contract between the European Commission, Directorate General Education and Culture (DG EAC), and empirica Gesellschaft für Kommunikations- und Technologieforschung mbH (co-ordinator – Bonn, Germany) as well as the University of Wuppertal, UNESCO Chair of Entrepreneurship and Intercultural Management (Wuppertal, Germany).

The study's main purpose was collecting 20 case studies about insightful practice in entrepreneurship education at European universities. This is one of them. The findings from a cross-case analysis are included in the Final Report which is available at the study's homepage and at DG EAC's website.





19 Tampere University of Applied Sciences, Finland: team learning and team entrepreneurship

Overview of contents

19.1 The university's entrepreneurial profile	4
19.1.1 The university's overall approach to entrepreneurship education	4
19.1.2 Leadership and governance	5
19.1.3 Resources: people and financial capacity.....	7
19.2 Entrepreneurship in curricula and teaching	7
19.2.1 Overview about curricular offers	7
19.2.2 Target groups	10
19.2.3 Designing lectures and courses – basic curricular decisions.....	12
19.2.4 Setting of entrepreneurship teaching	15
19.2.5 Instructors: teachers and mentors.....	16
19.2.6 Management of entrepreneurship education	17
19.3 Extra-curricular activities related to entrepreneurship education.....	21
19.4 Institutional aspects of entrepreneurship education.....	21
19.4.1 Organisational set-up and change.....	21
19.4.2 Laws, statutes and codes	21
19.4.3 Mindsets and attitudes.....	22
19.5 Outreach to external stakeholders	23
19.5.1 Types of relationships with external stakeholders.....	23
19.5.2 External stakeholders involved in entrepreneurship education	24
19.5.3 International relationships.....	25
19.6 Impact and lessons learned.....	25
19.6.1 Evaluating impacts of the entrepreneurship education approach	25
19.6.2 Lessons learned.....	26



Abstract



Tampere University of Applied Sciences (TAMK) has a major programme in entrepreneurship education (EE) named Proacademy. It started in 1999 and focuses on team learning and team entrepreneurship. Proacademy students spend 2.5 years working as team entrepreneurs, setting up a real company. Students establish own learning targets individually and as a team, supported by a coach and set down in learning contracts. The most important learning tools are dialogue as well as “birth-giving” and feedback sessions. Proacademy is designed as a multi-disciplinary EE study programme, unit and environment mainly for students from Business Administration and Business Information Systems. In autumn 2012, TAMK set up an additional EE unit named “Y-kampus” for mainstreaming EE in the whole university. It provides entrepreneurship courses, events and mentoring services, as well as dedicated EE premises. All TAMK curricula include some EE elements, which are organised by and at the Y-kampus. Y-kampus uses learning approaches similar to Proacademy. Its courses can be included in students’ degrees as free choice or alternative studies. Y-kampus also organises coaching courses for TAMK’s personnel. Y-kampus’ activities are still being developed, with a view to providing services to third parties such as students from the other three Tampere universities as well as start-ups that are already up and running. TAMK’s emphasis on entrepreneurship has notable impacts: 20 – 25% of graduates start a company, compared with less than 5% for all university graduates in Finland.

Case study fact sheet

■ Name of the university:	Tampere University of Applied Sciences (TAMK), Tampere, Finland
■ Legal status:	Public (City of Tampere has 87% ownership)
■ Campuses:	Seven campuses in the Pirkanmaa region: Tampere (four sites, incl. the main campus Kuntokatu), Ikaalinen, Mänttä-Vilppula, and Virrat.
■ Year of foundation:	1996
■ Number of students (year):	9,630 (2013) (Degree students. Total students in 2013: 10,477)
■ Number of employees:	761 (2013). Thereof: 316 Teaching staff; 20 R&D&I; 425 Other
■ Budget (most recent financial year)	EUR 73,622,000 (2013)
■ Academic profile:	As a polytechnic, TAMK is oriented towards work life. Six schools offering degree-awarding education: School of Wellbeing and Social Services; School of Business and Services; School of Construction and Electrical Engineering; School of Art, Music and Media; School of Industrial Engineering; School of Health Care. The Tampere Business Programme was awarded the first prize Quality Unit by the Finnish Higher Education Evaluation Council for 2010 – 2012, recognising outstanding quality of Proacademy.
■ Entrepreneurship education profile:	Proacademy programme in EE started in 1999; Y-kampus unit set up in 2012 for mainstreaming EE all over the university
■ Activities focused in this case study:	Cooperative entrepreneurship approach practised in Proacademy, a multi-disciplinary entrepreneurship education study programme; and Y-kampus entrepreneurship unit providing EE to all TAMK students
■ Case gatekeeper:	Riitta-Liisa Arpiainen, Senior Lecturer, Business and Administration Programme, Tampere University of Applied Sciences

Information included in this case study is from end of year 2014 unless stated differently.



19.1 The university's entrepreneurial profile

19.1.1 The university's overall approach to entrepreneurship education

Key characteristics of EE at TAMK

Tampere University of Applied Sciences (TAMK)¹ is one of 24 polytechnics in Finland. As such it is heavily oriented towards work life, offering professionally-oriented education for the needs of the labour market and conducting R&D that supports teaching and promotes regional development. In its entrepreneurship education (EE) offers, TAMK applies an innovative approach to entrepreneurship education (EE), focusing heavily on co-operative and **team entrepreneurship**. TAMK has two major EE facilities: Proacademy and Y-kampus. Both are overarching units serving different study programmes.

Proacademy is a multi-disciplinary EE study programme, unit and environment that started in 1999. It is mainly for students from Business Administration and Business Information Systems programmes seeking a Bachelor of Business Administration degree. Proacademy students spend 2.5 years working as team entrepreneurs in real companies they set up specifically for this purpose. Each Proacademy team consists of ten to 20 students who jointly carry out about 20 to 30 projects per year through which they develop and apply business ideas and generate real turnover. The Proacademy approach lets students define their own learning targets individually and as a team, supported by a coach and laid down in learning contracts. At team level the most important learning tools are dialogue, innovation and "birth-giving" sessions as well as feedback sessions.

In addition to Proacademy, a dedicated unit named **Y-kampus** has been set up in autumn 2012 for mainstreaming EE in all of the university's course programmes. Y-kampus offers entrepreneurship courses and events as well as coaching and mentoring services. It also provides dedicated entrepreneurship study premises to all students and teaching staff of TAMK. All curriculums of TAMK include some elements of EE, which are organised by and at the Y-kampus. Y-kampus makes use of learning approaches similar to Proacademy, i.e. learning by doing, learning in teams as well as learning through reflection, feedback and dialogues supported by coaches. For the future it is expected that Y-kampus will have an even stronger role in EE not only at TAMK but also for the other three higher education providers in Tampere as well as for existing start-ups seeking advice and mentoring.

Publicity of the TAMK case

In Finland, TAMK's EE activities are very well known. TAMK's business programme, which includes the Proacademy option, won the Quality Award from the Finnish Higher Education Evaluation Council in the category "Quality Unit", i.e. the first prize of all business programmes of universities of applied sciences in Finland, for 2010 – 2012. It recognised the outstanding quality of Proacademy.

Proacademy's team entrepreneurship approach has also attracted broad interest from entrepreneurship education providers from other countries. Large numbers of visitors come to Tampere each year to take a closer look: In 2013, there were about 1,000 visitors from 16 countries. TAMK provides advice and support to polytechnics around the

¹ Official name since 1 January 2015: Tampereen Ammattikorkeakoulu Oy.



globe that want to apply a team-based approach to EE, e.g. in Namibia and Bristol (UK). However, TAMK's approach may not yet be well-known across the EU.

19.1.2 Leadership and governance

Importance of government strategies

Proacademy and Y-kampus are home-grown developments driven by proponents of modern approaches to EE at TAMK. The heightened focus on effective methods to teach entrepreneurship, however, is fully in line with the Finnish Ministry of Education's "Guidelines for Entrepreneurship Education" published in 2009. These guidelines encourage the establishment of EE but include no financial support to TAMK and no legal requirement to establish EE.

Importance of entrepreneurship in the university's strategy

The university's current strategy puts clear emphasis on TAMK's entrepreneurial profile. There are six focus areas in the strategy, with **entrepreneurship pedagogy** and **wellbeing entrepreneurship** two of them. Entrepreneurship pedagogy relates to the further development of the innovative approaches to EE applied at Proacademy and Y-kampus, namely team entrepreneurship and team learning. Wellbeing entrepreneurship indicates a commitment to mainstreaming EE within one of TAMK's core educational fields, Wellbeing and Social Services. One of the "Operational principles" of TAMK is to "apply an entrepreneurial attitude to obtaining the best outcomes for TAMK as a whole".²

Extent of high level commitment to implementing entrepreneurship

The extent of high-level commitment to implementing entrepreneurship education is demonstrated by the following initiatives initiated or supported by TAMK's top management:

- In autumn 2012, establishment of **Y-kampus**, a unit exclusively dedicated to entrepreneurship, with its own premises and marketing strategy.
- Application of team entrepreneurship learning within the **Media Study Programmes** at TAMK's campus in Virrat.
- Use of co-operative entrepreneurship elements in the **Information Technology Study Programme**, in collaboration with many outside enterprises.
- Use of a virtual company learning environment (Kykylaakso Business Learning Environment) in the **Business Study Programme**, compulsory for all first-year students.
- Move of the degree programmes in **Media and Arts** to Mediapolis, an international campus concentrating on content production and ICT, bringing together enterprises and students to work side-by-side in an environment fruitful for entrepreneurial thinking.

² See "TAMK's strategy for 2010-2019", [http://www.tamk.fi/cms/tamken.nsf/\\$all/CD1DE6F6FAEC8171C225763A00351BE6](http://www.tamk.fi/cms/tamken.nsf/$all/CD1DE6F6FAEC8171C225763A00351BE6), downloaded 27/11/2014.



Level of faculties' and units' autonomy to act

When Proacademy was founded in 1999, it was a totally new way of learning, and its strong focus on entrepreneurship was uncommon at that time. Against this background, Proacademy was understood as a laboratory for experimenting with innovative ways of education focusing on entrepreneurship. The intention was to establish a space in which TAMK (mainly its Business and Administration Programme at that time) could experiment, without any direct impact on the University's other, traditional course programmes. This meant that Proacademy was given a strong degree of autonomy in developing its methods.

In the meantime, the approach invented at Proacademy has found its way into other course programmes at TAMK, in particular into Business Administration. With the start of Y-kampus in 2012, a totally new organisational unit was launched which is now responsible for providing and further developing EE throughout TAMK.

Organisational implementation

The **Proacademy** campus is located outside of the central TAMK campus, in a brownstone building in an early-industrialised part of the city which has been converted into a fashionable centre of young, high growth companies, museums, theatres, coffee shops and so forth.

For many years, each curriculum at TAMK has included some components of EE. However, only since 2012, when **Y-kampus** was founded, there is a dedicated unit in charge of centrally organising EE at TAMK. Y-kampus is also offering training courses for TAMK's personnel. In the future it is expected to provide courses and events targeting students from other Tampere universities as well as existing start-ups.

University's importance for driving entrepreneurship in its environment

TAMK is one of four higher education institutes in Tampere and the surrounding region of Pirkanmaa.³ Of these, TAMK has traditionally been the one with closest links to the local labour market, and as such has been affected strongly by the recent economic crisis – which has culminated in the radical downsizing of Nokia's workforce in the region. This has led to a strong increase of interest shown in EE as practised at TAMK. While entrepreneurship was considered as something strange until a few years ago, it has become a kind of guiding principle for economic revitalisation of the region.

The impact of TAMK's emphasis on entrepreneurship is reflected in the fact that approximately 20 to 25% of Proacademy graduates start a company,⁴ compared to a figure of less than 5% for all university graduates in Finland.

³ The others are University of Tampere (16,000 students), Tampere University of Technology (12,000 students) and the Police College of Finland.

⁴ Source: Annual survey of graduated TAMK students.



19.1.3 Resources: people and financial capacity

Human resources for entrepreneurship education

Proacademy currently has five coaches, including the Head Coach, who is also the Head of the Proacademy (Mr. Veijo Hämäläinen). He reports to the Director of Education, School of Business and Services. Pro-Academy does not have any non-teaching staff.

The **Y-kampus** team comprises of two teaching staff / coaches working full-time and seven who work part-time. The main link to existing businesses is provided by Proacademy alumni who are now working as entrepreneurs, and who support current students in their role as (volunteer) mentors. At the end of 2014, there are nine mentors active at Proacademy and Y-kampus.

Financial resources for entrepreneurship education

In the development phase of Y-kampus, TAMK received funding support from the European Social Fund.

Running costs for EE at TAMK are funded from the University's general budget. No additional financial resources, e.g. from the business community, are used.

Notably, Proacademy teams do not receive any kind of start-up capital when setting up their company in the first stage of the programme. On the contrary, team enterprises are asked to pay a small rent for the premises and also for office supplies etc. In Bristol (UK), where a similar programme has been launched, student companies do receive start-up capital, meaning that the costs for providing training for team entrepreneurship are considerably higher.

19.2 Entrepreneurship in curricula and teaching

19.2.1 Overview about curricular offers

Curricular offers by Proacademy

The **Proacademy** programme lasts 2.5 years and can be taken as a fully credited part of a Bachelor study programme in Business Administration, Business Information Systems, or Hotel and Restaurant Management in the Service Management programme. Since 2014, Proacademy also offers education to students from the Physiotherapy and Social Services study programmes. There is also a study programme for a Master Degree in Entrepreneurship (Master of Business Administration) which partly applies Proacademy learning methods and principles.

The study modules of the 2.5 years spent at the **Proacademy** are the following:

- **Developing Entrepreneurial Skills:** Starting a Team Enterprise; Experience Economy and Team Entrepreneurship; Building a Business Network; Growth Entrepreneurship; Profitable Business; Final Camp.
- **Successful Business Operations:** Learning Organisation; Sales, Customer Relations and Networking; Leadership and Management; Marketing Communications; Corporate Finance; Global Business; Creative Products and Business Models; ICT Entrepreneurship; Sustainable and Responsible Business; Trade Specific Competence; Experience Economy.



- **Language Studies 2:** Elementary German/Spanish/French/Russian; Basic German/Spanish/French/Russian; Intermediate German/Russian.

In addition to these modules, projects, free-choice studies, practical training and the Bachelor's thesis are all compulsory elements of the course programme. The following box-text provides an overview about the Proacademy degree programme in business administration.⁵

Overview: Degree Programme in Business Administration, Proacademy

Degree: Bachelor of Business Administration

Scope and duration: 210 credits (cr), 3.5 years

Location: Business School, Kuntokatu 3, Proacademy Finlayson

Head of the Business Programme: Milja Valtonen

Head of Proacademy: Veijo Hämäläinen

Skills developed in the degree programme: The framework for studying at the Proacademy is the team enterprise founded at the beginning of the studies. Through working in the team enterprise, the students learn various aspects of business, such as developing a business idea, productisation, sales, marketing, financial management of a company and leadership. The students also constantly learn collaboration and organisational skills, such as team learning and giving and receiving feedback. The students continuously apply the skills they have learned by implementing customer-based projects through their team enterprise.

Working life placement: Annual graduate surveys show that 20 to 60% of graduates continue as entrepreneurs, and the rest find employment in diverse tasks in their working life. The interests discovered during the studies guide the career choices. In many cases, graduates find employment through the contacts acquired during the studies.

Value basis for education: Proacademy offers the possibility for team entrepreneurship, international work and unique networks. The value path of Proacademy – trust, courage, actions, learning and success – describes the learning process.

Teaching methods: Learning in Proacademy requires being present and active participation. Important learning methods at Proacademy are dialogue, reading professional literature and producing essays, seminars, innovation tasks and customer projects. During the first year of studies, the students study the basics of Business Administration, for which they participate in the foundation modules which are compulsory for all students of TAMK Business School. They apply for Proacademy during the spring of their first year of studies, and one criterion for entrance is successful completion of all first year studies. During the second and third year of studies the students complete 90 credits worth of Proacademy professional studies. The studies also contain practical training (30 cr) which is carried out as project studies and the Bachelor's thesis (15 cr). The students select their free-choice studies (15 cr) either from the Degree Programme of Business Administration or from other degree programmes. The studies are completed in 3.5 years.

Proacademy specialised studies (90 ECTS credit points): To a large extent, students can decide themselves how to accumulate the 90 Prokatemia Specialised Studies credit points. They make their own study plan within a set framework and work accordingly.

⁵ Adapted from <http://opinto-opas-ops.tamk.fi/index.php/en/167/en/49598/15PRO/year/2014/classification/17> (retrieved 2014-10-09).



These specialised studies comprise literature study from various professional fields, seminar lectures, visits to companies, web-based learning activities, team meetings, project work, and incubation sessions for promoting the generation of innovative ideas. In order for the credit to be counted in the Specialised Studies category, the fields of study should be chosen from among the following: marketing, project management, development of learning skills, innovation, education for entrepreneurship, advanced teamwork skills, or development of IT environments.

Curricular offers by Y-kampus

At **Y-kampus**, TAMK's EE unit for all fields of studies, students can choose from nine different course programmes. Courses serve beginners as well as advanced students and last between three and six months. Course participants are eligible for receiving credit points. The number of individuals enrolled in courses is 150 per year. Y-kampus's activities are still being developed.

Exhibit 19-1: Overview about curricular EE offers at TAMK's Y-kampus

No.	Name	Objectives	Target group	Offered since
1	Towards being an entrepreneur	Test of entrepreneurship abilities and skills, development of competences through practical examples and work	Beginners	2012
2	Concept Workshops	Students solve product and service development assignments given by companies, the public sector and non-governmental organisations and work with diverse assignments in multidisciplinary teams with support of coaches	Beginners	2012
3	Marketing and Sales for Entrepreneurs	Multidisciplinary student teams learn marketing means and trends and implement a practical marketing project. Development of marketing and sales competence in practice.	Beginners	2012
4	Business Project	Learning through a practical, commercial project. Development of projects based on own interests and skills in multidisciplinary teams. Covers project management, contracts, jurisprudence, creation, innovation, sales, marketing, management, and financial competence.	More advanced	2012
5	Business Development	Planning and implementing a real-life business development project as a team, team dialogue workshops, study of relevant business literature and writing reflective essays.	More advanced	2012
6	Business Camp	One-week entrepreneurship camp (during the holiday weeks in the autumn and spring) to develop innovative business ideas, build networks, and acquire valuable business competence. Focus on creation, development, productisation & commercialisation of business ideas; customers, customer segments, sales and marketing from the viewpoint of business idea commercialisation.	Business idea developers	2012
7	From Idea to Enterprise	Skills for development of a business from one's own business idea, including financial competences. Practical work, assignments and teamwork. The course qualifies students to apply for a business start-up allowance.	Business idea developers	2012
8	Growth Entrepreneurship	Focus on enterprise growth and related demands on management. Based on study of successful local examples of growth enterprises and their stories.	Business idea developers	2012



9	Entrepreneurship Sling	Allows students to collect credits by participating in coaching meetings to develop their business idea, plus Y-kampus events, workshops, projects, seminars, and other entrepreneurship related activities available. Hop in – hop out: Credits are awarded according to performance and activeness. No binding beginning or ending dates.	various	2012
---	------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------	------

19.2.2 Target groups

Target groups of Proacademy

Study programmes and students' backgrounds

Proacademy has been designed as a multi-disciplinary entrepreneurship education study programme, unit and environment mainly for students from Business Administration and Business Information Systems programmes. All of these lead to a **Bachelor of Business Administration**. The three and half year Bachelor's degree (210 ECTS) includes two and half years spent at Proacademy, before which a common foundation of skills and knowledge in business or information technology (60 ECTS) has been laid in the first year.

In 2014 Proacademy was launched as an option for the **Physiotherapy and Social Services** study programmes. It is expected that Proacademy will be offered to students of more and more study programmes in the future.

TAMK also offers a Master Degree in Entrepreneurship (**Master of Business Administration**) which partly follows Proacademy methods and principles.

Approximately one third of successful applicants to Proacademy have some experience in managing a business already, either because they have set up a company already or they have been involved in a family business.

Proacademy counts approximately 90 to 100 students in the autumn term and about 60 to 70 students in the spring term.⁶ According to current estimates, this number may rise to 170 within two years.

Special target group: potential family business successors

A special target group is individuals who already work as entrepreneurs or have grown into a **family business** which they are expected to take over. The Tampere region faces a challenge in the form of family businesses for which a transfer to the next generation is uncertain: In a survey by the Pirkanmaa Entrepreneurs' Association published in 2012 comprising 2,830 small and medium-sized enterprises whose owner is older than 55 years, 38% of respondents reported that they do not have a successor within the family. This is a common problem all over Finland. Proacademy was found to be in principle well-suited for students who are involved in managing a business in parallel, as there are few fixed schedules that need to be followed. However, the level of commitment required for Proacademy means that this can be challenging.

⁶ The difference is due to the fact that each year two teams of about 30 students graduate at Christmas time, while two new teams of 30 – 40 students start their studies at the beginning of the autumn term.



Selecting the right candidates

The Proacademy represents a way of learning which certainly does not suit everybody. The main challenge is the dissolution of a clear separation between private life and studies. This can be very stressful for some types of students. In order to make sure that students are well chosen for the programme, applicants are very carefully interviewed, and a discussion takes place with their first-year tutors. The interviews have the main goal to identify the real motivation behind the decision to apply for Proacademy.

The purpose of these interviews is to assess whether a student has any major issues that might make it difficult for her or him to endure the level of stress and pressure typical of participating in the programme. Such pressure can be considerable, in particular because students cannot take their own decisions according to their personal preferences; everything is decided and done as a team. Thus, applicants should be team players or willing to become one. Care is being taken not to attract students to Proacademy who search for a way to avoid exams. The aim is that no student should have the idea that Proacademy is an easy way to obtain a degree – which definitely is not the case according to the statements of both coaches and students, current and former ones.

The application process for Proacademy is as follows: All students have to spend the first full year of their studies, for example in business management, in a traditional setting. During this time, they have the possibility to learn about Proacademy, for example by coming across one of its roadshow events.

Currently Proacademy receives about 80 applications per year, of which about 50 are accepted. It is possible to apply from other universities to Proacademy, i.e. the programme is open to students who have spent their first year of study in, for instance, business administration at another university.

Target groups of Y-kampus

Students enrolling in Y-kampus courses and activities come from any of the TAMK departments – so far from more than 20 different study programmes, but mostly from business and engineering departments. During the first two academic years, about 2,000 participants – TAMK students and personnel – have participated in the various Y-kampus courses and events: about 300 participants in the courses and 1,700 in the different extra-curricular activities.

Continuous education

Continuous education is not yet an explicit focus of EE activities at TAMK. However, the nine study courses offered by Y-kampus are open to any interested party. This includes individuals who have finished their studies already but are interested in continuous education. This group includes entrepreneurs who are in the process of setting up a business or employees who consider starting their own company. So far, numbers of Y-kampus course participants from outside of TAMK are modest, as the offer has been launched only two years ago, but for the future more intensive marketing efforts are foreseen.

Bridges to secondary education

Y-kampus offers are not yet targeting pupils in secondary education, although they are in principle open to any interested individual from Tampere.



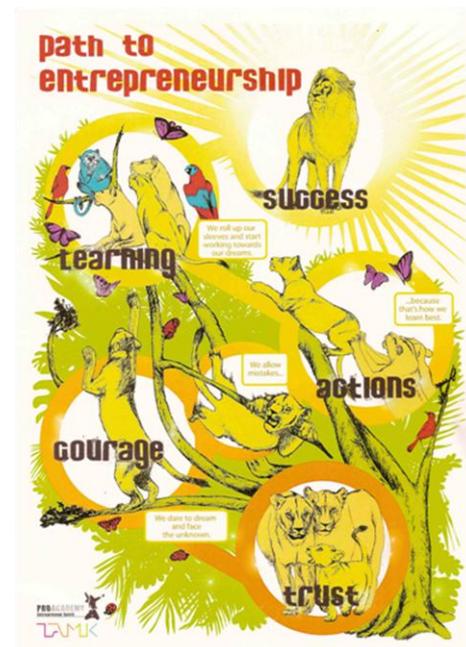
19.2.3 Designing lectures and courses – basic curricular decisions

Objectives

The objectives of **Proacademy** are reflected in its "vision for 2019", which is stated as follows (see also the related Exhibit):

- **Trust:** Proacademy is the most inspiring Finnish entrepreneurship community.
- **Courage:** At Proacademy we are willing to grow: We challenge one another to surpass ourselves and use the global opportunities.
- **Actions:** ProAcademians are agile to scan new business ideas, keen to put digital possibilities into practice, and tough entrepreneurs with the will to succeed.
- **Learning:** Proacademy is a role model in learning and working together and in professional development.
- **Success:** Proacademy is the best source of knowledge and competence for entrepreneurs of the 2020s.

Exhibit 19-2: TAMK's "path to entrepreneurship"



Source: TAMK

The objectives of **Y-kampus** are to help any interested person to meet three goals:

- Implement entrepreneurship projects and studies, develop their business idea, and search for business partners;
- Meet entrepreneurs, create their own networks, and get an idea of different career options;
- Test ideas and try their wings in real world business already during their study time.

Contents and methods

Applying the TeamAcademy concept

The approach applied at Proacademy is based on the **TeamAcademy concept** originally developed by Johannes Partanen at Jyväskylä University of Applied Sciences (JAMK), another Finnish polytechnic, from 1993 onwards.⁷ The originators spread the TeamAcademy approach to many other countries. The differences between Proacademy and the TeamAcademy model are quite intricate, as both have developed independently from each other since Proacademy was launched. Both have been continuously

⁷ See Leinonen et al. (2004).



improved and revised over the years. A major difference is that the TeamAcademy programme starts with the day students enrol at the university, while Proacademy starts only after students have undergone one year of traditional studies, for example in business management.

Working in real companies

Team work at and in a **real company**, established by the team itself, is at the centre of the Proacademy concept. While traditional business education at TAMK operates with fictional companies, Proacademy students establish a real company and deal with real money. Proacademy students set up a company in the legal form of a cooperative at the beginning of their studies and then learn by doing, i.e. developing the business of the company. They integrate their learning needs to support the development of the team and a sustainable company.

The **team** is the centre of the pedagogical studies and the learning process. Each team comprises 15 to 20 students. While during the first years of Proacademy all accepted applicants were included in one team only, the growing number of programme participants has made it necessary to split up the group into subgroups of currently four teams per year. The division into sub-groups is carried out in a way that ensures that each team is composed of **as diverse a group of people as possible**, as this has been found to be beneficial for learning in team settings.

Students are **financially responsible** for their own company. The annual turnover of a team company is approximately 120,000 euro. Revenues are used for example for salaries, events, seminars, and a graduation trip. After the team has graduated, the cooperative is usually turned into a limited company (Ltd.) by a sub-group of the graduating team. At any point in time, there are about 10 such team companies in operation.

At the start, students define their basic **business approach**: what kind of business they are going to do, their company's values, mission and goals and also the team rules. The company is the basis for a number of projects, which are jointly agreed upon and then executed.

The basic difference between the companies set up within the context of Proacademy and ordinary start-ups is that **making mistakes** is not really encouraged but certainly tolerated and seen as an important way to learn. As a consequence, many of the projects which Proacademy students embark upon fail, and productivity is very low. In those cases where Proacademy companies were continued after the team graduated, typically by a few of the graduates, today's company owners report of the challenges they faced when changing from the safe environment of Proacademy to a situation where they needed to turn a profit to be able to survive over the longer term.

Specific methods and media used

In addition to the real-world projects, studies consist of team meetings, small group workshops and coaching. There are no traditional lectures and exams: The learning process is to a large degree self-determined, supported by coaches. Students are allowed and encouraged to learn through their mistakes, failures and successes. On the team level, the most important tools of learning are dialogue, innovation and 'birth-giving' sessions and feedback discussions:

- The **projects**, of which there are about 50 per year in each Proacademy team, are the basic means for learning by doing and revolve around development of business in



the team enterprise. Through the projects the team's knowledge is put into practise and new experiences and skills are created. The team learns and grows from project feedback. Usually students start business by doing small projects which do not require any or not much real money, before moving to bigger and more daring projects. Every team makes the decisions regarding what kind of structure they will have in their company. Such a project can be the development of a product or a marketing campaign. For example, one of the teams developed a business idea for renting out batteries for loading smartphones at summer festivals. This proved to be a very well chosen business model; the turnover generated in one summer was about 70,000 euro. A web campaign was developed as well (<http://powerit.fi/>). This is a good example for the type of activities thought up by Proacademy students, as it was innovative but also a lot of fun for all participating parties.

- **Team meetings** take place twice per week and last four hours. They represent the most important tool for reflecting on experiences, developing new ideas and sharing them. The purpose of the dialogue is to expand the thinking by coming up with new perspectives or alternative ideas and to deepen the understanding – instead of discussion where the goal is typically to make a decision and to narrow down the original set of ideas. The students organise these sessions in groups where each student has, for instance, to study a text, share key lessons learned with the team, and then translate it into activities that require the team to apply the knowledge in new contexts or analysing different cases. The coach supports the process as to ensure that key elements of a good dialogue are in place: careful listening, respect for all thoughts, waiting for others and talking openly and straightforwardly. All completed projects and many learning sessions are analysed with a dedicated tool that guides students to come to essential conclusions about the subject.
- **Literature and essays:** Self-learning is an important element of Proacademy education. Students need to collect so-called book points which requires them to study 60 – 70 books in 2.5 years, write essays about what they have learned, and discuss these with their coaches. There are no fixed reading lists, however: The scope of what kind of literature they should read is determined to some extent by the subject of the projects chosen by the team. Literature study is usually carried out in learning cells, i.e. group of teamsters join together to study and then discuss texts in line with shared interests.
- **Seminars** on topics of common interest, typically identified by the team: Teams choose from the TAMK portfolio of courses those which are of most relevance to them and then attend them.
- **24-hour innovation exam:** Two months before graduation each Proacademy team has to undergo this examination, which consists of developing a solution for a specific business challenge by a real-world business. The customer and project content are unknown until the start of the exam, after which students have 24 hours to complete the project and then present it in front of the customer. A grade (0 – 5) is assigned by the customer of the project, according to which she or he pays the project team per grade achieved. The 24h-exam is rehearsed before through 12h-exams (**innovation sessions**) following the same logic (but without money involved), which take place once a year.
- **Learning contracts:** Twice per year each student is asked to define her or his learning targets and to develop a learning portfolio in discussion with the coach. The coach makes recommendations in order to make sure that all study areas are

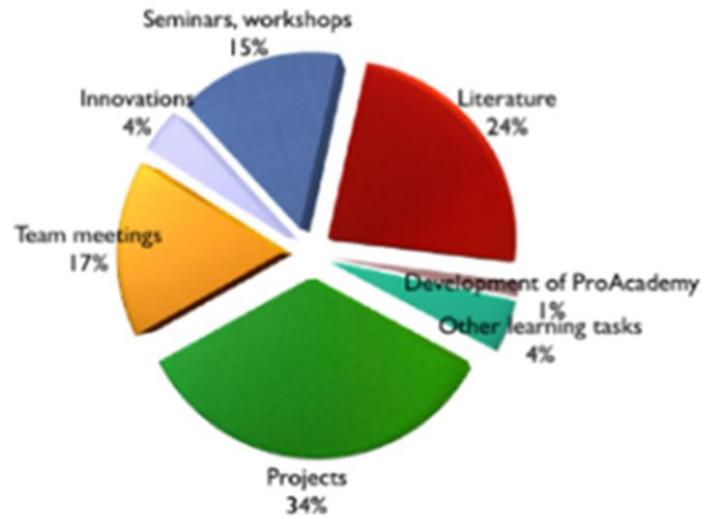


covered. Each Proacademy team sets its own objectives as well in the form of a team agreement together with rules, procedures, goals and targets.

The Exhibit indicates the rough share of the various learning methods of the total time spent in the programme.

While Proacademy students do not have to take any exams apart from the team innovation exams, they need to write a **final thesis** as any other student at TAMK. The topic should be a combination of theoretical background and its application in practice.

Exhibit 19-3: Approximate share of learning methods applied at Proacademy in%



Source: TAMK

Y-kampus applies a learning philosophy similar to Proacademy: learning by doing, learning in teams, learning through reflection, feedback and dialogues supported by coaches.

Informal evaluation of learning outcomes and feedback for students

Feedback discussions and dialogues supported by the coach are among the most important elements of the Proacademy concept of learning. They replace any formal evaluation through exams.

Formal evaluation of learning outcomes

Proacademy students do not have to take exams and do not receive grades – with the exception of the final thesis they have to write just as any other TAMK Bachelor/Master student. They can only either fail or pass. The extent of formal evaluation of learning outcomes is therefore much less than in traditional study programmes.

The drop-out rate is about 5 – 10%, i.e. one out of 10-20 students who start Proacademy drops out before the end of the programme. Most of these students return to traditional-type studies at TAMK: Proacademy students who realise that this is not for them have the option of changing back to traditional type learning at TAMK. For the time they spend at Proacademy, they will receive credits which means the risk is manageable.

19.2.4 Setting of entrepreneurship teaching

Locations

The **Proacademy** premises are not located on the central campus of TAMK but occupy one floor in a brownstone building in the Finlayson District in the centre of Tampere. The



district was the centre of the textile factory in Tampere for 160 years, before work in the factory stopped in the 1980s and the area was converted into a location for museums, galleries, theatres as well as new media, ICT and art companies and campuses. This location offers Proacademy a very unconventional, fashionable environment very different to typical university campuses. It largely consists of open floor working spaces plus some partly separated, more office-like space in which coaches have their desks. To accommodate the increasing numbers of students, Proacademy moved across the street to another building in the same district in late 2014.

Y-kampus, which was set up in 2012 following a project development stage, has its own premises within the main TAMK campus. It consists of two workshop rooms with a capacity of 25 to 30 people, an open stage for 20 to 120 people, two meeting rooms for four to eight people, and various public working spaces. These settings fully reflect and support the learning methods applied in the courses offered by Y-kampus.

Timing

Proacademy students have only few activities with fixed schedules, such as the team meetings that take place twice per week, last for four hours and for which attendance is compulsory. For the largest part of the studies, timing is a question to be agreed upon by team members, with a lot of flexibility and a tendency to dissolution of traditional boundaries between study and leisure times.

19.2.5 Instructors: teachers and mentors

Professors, other employees and external lecturers of the university

Proacademy has coaches instead of typical academic staff such as professors and scientific assistants. Currently, Proacademy has five coaches, including the Head Coach, Mr. Veijo Hämäläinen, who is also the Head of Proacademy. He is reporting to the Director of Education, School of Business and Services. Hämäläinen started out as a math teacher before he joined Proacademy ten years ago. Back then he was searching for an alternative to traditional ways of teaching, as he felt lack of motivation and interest to be the biggest barrier to learning and creativity. He was spotted and contacted by Riitta-Liisa Arpiainen who, as Head of the Business Programme, was in charge of Proacademy at the time. Although he had doubts about his ability to act as a coach to entrepreneurship students at the Academy, she was convinced of his suitability for the task, which proved to be correct. A lot of his training in becoming a Proacademy coach took place jointly with his first team composed of 16 teamsters, where, in his own words, he learned more in 2.5 years than he had done during all his prior studies taken together.

The **Y-kampus** team comprises two coaches working full-time and seven teaching staff who contribute part of their working time. It is lead by Mikael Juntunen, who has been project manager throughout the development phase of the centre, i.e. he was in charge of developing the Y-kampus service and education concept in collaboration with his team. Juntunen did his studies, both Bachelor and Master degrees, at Proacademy, where he was among the first graduates. He is also engaged in an own family business (DigiMedia Finland Ltd), where he acts as Head of Sales and Area Manager. DigiMedia operates in three different cities in Finland and focuses on media sales in the field of consumer marketing. He is responsible for a range of business development projects in the company.



“Real entrepreneurs” as teachers

Coaches at Proacademy and Y-kampus do not include alumni now working in their own company, or entrepreneurs who have not studied at TAMK. Entrepreneurs with these backgrounds are, however, active as mentors. Moreover, Y-kampus project manager Mikael Juntunen has experience in business management in his own family company.

Mentors

The role of mentors is to help young entrepreneurs starting their business. Every Proacademy team is allocated two alumni to help. Currently Proacademy and Y-kampus have eight mentors from different fields of business:⁸

- Jarkko Haukijärvi has set up a multi-field company active in consulting, support services for sales, education, and cleaning services, employing about 70 people. He has supported more than 500 start-ups through hands-on advice and consultancy. In addition to his role as mentor, he returned to TAMK to do his MBA at Proacademy.
- Mikko Nurmi is one of the founders of webimprovements.com, a user experience evaluation service for websites and mobile applications. He works as the creative director and partner in Leadin, a design company founded in 2009 focusing on development of user experience.
- Kaisa Aare-Puff has founded a couple of health care businesses and worked as an entrepreneur for years. At the moment Kaisa is the managing director of Kototiimi and the chair of the board of SAP-Care Oy.
- Katri Lietsala is managing director and one of two founders of Gemilo Oy, which provides interactive online tools for learning, teaching and working sold to municipalities, companies, and public administration. Gemilo was listed as one of the most interesting Finnish start-ups 2010, and today employs ten persons.
- Pasi Rautio is founder and director of Oy TuloksenTuplausToimisto Ab, which provides consultancy focused on sales and marketing.
- Tanja Verho, Reetta Keränen, Anna Kulonen are the founders and directors of Kolmas Persoona Oy, a company specialised in development of service business and service innovations. At the moment their companies employ more than 30 persons.

Proacademy and Y-kampus mentors do not receive remuneration for their work. Many mentors have studied at Proacademy themselves, i.e. they are able to contribute both their experience from their studies at Proacademy and from starting and managing their own business.

19.2.6 Management of entrepreneurship education

Teacher and trainer management

For training the coaches, TAMK developed new approaches as well. These were again based on the models developed at Jyväskylä University for teaching in innovative

⁸ See. <http://y-kampus.fi/en/mentors/>.



learning environments. Such training is today provided by Y-kampus for all types of teaching staff, including from third party organisations. The coaching education consists of three topics which together form an introduction to coaching:

- Topic 1, "From teacher to coach": What does coaching mean in practice? How do teaching and coaching differ from one another? What are the possibilities of coaching? How does coaching suit teaching? Underlying theories and theorists including Marcial Losada, Kouzes & Posner, Nonaka & Takeuchi.
- Topic 2, "Coaching tools": What kind of tools and methods inspire students? How can entrepreneurial approaches be enhanced? What is the role of teams from the coach's viewpoint? What does team learning mean and what are the benefits of team learning? What kind of idea creation techniques can be applied and used in coaching? Underlying theories and theorists including William Isaacs, Ian Cunningham, Belbin.
- Topic 3, "Personal Coaching Philosophy": Model on coaching philosophy – what does it mean? How to build my coaching philosophy? What to introduce to everyday work and how? What will change in everyday work from now on? How to proceed in the work community? What did this journey offer to me?

At the time of writing, 50 teachers from inside of TAMK as well as third organisations participate in coaches' coaching programmes, a figure which has been growing each year.

In the case of **Proacademy** coaches, experience shows that despite of the in-depth training, coaches acquire most of their skills once they have started to work in the Proacademy environment. For members of the teaching staff who are used to work in traditional education environments, the first months at Proacademy are typically perceived as very challenging. A major reason is that Proacademy coaches need to practise a hands-off attitude, while being fully available for support. They are not meant to intervene proactively, only when students ask for advice. While traditional lecturers are able to keep a certain distance to their students, as a coach they are required to be totally devoted to the team, i.e. they have very little distance to their students. They also need to learn not to take things too personally. There were coaches who found working at Proacademy unsuitable for them, so they returned to traditional type teaching.

Managing student support

The courses, events and services offered by Y-kampus are the main vehicles for supporting students – and also teaching staff – who are considering starting an enterprise or engaging in any other start-up related activity.

The new visibility which entrepreneurship related support has gained due to the launch of Y-kampus and the marketing of its brand, together with the increased awareness of entrepreneurship as a career option for young people as reflected in its representation in the media, have had a tangible effect on the interest shown in entrepreneurship courses, to the effect that demand for places in courses currently outstrips supply.

Internal and external network management

Y-kampus is the TAMK unit that is centrally responsible for networking with stakeholders within TAMK around issues related to EE.



Alumni tend to stay in close touch with the University. Most of them demonstrate that they are proud of their association with Proacademy, wishing to support their successors and the programme in general. An estimated 80% of alumni remain active at the Proacademy in one way or another after graduation.

Most interviewees agree that collaboration between the **four higher education institutes** in Pirkanmaa could be much stronger. One practical obstacle is competition over students and the financial resources that come with them.

One example of such co-operation related to EE is the common **Demola** unit, which serves all higher education students at Tampere. Demola is a programme for collaboration between students, universities and business partners. Thus it is a creative and real business activity, related to entrepreneurship. The Demola Network was launched in Tampere in 2008 but is today an international network. Demola participants work in a project with a multidisciplinary team to solve real-life cases together with partner companies. This training can be made part of students' degree programme at TAMK and the other universities in Tampere. The Tampere Demola unit carries about 100 projects per year, in which about 450 students are involved, 40% of which are from abroad.

In recent years, co-operation between the universities has been strengthened via ENTRE and the new working group on developing a unique model of higher education in Tampere. **ENTRE** is a joint initiative of TAMK, Tampere University of Technology (TUT) and University of Tampere (UTA) for allowing students to combine entrepreneurship related study modules from each of the three institutions. A business management student at TAMK, for example, may now enlist in courses provided by TUT and UTA and receive a degree certificate.⁹ The **working group on developing a unique model of higher education in Tampere** is preparing the establishment of a new, multidisciplinary higher education institution with an international presence.¹⁰ So far it is however not directly related to entrepreneurship education.

Proacademy is also in touch with **other polytechnics** in Finland and beyond in discussing innovation in EE, as the mood in the country and globally is shifting towards a much greater acceptance of and interest in entrepreneurship as well as towards innovative, more active ways of learning in (higher) education. TAMK has actively supported polytechnics in Turku, Lappenranta, Lapland Proacademy where programmes similar to Proacademy have been set up in the past three years.

Management of curricular integration and attracting new groups of students

Y-kampus is the TAMK unit that is centrally responsible for attracting new students to EE within TAMK. The design of the Y-kampus programme of activities was based on the experience with Proacademy as well as with entrepreneurship course programmes that have always been offered at TAMK, especially to students of business management. A survey was conducted of the Head of Degree Programmes (n = 30) plus Directors in order to explore perceived needs in the field of entrepreneurship education. In addition,

⁹ The main modules available are: Business Camp (5 credits, TPU), From Idea to Company (5 credits, TAMK), Growth Entrepreneurship (5 credits, TAMK), Business Plan (4 credits, TTY), Technology Commercialisation (4 credits, TTY), Creation of New Knowledge and its Tools (4 credits, TTY), Business Law (5 credits, UTA), Strategy and Entrepreneurship (5 credits, UTA), Business Models (5 credits, UTA).

¹⁰ See <http://www.tut.fi/en/about-tut/news-and-events/unique-model-of-higher-education-developed-in-tampere-p078221c2>, accessed 2014/11/16, 18:00.



students were surveyed as well. Y-kampus is engaged in three basic types of activities which also serve curricular integration:

- One or two entrepreneurship-centred **events and happenings** per month, which are a sort of marketing device for increasing awareness among faculty members and students of Y-kampus and entrepreneurship more generally. The number of individuals participating in events is approximately 1,100 per year.
- Nine different **course programmes** (see section 19.2.1), serving beginners as well as advanced students and lasting between three and six months. These courses are for students from the whole University, who are eligible for receiving credit points from Y-kampus programmes. The number of individuals enrolled in courses is 150 per year.
- **Mentoring and coaching** of nascent (student) entrepreneurs. These are supported in the process of developing their start-up ideas further, or, if they have an up-and-running business already, to boost their competitiveness. Students can obtain credits from mentoring sessions as well. Number of individuals in mentoring and coaching sessions: 30 per year.

The Y-kampus management seeks to increase, in particular, the number of persons who make use of its entrepreneurship mentoring and **coaching services**. This will require stepping up collaboration with relevant external stakeholders in the region, including the other universities and public service providers. The plan is for Y-kampus to take a stronger role in entrepreneurship education in the Tampere region at large.

Y-kampus is professionally marketed through social media and partnerships with traditional media. Marketing campaigns focus on provocative messages as a means to build the brand but also to present entrepreneurship to students as something "cool".

Evaluation of courses and programmes

Evaluation of the Proacademy programme and Y-kampus courses is part of **TAMK's quality, assessment and feedback system**. The system includes course feedback through TAMK's intranet, Annual Student Feedback through a questionnaire, Student Notification of Educational Defects, Supervision and Development Discussions, a student feedback collection system of universities of applied sciences and the Ministry of Education and Culture named OPALA, and TAMK's Quality Management System.

See the annex of this case study for a detailed description of this system.

A scientific evaluation of the impact of the **Proacademy** programme is taking place at the time of writing this case study, in the context of a PhD study. For this, 18 students who entered Proacademy were followed through the two and half year course. Three of them dropped out, mainly because of different personal reasons. Also 13 students of Namibia's ProLearning study programme's first team were followed through their two years study programme and also three years after graduation.

A dedicated evaluation of **Y-kampus** has not yet taken place; the methodology is still being developed. The main criterion for assessing success at this early stage is the number of participants in events, courses as well as mentoring and coaching. In the future, an increasing emphasis will be placed on attracting participants from outside of TAMK.



19.3 Extra-curricular activities related to entrepreneurship education

Y-kampus is engaged in some extra-curricular activities, but as these are limited to provision of mentoring and coaching of non-student individuals (not yet practised very much) and awareness-raising events (the main goal of which is attracting students to enrol in Y-kampus courses), they will not be further discussed here.

Y-kampus offers mentoring and coaching also in extra-curricular form, i.e. to students or staff members who would like to obtain advice in start-up related issues. For this purpose, Y-kampus collaborates with local and regional public services responsible for start-up support including the Chamber of Commerce and the Pirkanmaa Entrepreneurs' Association.

19.4 Institutional aspects of entrepreneurship education

19.4.1 Organisational set-up and change

When Proacademy was founded in 1999, it belonged under the Head of Business programme until 2010. Since then the Head of Proacademy has reported to the Director of Education, School of Business and Services.

When Y-kampus was founded in 2012, a totally new organisational unit was set up, which is now in charge of EE with the exception of Proacademy.

There are no specific positions for EE in the university's management, e.g. "Vice-Chancellor for Entrepreneurship, Vice-Rector for Entrepreneurship Education or similar.

19.4.2 Laws, statutes and codes

TAMK does not offer explicit **incentives for staff** to engage in or support EE. However, recent years have witnessed a sharp increase in awareness about the need for stronger entrepreneurship in Finland in general and in the Tampere region in particular. This has led to more and more teaching staff to develop an interest in EE.

Y-kampus offers a range of coach training courses, which are voluntary but open to all teaching staff at TAMK. Such training had been available already before the launch of Y-kampus in 2012, but has been streamlined and harmonised under the newly established roof of Y-kampus. Demand has grown significantly in recent years and currently there are more applications than course places available. Since the start of Y-kampus, about 100 teachers have undergone three-month coach training, which is part of their work schedule, i.e. not leisure time.

There are no plans to make coach training mandatory, since the concept requires participants to be self-motivated.

There are no specific **incentives for other stakeholders** to contribute to EE at TAMK.



19.4.3 Mindsets and attitudes

Raising awareness for the importance of entrepreneurship

When Proacademy was founded in 1999 it was a totally new way of learning, and also learning entrepreneurship was not common at that time. There was **resistance** in those days towards this kind of learning among the personnel; it was not well understood and accepted. Many years of positive experience, however, have resulted in Proacademy and the team learning approach at TAMK being supported and understood very well by the University management and by teaching staff.

In the early years, Proacademy was understood as a **laboratory for experimenting** with innovative ways of education focusing on entrepreneurship. The intention was to establish a space in which staff and students were expected to think outside of the rules operating in traditional types of higher education programmes. For example, the role of teaching staff is radically different at Proacademy compared to the rest of TAMK, as they are required to take a hands-off, reactive role and to encourage experimentation at the risk of failure.

There has been an intensive discussion at TAMK about the question whether to allow students from other course programmes to enrol in Proacademy. It appears that the process of extending Proacademy to further study courses is advancing slowly. The biggest practical obstacle appears to be that course programme syllabuses are very strict and tight, i.e. adaptation to the Proacademy approach is difficult.

In order to establish entrepreneurship education more firmly in other course programmes as well, the Y-kampus has been implemented in 2012. Through the visibility of Y-kampus, awareness about related education offers has become much stronger, and interest in participating in Y-kampus courses and events is very strong. There is now a broad consensus at TAMK that, while Proacademy is not a way of learning suited for everybody, entrepreneurship education offers should be open to everybody.

Encouraging entrepreneurial behaviour

Encouraging entrepreneurial behaviour is at the heart of TAMK's approach to EE. **Proacademy** students learn by working as team entrepreneurs for 2.5 years. They also set up their own learning targets, individually and for the whole team and supported wherever needed by their coach, and lay them down in the form of a learning contract.

Y-kampus is using the similar kind learning philosophy like Proacademy, learning by doing in teams with the same learning tools. It seeks to create an entrepreneurial mindset among all the students and teachers of TAMK, to which end it offers entrepreneurship courses and happenings to all students at TAMK as well as from the other two universities in Tampere.

In the **Business Study** Programme, all first-year students, typically around 160, spend much of their basic business studies working in "virtual companies", using a Business Learning Environment developed for this purpose (Kykylaakso¹¹). Kykylaakso allows learners to set up fictional enterprises and have them operate just as normal enterprises do – except for the fact that the money traded and the goods produced are not real. Each Learning Enterprise is operated by a group of ten students.

¹¹ See <http://www.kykylaakso.fi/palvelut/Index.php>.



In terms of general attitudes to entrepreneurship, the interviews conducted for this case study indicate that the Finnish education system is seen as very good in educating individuals with one or two key competencies, but not so good in supplying graduates with the skills for collaboration, teamwork and work in diverse and multi-cultural contexts. It is exactly these shortcomings which Proacademy and Y-kampus are addressing.

Moreover, it appears that in Finland there is still a widely held opinion that you need to be born as an entrepreneur, i.e. you cannot learn to become one. The experience from Proacademy appears to contradict this statement. A number of Proacademy graduates and current students, interviewed for the present study, stated that they had never thought of themselves as being suitable for becoming an entrepreneur, but had become convinced of the contrary.

There are clear indications for growing interest among young people in Finland for entrepreneurship, as is reflected in sharply increasing figures of people who show up at entrepreneurship events and happenings. This represents a considerable change in attitudes among the people of Finland. Many parents of ProAcademians are still sceptical of the approach, as they tend to think a life-time job with a big employer is the thing to aim for. But such jobs are disappearing quickly in the country, especially since the collapse of the Nokia ecosystem.

It is against this background that Proacademy's vision is to be "a nationally and internationally recognised school for entrepreneurs". It enjoys the full support of the President and Vice-President of TAMK in achieving this aim. The university's top management has for a long time already encouraged experimentation and innovation related to entrepreneurship education.

19.5 Outreach to external stakeholders

19.5.1 Types of relationships with external stakeholders

The region's economy is undergoing a painful process of structural change, which has led to job losses especially in larger companies, leading to high rates of unemployment. This has severe repercussions on the demands on higher education. For example, before the decline set in, Nokia hired almost everybody who graduated from the Tampere Technical University, which meant that curricula were aligned with the needs of Nokia. This has changed radically over recent years because of the downsizing of Nokia's operations in the region. Apart from these structural problems which are similar in most of Finland today, the Tampere region is benefitting from strong growth in population and an inflow of, in particular, young people, who prefer Tampere to Helsinki because it is less crowded, less expensive but still offering a very high quality of life.

Against this background, TAMK is engaged in co-operation with the **other two higher education institutions** in Tampere to identify and exploit synergies and to market the region as a national and global centre for innovation.

TAMK has close relationships to **larger companies** in the region as well as to the representatives of **smaller businesses**.

Proacademy enjoys a very good relationship with **local media**, i.e. newspapers, radio and TV stations. One third of TAMK's media points are generated by reports about Proacademy.



19.5.2 External stakeholders involved in entrepreneurship education

Enterprises

Associations of enterprises as well as individual larger employers are represented in the decision-making about EE at the university through TAMK's Board. TAMK also organises business evenings for discussing the business sector's requirements on higher education with companies in the region. The Finnish polytechnics, however, have traditionally been co-operating most closely with larger corporations, while relationships with SMEs tend to be underdeveloped. Since large companies have lost much of their lure as employers in the Tampere region and smaller companies do not have the same kind of tradition in co-operating with the higher education sector, this legacy acts as a barrier to closer ties with the business community, as Jari Jokilampi, CEO of Pirkanmaa Entrepreneurs' Association, points out.

A major challenge for reaching out to more small businesses seeking innovation is marketing and communication. How can the services of Proacademy and Y-kampus be communicated effectively to the target audiences, which consist of thousands of start-ups and small, growth-hungry companies in the region? The case study found this to appear to be a challenge left to be addressed.

Financial institutions

There are no specific relationships with financial institutions in the context of Proacademy and Y-kampus.

Support services

There is a range of public service providers supporting nascent entrepreneurs in the Tampere region. The two most important may be the Chamber of Commerce and the Pirkanmaa Entrepreneurs' Association.

The region's **Chambers of Commerce** represents 1,700 member companies in the wider Tampere region. The Chamber of Commerce organises a number of committees, including the education committee and the industrial committee, in which business requirements for new or revised curricula are being discussed. The Chamber provides TAMK with representatives from the business community who are well-positioned to help with the practical matters of such changes.

Pirkanmaa Entrepreneurs' Association has a 20 year track record in advising and supporting start-ups in the region. It has supported 10,000 entrepreneurs in the process. The Association provides advisory services especially to start-up as well as training courses and seminars. The Association states to be very pleased with the student output from Proacademy and with the general emphasis on entrepreneurship at TAMK. It was however mentioned that there is far too little co-operation between existing, small companies in the region and the universities. Much creativity would be needed to address this shortcoming, as small companies tend to consider further education and training as a luxury rather than a necessity.

Incubators, accelerators, science parks and technology parks

TAMK's degree programmes in Media and Arts will move its location to **Mediapolis**, an international science and technology park plus campus. Mediapolis concentrates on content production and ICT and brings together companies and students to work side-by-



side in a fruitful environment for entrepreneurial thinking. The move will go ahead in late 2014.

19.5.3 International relationships

The Proacademy model has been transferred to other polytechnics around the world, such as in **Namibia**: Here, TAMK participated in setting up ProLearning, a study program similar to Proacademy's and run at the Polytechnic of Namibia in close cooperation and mentorship of TAMK's Riitta-Liisa Arpiainen. This connection came about through existing personal connections. A similar partnership was established with **Bristol** University in England, where a programme based on the Proacademy approach started in 2014. Interest in team-based entrepreneurship education in the UK was said to have grown a lot in recent years.

Education itself also has a **strongly international element**. Each year Proacademy organises and participates in at least two international summer schools, where students get together in multicultural and interdisciplinary teams to develop innovative solutions for customer cases. Every spring Proacademy hosts a business development and innovation module for exchange students regardless of their field of study.

The interest in the Proacademy approach is reflected in **large numbers of visitors** to the campus. In 2013 TAMK welcomed about 1,000 visitors from 16 countries from all over the world to Proacademy.

19.6 Impact and lessons learned

19.6.1 Evaluating impacts of the entrepreneurship education approach

Overview of impact evaluation methods applied

A formal impact evaluation of **Proacademy** has not yet taken place. An informal evaluation may be based on the following soft indicators:

- 20% of graduates from Proacademy take up (and finish) a masters study programme afterwards, which is an indication that Proacademy does provide students with the necessary level of competence in spite of its non-traditional methods and focus on self-determined and team learning.
- Feedback received from current and former Proacademy students is very good to enthusiastic. The impression is that participants feel their potential has been unleashed by the methods applied in the programme, whereas it would have remained dormant in traditional educational settings.
- About four out of five Proacademy alumni stay in close touch with the university after graduation, contributing to the programme and their successors through mentoring, presentations and other forms of support.
- 20 – 25% of Proacademy participants start a company in the years following graduation – compared to a figure of less than 5% for all university graduates in Finland.
- The total turnover of a student company is approximately 120,000 euro per year, without teams having received any start capital when launching the company. This



demonstrates the degree to which the learning environment at Proacademy is embedded in the real world of business from a very early stage in the 2.5 years programme onwards.

- Interviewees with an insider-view of the job market in the Tampere region confirm that graduation from Proacademy is considered an excellent component of a job applicant's CV.
- Almost all of the companies that were established in the course of a Proacademy course are later continued in one or the other way by a subgroup of the class.

Impact evaluation methods and findings

A scientific evaluation of the impact of the Proacademy programme is taking place at the time of writing in the context of a PhD study. For this, 18 students who entered Proacademy were followed through the two and half year course. Three of them dropped out, mainly because of different personal reasons. Also 13 students of Namibia's ProLearning study programme's first team were followed through their two years study programme and also three years after graduation.

Number of start-ups

A further performance measure being considered to be introduced is the number of start-ups created by graduates from TAMK. This indicator has not yet been defined, and the methodology for measurement would need to be developed – for example, within how many years after graduation? The main objective of the work of Y-kampus is to make entrepreneurship a viable career option for as many students as possible, but Y-kampus does not seek that every graduate should engage in a business start-up. Y-kampus leaders believe that entrepreneurship skills are also increasingly relevant within larger organisations, not merely for starting your own company.

19.6.2 Lessons learned

Summary of lessons learned about methods and settings

Proacademy, an EE programme where all coaching, learning and business development activities are focused on facilitating the entrepreneurial path, was found to be successful in generating creativity and preparing participants for entrepreneurial behaviour during their working life. Proacademy represents a unique (and to many daring) approach to continuous development of a learning community, based on team learning and self-managed development of relevant knowledge and skills. The shared decision making in Proacademy allows for student-entrepreneurs taking an active and responsible role in the management of the study programme and leaves enough room for creativity and innovation in practice. Capability of self-leadership of teams and individuals is enabled by a shared vision and values, and the shared domain of entrepreneurship as the focus of learning activities.¹² The main lessons learned from the Proacademy case in terms of the methods and setting of EE include the following:

- **Feasibility of company establishment:** Letting students establish a company and take the full financial risk for it has proven to be fully feasible. There has as yet been

¹² cf Nevalainen & Majjala (2012)



no case in which the university needed to step in to prevent damage from Proacademy students.

- **Benefits of immediate encounter with customers:** Approaches where the university decides to supply students with initial capital for setting up their own business, may make the programme more expensive to run and may also compromise the learning process: If newly established companies are supplied with seed capital, students will feel less urgency to gain customers and generate turnover. At Proacademy, in contrast, students have their first meeting with potential customers in the first week after establishing their company. While it takes a lot of courage for fresh Proacademy "teamsters" to make cold calls to potential customers, this proves to be a necessary part of the studies. In addition, many companies in the wider region by now know about Proacademy, i.e. they kind of expect to receive such calls. Some companies have even started to reserve certain kinds of projects for future Proacademy teams.
- **Feasibility of learning to become an entrepreneur:** In Finland many people still believe that you need to be born as an entrepreneur to launch a business, i.e. one cannot not learn to become an entrepreneur. The experience from Proacademy appears to contradict this assumption. Many Proacademy graduates and current students state that they had never thought of themselves as being suitable for becoming an entrepreneur, but had become convinced of the contrary.
- **Selecting candidates who can withstand pressure:** This conviction is reflected in the selection process for Proacademy. Applicants are interviewed in some depth, but not so much to explore whether they are "born entrepreneurs", but rather to assess whether they are likely to withstand the considerable work and time pressure typical for Proacademy projects.
- **Applicability in different academic disciplines:** The Proacademy approach may not only be suitable for students of business administration, but for other study programmes as well.
- **Choosing a fashionable location rather than being on campus:** The Proacademy campus is not located on the main TAMK campus but resides in a brownstone building in an early-industrialised part of the city which has been converted into a fashionable centre of young, high growth companies, museums, theatres, and coffee shops. This has contributed to the feeling of Proacademy as being well-embedded in the real-world entrepreneurship landscape rather than being an academic institution at arm's length from the business world.
- **No grades necessary:** Proacademy students do not receive grades, with the exception of their Bachelor thesis. Anecdotal evidence suggests this suits potential employers in the business sector well, as they tend to be interested in grades only insofar as they relate to performance in practical matters, but not much in grades for how well people can learn by rote.

Preconditions for establishing a radically different type of EE

Proacademy was founded in 1999 as a **laboratory for experimenting** with innovative ways of education focusing on entrepreneurship – at a time when EE was still far from being considered essential in Finland. It was a space in which TAMK could experiment with innovative pedagogical approaches, without any direct impact on the remaining, traditional course programmes run at the university. Proacademy has always understood



itself as a learning organisation itself, i.e. the experience over the years has led to many incremental changes and adaptations to increase the effectiveness of the programme.

With the benefit of hindsight, this strategy has proven very beneficial, as ten years later, when EE had become all the rage in Finland, TAMK was able to offer a well-established, highly advanced EE programme to the growing numbers of students seeking a more practically oriented pathway to a Bachelor in Business Administration.

Mainstreaming EE across the university

Mainstreaming of EE across all parts of the university, as attempted by TAMK's launch of Y-kampus in 2012, involves the following issues:

- **Importance of staff training:** Changing cultural attitudes to entrepreneurship within a higher education institution can only succeed when staff training receives utmost attention. It will not be possible, however, to obtain buy-in from each and every member of the teaching staff. At TAMK some of the older teachers still believe that it is very risky to start a new business. They consider it irresponsible to encourage students to become an entrepreneur, as teamsters are too young. Feedback from former Proacademy students, however, suggests this might not be true.
- **Efforts to bridge different staff opinions:** Experience from TAMK indicates that internal promotion of the Y-kampus and Proacademy approaches did not yet reach all members of the teaching staff, as there is still some resistance especially from older personnel. Quite a few members of the teaching staff still rely totally on traditional ways of teaching, which appear to lose relevance in sight of today's labour markets. Bridging the cultural gap between older and younger teachers will require continued efforts.
- **Teachers' practical experience:** One idea discussed during the interviews conducted for the present study was to ask every member of the teaching staff that they must have worked in the management of a real company for some time; this may increase awareness about the needs of EE a lot.

Marketing to new types of students and stakeholders

In terms of marketing Proacademy and Y-kampus to new types of audiences, in particular existing start-ups and growth-oriented small enterprises, the following lessons can be mentioned:

- **Untapped target groups:** It might be necessary to step up marketing efforts to reach new groups of potential students, such as owners of young businesses struggling with achieving self-sustaining growth. It appears that many potential clients do not yet realise the benefits of enrolling in Proacademy. This is likely to apply to practice-oriented EE offers in other parts of the world as well.
- **Courses for absolute beginners:** It could make sense to consider offering different course programmes for (a) total beginners, i.e. students without any experience in managing a business, and (b) participants who have experience as business owner or part of a family business. This would not mean that both groups should be separated completely, but that some elements of specialisation are introduced into the curriculum. Our interviews indicate that this could increase the effectiveness of the programme particularly for the second group, i.e. students who already have experience as business owner or part of a family business.



- **Motivating entrepreneurs beyond alumni:** It appears that it is difficult to motivate successful entrepreneurs to act as mentor or even coach at the Proacademy – if they are not Proacademy alumni themselves. Attracting this group would widen the pool of expertise the programme could exploit for offering hands-on mentoring. This is an area which could be professionalised, possibly by offering some kind of compensation to mentors.
- **Regional university co-operation:** Cooperation between the three higher education institutions in Tampere has received a boost in recent years, but there still appears a lot to be done in order to identify and exploit synergies, i.e. to eliminate duplication and to market EE in higher education as effectively as possible to the diverse range of target audiences.

Improving the regional business environment

With regard to the overall **conditions for starting a business** in Pirkanmaa, the TAMK experience shows that more needs to be done in terms of a tighter support net for nascent entrepreneurs in the region. While there are many service providers that offer a range of supports to start-ups, collaboration between these may need to be stepped up so that entrepreneurs receive effective, hands-on support across all stages of the start-up process.

Transferability to other universities

Since the Team Academy (Tiimiakatemia) approach was invented at the University of Jyväskylä in 1993, it has been transferred and successfully established at a considerable number of higher education institutions across the globe. An overview document compiled by Nina Jussila¹³ lists universities from ten countries, which together account for more than 10,000 students who have been, or are being trained, using team-based approaches based on Johannes Partanen's original concept. Jussila states that there are over 1,300 team entrepreneurs and over 800 trained team coaches already.

The persons responsible for operation of the Proacademy programme at TAMK advise other universities which would like to experiment with the team entrepreneurship approach to jump into the water and in one go set up a full-scale programme rather than merely adding more practical work to traditional course programmes. Experience so far indicates that many universities lack the courage to do so, but it is necessary to gain the full benefits from the Proacademy approach. The team learning and team education approach is very specific, even radical, and different from traditional approaches. It may require highly innovative management and teachers.

In general, entrepreneurship education programmes in which students have to launch real companies may have become much easier to realise because of the new possibilities to do business in the digital domain: It is today possible to develop and offer innovative kinds of services via the Internet which require very little investment, i.e. where barriers to market entry are extremely low, as Head of the Proacademy Veijo Hämäläinen pointed out.

¹³ See <https://prezi.com/kv4ctpdixcmj/tiimiakatemia-network/>, downloaded 2014/11/30.



References

Research for this case study was conducted by Karsten Gareis, senior researcher at empirica, Bonn, on behalf of the study for supporting the entrepreneurial potential of higher education (sepHE). Sources and references used include desk research plus:

Interviews

- [1] Peer Haataja, Director of Tampere Chamber of Commerce (interviewed on 1/10/2014 at TAMK Y-kampus, Tampere)
- [2] Veijo Hämäläinen, Head Coach of Proacademy, TAMK (interviewed on 1/10/2014 at TAMK Y-kampus, Tampere)
- [3] Mikael Juntunen, Project Manager of Y-kampus (interviewed on 1/10/2014 at TAMK Y-kampus, Tampere)
- [4] Tanja Verho, Proacademy Alumnus, Entrepreneur, Y-kampus Mentor, CEO of Persoona Oy (interviewed on 1/10/2014 at TAMK Y-kampus, Tampere)
- [5] Kai Hintsanen, Lecturer, International Business Programme, TAMK (interviewed on 1/10/2014 at TAMK Y-kampus, Tampere)
- [6] Tiina Hanhike, Senior Adviser at Ministry of Employment and the Economy (interviewed on 1/10/2014 in Leppävaara)
- [7] Jarkko Haukijärvi, Entrepreneur, Master's Student, Y-kampus Mentor, CEO of Ylöjärven Kauppahuone Oy (interviewed on 2/10/2014 at Hotel Scandic Station, Tampere)
- [8] Riitta-Liisa Arpiainen, Senior Lecturer, Business and Administration Programme (formerly Head of Business and Administration Programme), TAMK (interviewed on 2/10/2014 at Hotel Scandic Station, Tampere)
- [9] Marika Ropanen, Emmi Kuortti, Christa-Maria Määttänen, Proacademy Students, (interviewed at 2/10/2014 at TAMK Art and Media House, Tampere)
- [10] Ari Nupponen, Proacademy alumnus, entrepreneur, Restaurant Kaijakka (interviewed at 2/10/2014 at Restaurant Kaijakka, Tampere)
- [11] Pasi Kuhmonen, entrepreneur, Proacademy alumnus, CEO of Villivisio Oy (interviewed on 3/10/2014 at Hotel Scandic Station, Tampere)
- [12] Päivi Karttunen, Vice President of TAMK (interviewed on 3/10/2014 at TAMK, Tampere)
- [13] Elina Merviö, Proacademy Coach, TAMK (interviewed on 3/10/2014 at TAMK Y-kampus, Tampere)
- [14] Jari Jokilampi, CEO of Pirkanmaa Entrepreneurs' Association (interviewed on 3/10/2014 at TAMK Y-kampus, Tampere)

Literature

Halttunen, J. (2006) "Team Academy – Award-winning entrepreneurship education from Jyväskylä, Finland", presentation at OECD/IMHE conference, Copenhagen, Denmark, 16/10/2006. Downloaded from <http://www.oecd.org/edu/imhe/37544053.pdf> (2014/11/30, 18:45).



Isaacs, W. (1999) "Dialogue and the Art of Thinking Together: A Pioneering Approach to Communicating in Business and in Life", Bantam Doubleday Dell Publishing Group.

Leinonen, N., Partanen, T. and Palviainen, P. (2004) "Team Academy - True Story of Community that Learns by Doing", PS-kustannus, ISBN 9524511037.

Ministry of Education, Department for Education and Science (2009) "Guidelines for entrepreneurship education", Publication 2009:9, Helsinki: Ministry of Education. Downloaded from <http://www.minedu.fi/export/sites/default/OPM/Julkaisut/2009/liitteet/opm09.pdf> (2014/08/30, 16:00).

Nevalainen, T. and Maijala. M. (2012) "Creative management in TAMK Proacademy", Development and Learning in Organizations: An International Journal, 26(6): 17-19.

Waterman Jr, R.H. (1994) "What America Does Right: Learning from Companies That Put People First", W.W. Norton & Company.

Websites

<http://www.tamk.fi/en> (2014/11/17, 17:15)

<http://www.proakatemia.fi/en> (2014/11/17, 17:15)

<http://y-kampus.fi/en/> (2014/11/17, 17:15)

<http://en.wikipedia.org/wiki/Teampreneurship> (2014/11/17, 19:30)



Annex

TAMK's quality, assessment and feedback system

Feedback on studies as part of TAMK's quality, assessment and feedback system

Student feedback forms an important part of TAMK's quality, assessment and feedback system. Course feedback is a means for giving feedback on course implementations directly to the teacher in charge. Student feedback is discussed annually in the performance analysis of degree programmes. Thus, it is a significant channel in affecting the development of teaching and curricula. This also applies to EE.

Course Feedback: After each course, it is possible to give feedback through the electronic feedback system in TAMK's intranet or by using another method defined by the teacher. Intranet identifications are used to log into the feedback system, logging in enables the system to recognise the student's courses. The identity of the feedback giver cannot be seen in the answers. Summary of course feedback is saved in the course implementation plan.

Annual Student Feedback: First-year students give feedback on matters related to the beginning of the studies through the Questionnaire for First-Year Students. The questionnaire is sent to students in the autumn (and in the spring for those whose studies have begun in January). Annual feedback on studying is collected with an online form. Tutor teachers discuss the feedback with their own groups after which the feedback is processed at the level of the degree programme with the teachers, head of degree programme, and representatives elected by diverse groups, and the potential changes made based on the feedback are told. The survey aims at collecting extensive OPALA-like feedback on the study process of degree-awarding education during the whole study time. The survey is sent to students at the end of the autumn term. Annual feedback is collected from all students except for the first-year students (they have answered the Questionnaire for First-Year Students). As regards master's degree students, the survey is sent to all except for those who have started their studies in the autumn in question.

Student Notification of Educational Defects: When the student wants to complain about teaching, (s)he first discusses the matter (1) with the rest of the group and then, if the group has a joint opinion on the notification, (2) with the teacher concerned.

If the above-mentioned discussions do not bring the desired result: (3) The group and the teacher discuss with one another on a separately agreed occasion. The purpose of the discussion is always to reach a compromise. (4) If the oral conciliation does not bring the desired result, the group makes a written notification of the matter. The notification is signed by all or some of the group members. The notification can also be signed with a marking of how many group members stand behind the notification. The notification is delivered to the head of degree programme, and it also has to include the information on when the conciliation discussion has taken place. (5) The head of degree programme has to convene the group for conciliation in a month after the complaint has arrived. In addition to the head of degree programme, the group members and the teacher attend this conciliation. The head of degree programme presides at the conciliation. (6) If this conciliation does not bring the desired result, the head of degree programme delivers the discussion memo and the notification to the director of education who makes the decision as required by the situation, if need be together with the vice president in charge of



education. (7) The head of degree programme informs those who have signed the notification of the related decision. If the student does not know how to complain about an educational defect, the head of degree programme, director of education etc. will tell the appropriate complaint manner to the student.

Supervision and Development Discussions: The teacher tutor has a personal supervision and development discussion with the students a minimum of once a year and makes a summary of it for the student counsellor, who delivers the overall analysis of the degree programme to the head of degree programme and student counselling coordinator. The summary is discussed in a degree programme meeting together with other student feedback when making the performance analysis and deciding the development targets for the following year.

OPALA: OPALA is a common and uniform student feedback collection system of universities of applied sciences and the Ministry of Education and Culture. All graduating students fill in it during their graduation month. OPALA feedback maps experiences of the whole study time.

TAMK's Quality Management System: TAMK's core processes are education, research and development. They are supported by internal services. The core of quality management is formed by immediate evaluation in learning situations with the aim of ensuring the validity and achievement of the set learning and competence objectives. Another significant dimension is formed by quality assurance in teaching and related curricula. TAMK's key task is to support development of expertise both in degree-awarding education and in research, development and business services. Evaluation data is collected from several sources, such as student database Winha, statistical data collected for the Ministry of Education and Culture, questionnaires made for students and staff and AMKOTA files, a university of applied sciences decision and statistical database maintained by the Ministry of Education and Culture. The evaluation data is brought together in performance analysis of the schools and units in the spring. Analysis of information takes place in the degree programmes. The analysed information creates the basis for target setting for the following period. TAMK's quality manual is a key tool in the everyday work of the higher education institution. It contains the detailed study-related instructions, responsibilities and forms.

Source: <http://ects-guide.tamk.fi/palautteen-antaminen-opinnoista>, downloaded 2014/11/30.