Elina Kirjalainen & Tytti Pintilä (eds.)

Diploma of Higher Education

Competence Modules for Everyone

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ELINA KIRJALAINEN
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(EDS.)

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DIPLOMA OF HIGHER EDUCATION
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ABSTRACT

Elina Kirjalainen & Tytti Pintilä (eds.)
Diploma of Higher Education. Competence Modules for Everyone
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In 2013–2015, JAMK University of Applied Sciences implemented a national pilot project Diploma of Higher Education based on a proposal by the Finnish Ministry of Education and Culture. The aim was to determine the need for working life for competence modules consisting of parts of higher education degrees which diversify the offering and participants. Similar higher education programmes have grown more common internationally.

JAMK UAS implemented four diploma of higher education programmes as UAS open studies: Agricultural Entrepreneur Business Competence, Gerontological Rehabilitation, HR and Financial Specialist and Purchasing Specialist. The aim of the students was to expand their competence, develop their own work and further advance in their careers. For the training to succeed, it was important to invest in instruction, support group formation and have flexible implementation models.

The students were able to develop their competence based on their own individual needs and the needs of working life, regardless of their educational background. Groups that promoted peer learning and networking were felt to be the strengths of the training. The costs for students were also very moderate. If needed, the studies can later be credited towards a degree programme.

Diplomas of higher education are a quick and flexible way to implement various competence modules that meet the needs of working life. The students and employers have appreciated the pre-packaged, clear and sufficiently advanced competence modules of 60 ECTS cr.

Keywords: adult education, agricultural entrepreneur, business competence, competence module, continuing education, diploma of higher education, gerontological rehabilitation, higher education policy, HR and financial specialist, open university, open studies, path studies, purchasing specialist, working life orientation

TO THE READER

Elina Kirjalainen & Tytti Pintilä

In only a few years, Diploma of Higher Education has become established as a term in the field of Finnish higher education policy. Just under three years ago, the term first emerged in public debate via the Ministry of Education and Culture's working group responsible for developing higher education structures. It is a direct translation of the European Diploma of Higher Education. Thus from the outset, the Ministry of Education and Culture's diploma of higher education proposal did not propose a two-year higher education degree for finland. International examples, among others an associate degree, had indeed been proposed as a background to the Diploma of Higher Education in the memorandum Monipuoliset ja sujuvat opintopolut ("Versatile and Smooth Study Paths").

In public this was forgotten, however, and in the spring of 2013 there was a heated higher education policy debate against "mini degrees." The majority of the signatories of the Ministry of Education and Culture's own working group, too, left a statement or opinion the end of the memorandum opposing Diplomas of Higher Education. It is interesting to reflect on why not even the memorandum's working group had read the proposals on the idea of competence modules pursuant to the principles of open higher education, but rather had read between the lines the word "degree."

One target of criticism was that comparable modules could not be found in the Bologna structures of the Process. The Bologna Process Ministerial Conference in Yerevan held in May 2015 officially approved the short-cycle higher education modules corresponding to the Diploma of Higher Education for level 5. Therefore, Finland, too, must recognise and acknowledge competence acquired in education of this kind.

In spite of the general criticism towards the idea of a Diploma of Higher Education, JAMK University of Applied Sciences applied for and received funding to pilot Diplomas of Higher Education in the summer of 2013. The parties responsible for implementation in practice were thus faced with an extremely interesting challenge. The participants in the project discussed the views of the Ministry of Education and Culture in depth and considered what would be the most rational way to approach the objectives set. The measures proposed in the project application had to be rapidly put into practice, as funding had been obtained for the creation, marketing, realisation

and evaluation of new types of education only from September 2013 until the end of August 2015. During the project, access to funding was extended to April 2016, which facilitated the completion of education programmes during 2015 and reporting at the beginning of 2016.

Ultimately, the piloting task proved to be quite simple. JAMK University of Applied Sciences was well aware of those skill gaps repeatedly referred to in various education and employment policy statements. On the one hand, Finns have a high level of education, but on the other, some individuals lack higher education entirely, or their competence does not meet today's needs. The transition from upper secondary vocational education and to higher education is not smooth, and the open higher education institute pathway to degree-level education does not function in the way desired. Some individuals may obtain degree after degree of the same level, while others are unable to access even the first degree programme.

A solution is being sought for this problem by allocating quotas for applicants applying for their first degree. Boundaries need to be dismantled both before the tertiary level and between tertiary levels in education. Clear structuring of open higher education with clear competence modules is needed. Higher education institutes must be able to offer flexible and rapid solutions for the acute competence deficits which require higher education.

Open higher education and the context underlying the Diploma of Higher Education are dealt with in greater detail in the first and second section of the publication. In section two, Maarit Korva, Coordinator at JAMK University of Applied Sciences (JAMK), describes the potential of open studies in developing working life experts and the place the Diploma of Higher Education may have in open higher education. In the third section, the project staff of the project – Elina Kirjalainen, Project Secretary, and Tytti Pintilä, Project Manager – explain those problem areas, which the Diploma of Higher Education aims to address.

The objectives set for the Diploma of Higher Education could be read clearly in the memorandum of the Ministry of Education and Culture. It was possible to start practical implementation very quickly, as JAMK knew the skills gaps in its region and its own educational strengths. The initial stages of the Diploma of Higher Education project and students who applied for inclusion have already been discussed in the articles Korkeakouludiplomi – Korkeakouludiplomi – taustat ja pilotointi Jyväskylän ammattikorkeakoulussa 2013–2015 ("Diploma of Higher Education – backgrounds and piloting in JAMK University of Applied Science 2013–2015") by Elina Kirjalainen and Tytti Pintilä. The interim report (2015) on the follow-up and evaluation study on the Diploma of Higher Education pilot project of the University of Jyväskylä's Institute for

Educational Research has comprehensively described the initial stages of the project, the expectations towards Diplomas of Higher Education, the views of JAMK's staff, the planning process, marketing, the student selection process and pedagogic solutions.

The Finnish Institute for Educational Research (FIER), based at the University of Jyväskylä, will also publish the final report of its follow-up and evaluation study in January 2016. The discussions with the broad-ranging experts of FIER and the studies they carried out have been of invaluable help already during the project, and the follow-up and evaluation report is providing new valuable information for Finnish higher education decision-makers too.

As the initial phase of Diplomas of Higher Education has been already been dealt with extensively, the present publication focuses on addressing education pilot from their own perspective. Section 4 to 7 reports the experiences of each pilot regarding the planning and realisation of the new competence modules and observations of the functionality of the training model. The authors of the articles have been practical implementers in the pilots as well as members of the JAMK team for the Diploma of Higher Education. After being selected as a pilot education project, each education programme was given considerably free rein to develop studies specifically for its own field and perceived competence deficit both from within the university of applied sciences (UAS) Bachelor's degree offering and perhaps also from within the UAS Master's degree offering. The size of the budget framework for each training programme was the same. Only the scope and implementation period of the education programmes were agreed on together. The pilots were monitored and guided, where necessary, in regularly held team meetings. It is interesting to observe how differently the programmes were implemented, and how the various pilots enriched the Diploma of Higher Education project.

The Diploma of Higher Education team included Jaana Auer, Senior Lecturer; Hannu Ikonen, Educational Development Manager; Sami Kantanen, Head of Department; Ari Karsikas, Senior Lecturer; Elina Kirjalainen, Project Secretary; Maarit Korva, Administrative Planner; Sanna Nieminen, Principal Lecturer; Pertti Pernu, Head of Department; Pirkko Perttinä, Specialist; Aila Pikkarainen, Senior Lecturer; Tytti Pintilä Project Manager and Mirja Riipinen, Senior Lecturer. It has been rewarding to work with competent experts in adult education who are enthusiastic about development work.

As the Diploma of Higher Education project has been a subject of interest both in Finland and internationally, it has been easy to collect opinions both from experts in open higher education and also from the network that has arisen internationally. In Finland, Diplomas of Higher Education have been

discussed at network meetings of open higher education and at various seminars where both JAMK and FIER have presented results of the project. Through these, awareness of competence modules has been disseminated and a wide range of development ideas have been obtained from higher education institute actors. Of the international networks, the most important for this project were EURASHE and Chain5, which are described further in section 8.2.

Discussions with the employment authorities during the project helped in understanding the value of the academic-level competence module also in the operating area of JAMK University of Applied Sciences, where the unemployment rate for those with tertiary-level degrees is among the worst in the country. The possibilities for unemployed job seekers to study in open higher education are still limited, and we hope that this project will contribute to providing a solution to this problem. Self-development can never be an obstacle to employability.

The steering group for the Diploma of Higher Education project (section 8, appendix 1) consisted of those representatives of trade unions who were initially very critical of the idea of the Diploma of Higher Education as well as of employer representatives of each pilot education programme. Input to the steering group was also provided by a representative of labour administration, a student member, and representation from JAMK's management and staff. Researchers from FIER were also involved as experts. The work of the steering group brought with it the valuable perspective of business life. In the light of day-to-day experiences, employers' representatives encouraged the creation of clear, high-quality competence modules, which recruiters also find easy to understand. Section eight of the publication opens up the results of the Diploma of Higher Education project in full, both at JAMK University of Applied Sciences as well as in a wider Finnish and international context.

The summary presents a picture formed through the experiences of the Diploma of Higher Education project of how comprehensive competence modules could incorporated as part of the Finnish higher educational field.

13.12.2015
Elina Kirjalainen & Tytti Pintilä

1 DIPLOMA OF HIGHER EDUCATION AS PART OF FINNISH HIGHER EDUCATION POLICY

Elina Kirjalainen & Tytti Pintilä

1.1 FINNISH HIGHER EDUCATION POLICY AND EDUCATION LEVEL IN INTERNATIONAL COMPARISON

The idea of Diplomas of Higher Education emerged in the heated development phase of higher education in the early 2010s. Resources for higher education were cut, but at the same time there was concern about the decline in the level of Finnish higher education. It had been customary to regard Finland as a model of education in Europe, but various follow-up and comparison studies showed that Finland was falling into the average category in development (among others, OECD 2013). There was a strong paradox in the Finnish education field against which the idea of the Diploma of Higher Education appears as highly viable. The circumstances for which piloting sought solutions are described below.

In Finland, education is seen as an important enabler of social mobility and personal development. Investment in education as human capital is seen as worthwhile both for the individual and the society, as investment in education generally has a positive impact on the individual's income and productivity. (Asplund & Maliranta 2006.) Likewise, Kokkinen (2013) has shown that the high educational level of citizens is clearly linked to economic growth and increased well-being. Efforts have been made to steer the education system to respond to the needs of the changing society through the education policy. In the light of a study by Statistics Finland (2007), the educational level of Finns has risen continuously, and Finland has developed relatively quickly from an agricultural country to a high-productivity and high-technology country. The fundamental element in this process has been an educated and competent labour force.

The basis of the Finnish education system is an education policy based on lifelong learning and equality. This has been emphasised in the education and research development plans guiding education policy since the 1980s. (Ahola 2015, 34–40.) A particularly equalising feature in Finnish degree-level education is that it is free of charge whether the degree is the first or tenth. The eagerness of Finns to educate themselves as well as an education policy

that aims to expand higher education in particular has also been criticised – a long-running issue in the education policy debate is over-education. It has also been described how education inflation has eroded the value of higher-level degrees. The expansion of higher education has been observed to be linked to the reduction in the value of degrees. (Aro 2014.) There is no unambiguous definition for what is meant by over-education that is independent of the interlocutor, however (Witting 2014).

1.2 IS THE DECLINE IN FINNISH COMPETENCE A STATISTICAL ILLUSION OR A REALITY?

According to Statistics Finland (2012), the number of people with higher education increased by 26 per cent between 2000 and 2011, and nearly every third Finn of working age, 1.2 million, had at least a lowest level tertiary qualification in 2011. The increase in the educational level of women, especially, in Finland has been rapid during recent decades. Why then are Finnish decision-makers concerned about the decline in our high level of education?

The Ministry of Education and Culture's memorandum (2015, 11) Growth in competencies for Finland depicts Finland's situation as being rather bleak:

> *"The stagnation of competence development in Finland and the downward trend in learning outcomes must be reversed towards new growth. Finland is losing its position as a model of education. Equality of education, which has been Finland's strength, seems to have weakened, and social background is increasingly impacting on learning outcomes. Moreover, the increasing rise in the level of the education in Finland has come to a halt, and the educational structure is stabilising at the present level. Also the trend in the employment rate, which is weaker than in competing countries, deterioration of the dependency ratio as well as deficiencies in inclusion, life management and well-being are serious social challenges. Owing to the decreasing financial resources of the public sector and the strengthening of overall control, development of the welfare state will require reassessment of the functions of the administrative sector, reform of structures and guidance and new ways of organising services."*

Finland's ranking in international education comparisons depends, however, on how educational level is measured. Are graduates of the lowest level tertiary level (in Finland, the former post-secondary level, such as business

and administration, nursing and engineering) considered as tertiary-level graduates? In the European Qualifications Framework (EQF) and UNESCO's International Standard Classification of Education (ISCED) 2011, higher education is located on a scale between 5 and 8, i.e. level 5 is the lowest tertiary level. Likewise, Eurostat regards qualifications located at level 5 as tertiary qualifications in its statistics. Hence, countries in which level 5 is included in the comparison rank high in the statistics. In Finland, the post-secondary level plays a significant role in comparisons using older age groups. Young people, on the other hand, cannot pursue level 5 studies. (Kalenius 2014, 28–31). The education level ranking for young adults falls when the tertiary level is examined as a whole.

In a number of European countries short-cycle tertiary qualifications (ISCED 5) meet the needs of working life and expand the number of people participating in higher education. The Communication from the European Commission (Rethinking Education: Investing in skills for better socio-economic outcomes 2012, 16) proposes the following:

> *"Promote excellence in vocational education and training (VET). Key actions are developing, according to national circumstances, high-quality dual VET systems, aligning VET policies with regional/local economic development strategies namely for smart specialisation, enabling permeability with other educational offers, developing short-cycle tertiary qualifications (2 years) focused on identified areas of skills shortage especially where there is growth potential such as ICT, healthcare and green skills, and strengthening local, national and international partnerships and networks between companies, especially SMEs, and VET providers."*

According to Ahola (2015, 31), Finland has generally listened carefully to international assessments and recommendations regarding development needs for education. It is not, therefore, surprising that the European Commission's call has been taken seriously and as an objective for implementation. These assessments and recommendations also appear in the memorandum "Versatile and Smooth Study Paths" (2012), in which it was decided to propose the Diploma of Higher Education pilot. It is important, however, to note that the discussion has constantly referred to competence modules instead of "short-cycle tertiary degrees."

The most recent Education and Research Development Plan (2012, 45) has raised slow placement in studies and multiple education as a special challenge in the Finnish post-secondary education system. Thanks to the free degree-

level education, by passing the entrance examinations anyone, in principle, can at the very least enrol in more than one degree programme in order to further their competence. On the other hand, the entrance examinations and possible selection even beforehand may, in competitive fields, exclude from higher education people whose competence would be needed in higher education.

Education and Research 2011–2016 (2012, 55) describes the situation at the time as follows:

> *Nearly one-third of new students selected into institutes of higher education already have a post-secondary degree or the right to study at institutes of higher education. The careers of tertiary-level graduates vary, and the competence required in working life changes. Post-degree education can support, among others things, the development of new job descriptions and fields of expertise and the specialisation of tertiary-level graduates. The reason for multiple academic studies also lies in excessively detailed qualification requirements set for various tasks in working life and the opportunity to obtain training that complements competence free of charge through education leading to a degree. Apprenticeship-type continuing education has been developed for those who already have a higher education degree through a separate appropriation in collaboration with working life.*

According to Statistics Finland's education statistics (2013), every tenth new tertiary-level student had also previously completed a tertiary degree. On the other hand, the OECD country comparison (2013) shows that 9.9 per cent of young adults in Finland have only basic level education, while the average in OECD countries is 17.7 per cent. In other words, one in ten young Finnish adults has completed only comprehensive school. Some Finns thus have several tertiary-level degrees, other none at all. It has been clearly shown that education prevents social-exclusion (Myrskylä 2012). This touches on a contradiction which the Diploma of Higher Education project attempts to address. How can those who are dubious about university-level studies be brought into higher education? How, on the other hand, can additional competence be offered to those who already possess a higher education qualification, in other words, to those for whom taking a full degree may be unnecessary?

1.3 POSITION OF ADULTS IN HIGHER EDUCATION INSTITUTES

In the words of Haltia (2012, 269), we can ask: What is the position of adult students in higher education institutes at the moment? According to the Ministry of Education and Culture, adult education in universities of applied sciences (polytechnics) consists of education leading to a UAS Bachelor's degree or a UAS Master's degree, specialisation studies, open studies and fee-based continuing education. Universities organise adult education in the form of education leading to a qualification, open university instruction, short- and long-term continuing education and specialisation studies, and labour market training. (Ministry of Education and Culture website n.d.). Also in the light of the statistics presented above, it would be sensible for institutes of higher education to offer competence modules that are narrower in scope.

Apprenticeship-type further education functioned as continuing education serving working life at the turn of the 2010s at higher education institutes, but nowadays it has nearly disappeared from the offering. The definition of professional specialisation studies in the higher education system as post-degree studies excludes those who do not fulfil the criteria in question. In addition, continuing education at a market price or supported labour market training courses for selected target groups are offered.

At Finnish universities, the offering still emphasises long-term studies leading to a degree. These applicants are selected mainly on the basis of entrance examinations or previous studies. International development, changes in the funding models for higher education institutes, the development of MOOCs (massive open online courses) and other similar models, as well as the sometimes hard-to-predict needs of the labour market, indicate that the emphasis on degrees will decrease. (YLE 2015.) At the same time, openness and easier access to education could obtain greater significance.

Would there be a place in higher education institutes for clearly defined higher education institute competence modules? The study fees for open higher education have been kept moderate through regulation in order for as wide as possible number of people to be able to further their existing skills in higher education that is open to everyone. At the same time, the flexibility of the open higher education compared to degree programmes makes it possible for adults to simultaneously study and work or to seek employment.

Open higher education has been available since the 1970s, and the open university pathway to a degree has existed for nearly as long. The Ministry of Education's first mention of the path dates from 1983. Academic discourse

which views open higher education highly critically (Haltia 2012) has at times overshadowed respect for open university education, and has perhaps created unnecessary apprehension regarding students who have enrolled in higher education through paths other than entrance examinations. According to Haltia (2012, 2015a), the degree path in universities has not functioned in the way desired. Nationally, however, there are a significant number of open university students. In 2014, for example, 77,896 separate students completed 60,109 ECTS cr. (Vipunen 2015). In addition to analysing views concerning the path to obtaining a degree through an open university, Haltia also has explained the reactions (n=74) to Diplomas of Higher Education (Haltia 2015b) caused by the memorandum behind the Ministry of Education and Culture's Diploma of Higher Education project.

The situation in the UAS open studies is different and open higher education and the pathway to higher education have been approached mainly through Haltia's discourse of effectiveness (2012 258), in other words, responding to the competence needs of working life. At the same time, good students aiming for a degree are obtained via the open UAS path, as Korva (2014) has shown through examples from JAMK University of Applied Sciences. In the following sector, Korva explains the situation in open higher education on a wider level and the integration of the Diploma of Higher Education project in this context.

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2 OPEN UNIVERSITY OF APPLIED SCIENCES (UAS) DEVELOPING WORKING LIFE EXPERTS

Maarit Korva

2.1 A FUNCTIONAL PATH TO DEGREE-LEVEL EDUCATION

At JAMK University of Applied Sciences, the mission of the open UAS is to provide the regions of Central Finland with open UAS education for everyone so as to develop working life and enable lifelong learning and professional growth in accordance with the national policies and the strategies of JAMK University of Applied Sciences. (Open UAS n.d.) The operating concept strongly emphasises the open UAS's role in strengthening the competence required in working life.

Working life competence developers have been identified as one of the main groups in open studies but, with the so-called UAS funding model introduced in 2014, the so-called "Study Paths" may have come under the brightest spotlight. Students can work towards a degree through study paths, which usually comprise first-year degree studies. Open Study Paths aiming at a degree have been found to be an interesting development area, on the one hand, because they have had a positive effect on degree-level education pass rates and the speed of graduation (Korva 2014). On the other hand, study paths usually entail extensive modules which, as such, bring numerous open UAS ECTS credits and show in the funding received by the university of applied sciences.

For example, at the beginning of 2015, the majority of ECTS cr. worked for in JAMK University of Applied Sciences' open studies were completed in Study Paths. In the spring of 2015, the Open Study Path was observed to be highly popular. In the spring of 2015, a total of 89 students, were selected through the Open Study Path for the degree programme, 81 for Bachelor's studies and eight for Master's studies (Statistics on applicants in spring 2015 n.d.). With respect to Bachelor's programmes, anyone who has completed 60 ECTS cr. worth of open studies and, with respect to Master's programmes, anyone who has completed either 20 or 30 ECTS cr. worth of open studies that can be recognised as part of the degree programme may apply via the Open Study Path of JAMK University of Applied Sciences (Applying for

Bachelor's and Master's degrees with open studies n.d.). The number of students selected via the Open Study Path in a single university of applied sciences is considerable compared to, for example, the corresponding overall number of open universities, which in 2012 totalled 526 students (Hirsivaara 2014). It seem that the Open Study Path to degree studies functions well at JAMK University of Applied Sciences, while the open university field has, according to Haltia (2015), struggled with the narrowness of the path.

The Study Path to degree studies thus functions, but what is the open UAS's role in strengthening the competence required in working life?

2.2 OPEN STUDIES PROVIDE FURTHER EDUCATION FOR THE ADULT POPULATION

Haltia, Leskinen and Rahiala (2014) have grouped open studies students into four categories:

1. students supplementing their degree
2. self-developers
3. Study Path applicants
4. applicants via main admission.

Students supplementing their degrees were found to have the highest education background: the most common degree was a higher post-secondary degree. Forty-five per cent of this group had turned 40, and the majority of them were active in working life. The motive of students supplementing their degrees was to further the skills and competence needed in working life.

The self-developers were, in terms of age, the oldest group: over half of them had turned 40. The self-developers had the most diverse educational background of the groups. As was the case for students supplementing their degrees, the majority of the self-developers, too, were active in working life. Their motive was to develop themselves through the studies. As was the case for students supplementing their degrees, the self-developers wanted to develop the skills and competence required in working life, but they also wanted to familiarise themselves with academic studies and the relevant discipline or field of study. (Haltia, Leskinen & Rahiala 2014.) There are clear similarities in this group with those who applied to pursue a Diploma of Higher Education (see Aittola, Siekkinen & Välimaa 2015).

As has been previously mentioned, it seems that the strongest group among all open studies students at JAMK University of Applied Sciences currently appears to be Study Path applicants. It is in the interest of JAMK University of Applied Sciences, however, to also strengthen recognition as a provider of further education for citizens, i.e. to expand the proportion of self-developers and students supplementing their degrees. In 2015, one of the three development targets in the open studies action plan of JAMK University of Applied Sciences has been to develop the offering supporting working life competence by means of, among other things, competence modules. During 2015, marketing, too, has focused mainly on students aiming to develop their working life skills.

The study conducted by Haltia, Leskinen and Rahiala (2014), found that open studies students were most frequently aged between 40 and 49. A nearly equally large number were aged between 30 and 39. Open studies have thus clearly found a role in educating the adult population, but this role needs to be strengthened further. The students who applied to pursue a Diploma of Higher Education correspond to this profile, as their average age when the studies began was 41.4 (Aittola, Siekkinen & Välimaa 2015, 25). It could be concluded from this that the clear competence modules put together as Diplomas of Higher Education have met the needs of the adult population well.

2.3 COMPETENCE, MODULE OR DEGREE?

The Development Plan (2012 45, 55) – Education and Research 2011–2016 mentions the weakness of the higher education system as being multiple education, among other things. It mentions that nearly one-third of new students selected into institutes of higher education already have a post-secondary degree or at least the right to study at an institute of higher education. The Development Plan indeed raised the issue of post-degree education through which people can acquire the skills needed in the changing work scenario. Extensive competence modules, among other things, are highlighted as measures.

In 2013, one of the targets set by the Higher Education Development Group was that more degrees or modules providing competence should be completed. It was also hoped that the education offering would flexibly meet the changing needs of society and working life. (Versatile and Smooth Study Paths 2013, 35.) One of the tools that could be seen in this were open studies through which the piloted Diploma of Higher Education was implemented on the proposal of the Development Group. The strength of open studies is that

they make the opportunity for academic-level additional education openly available to everyone as a result of, among other things, affordable study fees (maximum of €15 per ECTS credit (Government Decree on Fees Charged for the Activities of Polytechnics 2014).

Open studies have been criticised in that the offering has not provided students with sufficiently predictable and goal-oriented studies. It has also been unclear how the studies can be utilised in continuing studies and working life. (Versatile and Smooth Study Paths 2013, 37.) University degrees consist of basic, subject and advanced studies (Government Decree 2004), which open universities also offer to their customers in the form of modules (see, for example, www.avoinyliopisto.fi). Although UAS degrees also include, for example, basic and vocational studies, and advanced vocational studies (Master's degree), these are not offered as such as course packages (see, for example, www.jamk.fi/avoin). Instead, the offering usually consists of study paths and of individual courses.

At universities of applied sciences, curricula are competence-based. For example, at JAMK University of Applied Sciences the curricula for degrees consist of (1) the graduate attributes of all degree graduates and (2) the competence provided by the degree programme. The learning objectives of individual courses are linked to defined competences at the curriculum level. (JAMK University of Applied Sciences – Basis for the 2015–2016, 2014 Curricula for Degree Programmes Leading to a Bachelor's Degree.)

The strength of universities of applied sciences with regard to the shaping of products could be found in competence modules. The curricula have clear competence threads, which could be linked together as products for customers. The Diploma of Higher Education project has carried out important development work here.

2.4 DIPLOMAS OF HIGHER EDUCATION AS COMPETENCE LINKERS

Diplomas of Higher Education were built into the basic activities of the open UAS. The modules were created from substantive competence threads that were already included in the curricula, i.e. could be offered through the open UAS. A strong need for the content was found in the field, which was proved by the rapid commitment to the 1½ year-long studies by a relatively large group of students.

Within Diploma of Higher Education programmes, individuals can acquire through a module consisting of 60 ECTS cr. additional competence

enabling them to strengthen their position in the labour market. Competence strengthening of this kind should not always require a full degree behind it. Sometimes a smaller, concise module is precisely what is needed to update competence to the particular level required. The starting point for Diplomas of Higher Education *"Some of the demand for education leading to a degree can be satisfied through continuing education"* (Versatile and Smooth Study Paths 2013, 38), is extremely wise.

A scope of studies consisting of 60 ECTS cr. has been found suitable in a number of different qualifications. For example, in the qualification requirements for teaching personnel, specifically 60 ECTS cr. are highlighted in several places: pedagogical competence, studies in the subjects taught in basic education required of a class teacher, studies in a subject taught by a subject teacher, study counsellor and special needs teacher studies all consist of 60 ECTS cr., with certain requirement conditions for other education (Teaching Qualifications Decree, 1998). Likewise, for example, a Bachelor's degree in social services and health consisting of 60 ECTS cr. worth of early childhood education and social pedagogy studies (Government Decree on Qualification Requirements for Social Welfare Professionals, 2005) is acceptable as a qualification for a kindergarten teacher. It would indeed be possible to consider that the Diploma of Higher Education could serve as a validating title, for example, specifically for a 60-credit module enabling a person to clearly demonstrate that they have a recognisable addition competence or qualification in the theme in question.

2.5 WORKING LIFE – ARE YOU READY?

Now, at the end of the Diploma of Higher Education pilot, we can only guess at how the new Diplomas of Higher Education will be accepted in working life. There might have been misgivings in working life regarding the value of open higher education. There should not, however, be any grounds for them Open UAS education constitutes academic-level education, and on the basis of a sufficiently broad module students can attain significant competence. It is to be hoped that the importance of the Diploma of Higher Education module is recognised and acknowledged. It is crucial that working life values extensive, academic-level competence modules. The Diploma of Higher Education is a tool for achieving them, and by means of the certificate, the Diploma of Higher Education, students can prove their competence.

This year a nationwide project AVOT (Working life-oriented open university education) has been launched with the aim of supporting the competence and

skills required in working life and providing thorough open higher education packaged competence modules for the needs of working life (press release of the University of Turku, 7 September 2015). JAMK University of Applied Sciences is also involved in the project. There is a feeling that the Diploma of Higher Education will continue in one way or another. There are issues for the development work that must be investigated with regard to relevance for working life:

- How extensive must a module be to provide sufficiently robust competence? What is valued in working life?
- Do the modules require a special name, or is it sufficient to simply list the studies?
- Can the modules be standardised (compare university basic, subject and advanced studies), or can they be shaped according to need?

It is clear that the university of applied sciences is well equipped to build competence modules. Competence-based curricula and the Diploma of Higher Education pilot provide an excellent basis for this. Much still remains to do in creating modules for all fields, in naming them and in getting them recognised. How can open UAS certificates be endowed with credibility?

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3 IMPLEMENTATION OF THE DIPLOMA OF HIGHER EDUCATION PILOT IN JAMK UNIVERSITY OF APPLIED SCIENCES

Elina Kirjalainen & Tytti Pintilä

According to the memorandum "Versatile and Smooth Study Paths" published by the Ministry of Education and Culture on 14 February 2013, the needs of business life could be met in Finland more efficiently by means of open higher education competence modules, i.e. "Diplomas of Higher Education." In addition, increasing the flexibility of degree structures and the diversity of open higher education, among other things, was favoured. (Versatile and Smooth Study Paths 2013, 37–39.)

The new competence modules would contribute to promoting educational equality, to accelerating access to education and to lengthening work careers, and to securing the regional availability of higher education. For those in employment, Diplomas of Higher Education would provide an opportunity to supplement their skills, and for those without a post-secondary degree they would serve as a path to the academic studies or as a faster route to the labour market. People can pursue level tertiary level studies in a goal-oriented manner in between degrees. At the same time, the dismantling of boundaries between upper secondary vocational studies and tertiary-level studies and the creation of links is promoted. (Ibid.)

JAMK University of Applied Sciences applied to implement the pilot and piloted Diplomas of Higher Education as the only higher education institute in Finland during the period 2013–2015. The aim of the project was to strengthen extensive competence modules in the offering of open studies, to clarify what kind of academic-level competence and modules narrower in scope than a full degree are needed in various subjects in order to develop operations and carry out pilots in different educational fields. The launch and first year of operation of the project has already been comprehensively discussed in the articles of Pintilä & Kirjalainen (2014) and in the interim report by Aittola, Siekkinen & Välimaa (2015).

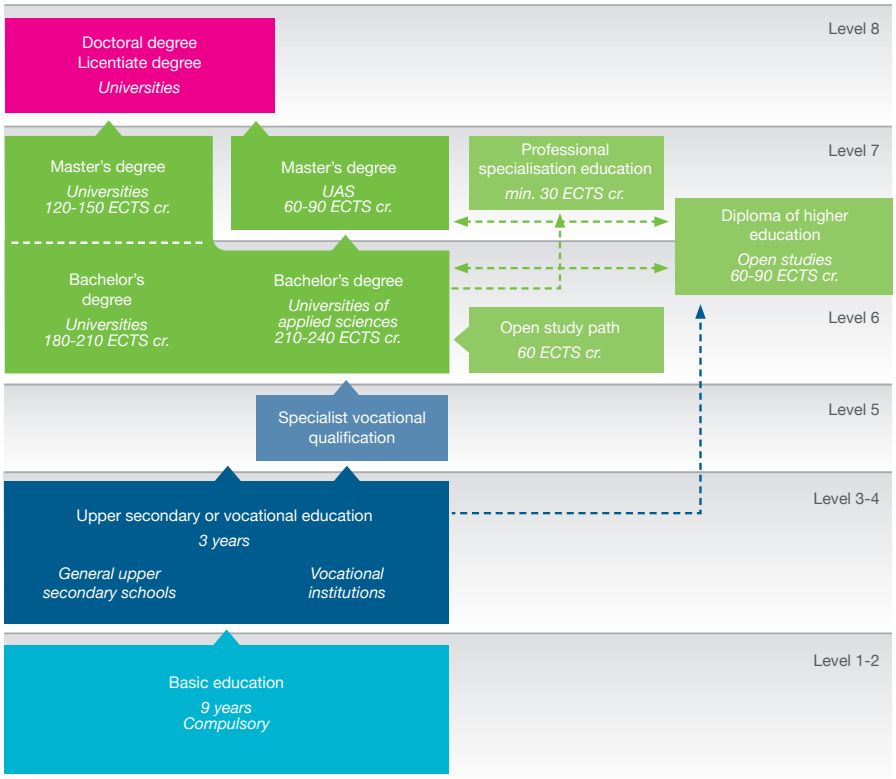

FIGURE 1. Ranking of the Diploma of Higher Education and open study path (Study Paths) in the education system and in EQF levels.

Diploma of Higher Education studies were offered in gerontological rehabilitation, purchasing professional, HR and financial specialist and agricultural entrepreneur business competence. In line with the Ministry of Education and Culture 's principles of the educational equality, these education programmes reached very different student groups. At the same time, it was possible to pilot the Diploma of Higher Education by means of various implementation models and resource allocations. The students were admitted in order of registration without basic education or work experience requirements. As matters relating to patient and client safety are closely associated with gerontological rehabilitation right from the start, an aptitude test for this education programme was arranged.

The target groups and implementation methods for each education programme were different in order to obtain data relating specifically to the availability of the programme and the needs of adult education. The scope of

the programme was set at 60 ECTS cr. and the duration of studies the duration of the project, i.e. from 1 August 2014 to 31 December 2015. International examples were usually 120 ECTS cr. in scope, but on account of the project's schedule and experiences obtained from adult education, 60 ECTS cr. and 1½ years were regarded as more practical for the Finnish context. This matter is discussed in greater detail in section 8.

The education complied fully with the principles of open higher education, among other things the cost of the education for students was €10 per credit, altogether €600 (Government Decree on Fees Charged for the Activities of Polytechnics 1230/2009). A discount of 20% was granted to unemployed jobseekers. Unemployed jobseekers accounted for 12% of the participants (Pintilä & Kirjalainen 2014, 22). The student fee did not prove to be an obstacle, neither was it a factor that particularly committed the students to participate in the education programme. Unemployed jobseekers, however, were prevented from applying by the potentially negative attitude of Employment and Economic Development (TE) administration towards such extensive studies. As the education programmes did not lead to a degree, there were no social benefits for students available for them.

All the applicants to the Diploma of Higher Education programme already had a degree or other qualification. There were no participants who had completed only the matriculation examination, and slightly more than half had completed a vocational qualification. In other words, the education succeeded fairly well in reaching those without previous higher education. In addition, the students have completed a considerable amount of other continuing education. Many already have a long career behind them with fairly diverse work experience. (Aittola, Siekkinen & Välimaa 2015.)

Indeed, it seems that the first Diplomas of Higher Education have reached, in particular, adults who actively develop themselves and are seeking advanced or supplementary competence. For example, young adults spending a gap year did not register in the programmes, as they were already full when the results of the entrance examination for the degree programmes arrived in the summer of 2014. Moreover, it was seen as more rational to refer applicants aiming to access degree education to the first year study paths of the open UAS.

There were no prior education requirements for the Diploma of Higher Education, and the groups were very multidisciplinary, which was both a challenge and a strength in implementing the programmes. The same education programme may comprise people who working in many different sectors, career changers, people who have worked in the field for a long

time, and people with a tertiary-level degree or a vocational qualification. The specialists in the education programmes continued reflection on this in their own articles.

According to the student feedback analysed by Aittola & Laine (2015), the education is highly appropriate for people coming from different starting points and fields. The students' different backgrounds enrich the studies, and the system of applying assignments to practical situations directly serves the needs of working life. The flexibility of the study methods is essential from the perspective of accessibility. The flexibility of the Diploma of Higher Education enables new competence modules to be offered in an agile manner on the basis of observed needs. The education also provides a route to a post-secondary degree, and approximately 30% of the respondents to the student feedback survey intended to apply to become degree students. It is surmised that the programme will also improve career development opportunities.

The Diploma of Higher Education pilot ended with the publication of the follow-up study and the conferring of the first Diplomas of Higher Education on 25 January 2016. The progress of the pilot is summarised in Figure 2.

FIGURE 2. Implementation of the Diploma of Higher Education pilot in JAMK University of Applied Sciences).

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4 GERONTOLOGICAL REHABILITATION

Aila Pikkarainen & Raija Lundahl

4.1 SOCIAL CHALLENGES UNDERLYING THE DIPLOMA OF HIGHER EDUCATION

Current Finnish society can be described as a greying or, more positively, as a silver society. During the last thirty years an increasing number of 65-year-olds are characterised not only by numerous positive aspects, such as activeness and participation but also by various challenges to health, functional capacity and well-being. Each new generation of older adults has their own needs for services, which have arisen during their earlier life course in a specific historical and cultural period. In the future, an older adult will, as a client of social welfare and healthcare, be an individual and even demanding user of services. At the same time, he or she will have the know-how and resources to be an active developer partner of services.

The on-going social welfare and healthcare (SOTE) reform is currently taking shape in new kinds of autonomous regions to which the duties of the municipalities and joint authorities will be transferred. This change will also bring about a reassessment and reorganisation of services for older adults. In the future, the number of staff will not increase in the services for older adults, but know-how will be directed in a more targeted way to helping older adults to cope with everyday life. (Plan for arranging services for older adults in Central Finland in 2020, draft 1.1.) This coping in everyday life includes the older adult's independent activities to maintain their well-being. In the future, early-stage multidisciplinary rehabilitation, active rehabilitation at home in various situations of illness or disability, as well as digital and virtual rehabilitation of older adults will likewise increase. Private and third sector services will strengthen and network alongside the traditional public services for them.

At the same time, the higher education system is faced with a number of reform and development challenges. Young UAS students of social services and healthcare focus mainly on services for children, young adults and people in working age, although even now the need for workers is greatest in services for older adults. According to calculations, more than half of the current staff

in social welfare and healthcare services for older adults are due to retire during the next 15 years (Plan for arranging services for older adults in Central Finland in 2020, draft 1.1.).

It is difficult to gain entry to the degree programmes of social services and healthcare in universities of applied sciences. Various open study paths are required in order to increase alternatives for entrance eligibility. The Diploma of Higher Education programme in gerontological rehabilitation currently piloted the students' opportunity to orient towards future studies and assess their own study skills at a university of applied science. During these studies, people changing their profession frequently reflect on new career and employment opportunities, personally interesting sectors of work and the entrepreneurship options. People want to deepen their professional skills and obtain motivation to continue in their work.

Workers in services for older adults need to update their know-how. A particular challenge is to increase gerontological rehabilitation competence in all social welfare and healthcare services, as the majority of clients are over 65 and increasingly even over 90. Multidisciplinary gerontological knowledge is increasing continuously, but the social welfare and healthcare sector devotes surprisingly little attention to studying and, in particular, to applying it.

When the Diploma of Higher Education programme started at JAMK University of Applied Sciences, consideration was given as to what kind of social services and healthcare content modules would be current, innovative and multidisciplinarily interesting to meet the competence needs of working life. The IKKU project, i.e. the Research and Development Project on Cooperative Rehabilitation for Aged Rehabilitees (Pikkarainen, Vaara & Salmelainen 2013), implemented between 2009 and 2014, produced theoretical, structural and content information about early-stage gerontological rehabilitation of older adults. At the same time, the reformed legislation (Act on Supporting the Functional Capacity of the Older Population and on Social and Health Services for Older adults 980/2012, Social Welfare Act 1391/2014) emphasised diversification and enhancement of services for older adults. It was considered that there was sufficient demand in working life, novelty value and background information based on development and research work or a gerontological rehabilitation Diploma programme. At the same time, it was seen as strengthening its place alongside gerontological nursing and gerontological social work.

4.2 APPLYING FOR GERONTOLOGICAL REHABILITATION STUDIES

The active planning of Diploma of Higher Education studies in gerontological rehabilitation started in the spring of 2014 in the form of multidisciplinary cooperation at JAMK University of Applied Sciences' School of Health and Social Studies. The working group consisted of Mirja Immonen, Head of Department; Leena Liimatainen, Head of Department; Pirkko Perttinä, Specialist in Charge of Diploma of Higher Education Programme; Pirjo Tiikkainen, Specialist in Nursing; Aila Pikkarainen, Specialist in Gerontological Rehabilitation; Raija Lundahl and Asta Suomi, Specialists in Social Studies. The working group also heard representatives of working life during various stages of the planning process.

The aim was to obtain a group of about 20 students that would start Diploma of Higher Education studies in August 2014. Marketing took place in the spring of 2014 by utilising the working life networks of the School of Health and Social Studies, the networks of the Open UAS and general marketing practices and communication practices. All 26 applicants who had registered were invited to an entrance examination held at the beginning of June, in which 24 applicants participated. On the basis of communications received during the autumn of 2014, it was ascertained that the marketing rapidly executed during the spring had not reached all those who might have been interested in the studies.

The purpose of the aptitude test was to assess, in line with the general application criteria for social services and healthcare studies, the applicants' motivations for the field and for embarking on Diploma of Higher Education studies, their learning and working prerequisites for studying at a university of applied sciences, as well as their social skills in group and interaction situations. The written task and group situation focused on the individual applicant's ability to produce logical and structured text, their ability to reflect on their own actions and function in a group, and on the possibility of independent online learning. Assessment criteria, including reasons for rejection, were drawn up for all the assignments.

The aptitude test consisted of written tasks and small-group tasks. The written task was assessed by people who had not assessed the group situation. The group situation was eliminatory. Students were not accepted into the programme if they failed one of any areas under assessment (motivation and self-assessment capacity, learning and working prerequisites, social skills). The assessment of learning and working perquisites also took into

account the written assignment. Two of the applicants failed to meet the set suitability criteria in respect of one or more of the assessment criteria.

In August 2014, Diploma of Higher Education studies were started by 22 students, the majority of whom were from the Central Finland area. There were, however, individual students from other regions in Finland too. The students can be divided into three groups on the basis of educational and professional background (see also Table 1):

(1) Career changers or unemployed persons who wanted to turn to a new field, either to improve their employment prospects or to obtain skills for a new profession. Some of them intended to apply to study at a university of applied sciences, and the Diploma of Higher Education studies provided them with the opportunity to assess their personal studying skills and consider their areas of interest.

(2) Employees who had completed upper secondary-level studies working in various sectors of care for the older adults such as primary healthcare, home care, day centres, long-term care, psychogeriatric wards and rehabilitation organisations. Of these students, some wanted to deepen and expand their know-how and others were applying to become a UAS degree student in the future.

(3) Employees who had completed a social and healthcare college qualification and/or a UAS qualification. They wanted to expand and deepen their know-how in rehabilitation and services for older adults and to update their working life skills. In addition, some of them had current development or project tasks, changes in duties or other current structural or content-related challenges in their work units.

TABLE 1. Background information of gerontological rehabilitation students.

Highest educational level attained	Vocational 62%; Bachelor's degree 29%; Master's degree 10% (incl. one PhD)
Proportion of women	100 %
Average age	43 years
Examples of completed studies	Specialist qualification in management and care for the elderly, Bachelor of Business Administration (BBA), practical nurse, nurse, deacon, youth and leisure instructor, designer, artesan, Teacher Education College, basic studies in special education
Examples of duties	Nurse, practical nurse, instructor, diaconal worker, project leader, community coordinator, sales assistant

4.3 STRUCTURE OF STUDIES AND PEDAGOGICAL PROCEDURES

The structure of Diploma of Higher Education studies in gerontological rehabilitation was based on four key principles (Figure 1). The first principle was that the initial part of the studies, from August 2014 to March 2015, corresponded in part to the Skills for Working Life studies and to the first-year studies in Client Relations and Welfare Services for students in the Social Services and Healthcare degree pursuant to JAMK UAS degree programme curriculum (2014–2015). In the Diploma of Higher Education programme, the content of these courses was built from the perspective of gerontology and gerontological rehabilitation. The courses were taught in part by the same specialist teachers as in the degree programme.

The desire as to ensure the standard and substitutability of the studies in the event that a student applied to become a degree student later on. At the same time it was a challenge to identify and assess the competence of students with different backgrounds in relation to the Diploma of Higher Education studies in gerontological rehabilitation. This process was facilitated by the preliminary assignment carried out by the students before the studies started. It was a preparation for a Personal Learning Plan (PLP) and study guidance (PLP discussions). As the content of the gerontological rehabilitation programme was integrated within the studies, relatively few Diploma of Higher Education students made use of or received credit for previous know-how, and those who could do so decided to participate in the instruction and to perform the required study assignments.

The skills required for dialogue learning and online learning were challenging for some of the students, who required additional guidance. These studies required new ways of learning and doing things from the students. A theory-in-use for gerontological rehabilitation compiled by each student summarised both theoretical and practical competence and the development of a professional identity.

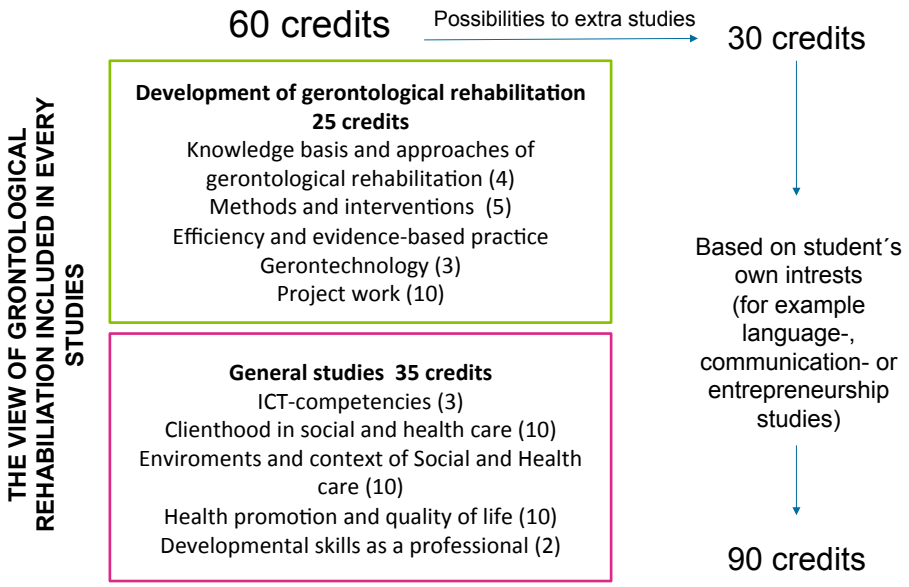

FIGURE 1. Diploma of Higher Education studies in gerontological rehabilitation – structure and courses.

The second principle was that each student had a partnership with an older adult from within their own circle of working life, relatives and friends. The tasks of every course included internalising gerontological knowledge in such a way that students were able to apply the knowledge in discussions with the older adult they had as a partner. The aim was to actively change the theoretical knowledge learned during the course of the studies into a routine theory-in-use for each student. At the same time, the students had the opportunity to consider what general gerontological knowledge is as an experienced, individual phenomenon of old age. The theme running through the courses was thus to deepen and render tangible a genuine person-centered approach.

The third principle in the studies was the combination of online learning and seminar days. Throughout the studies, a two-day principle of seminar days was established so as to enable group formation, mutual discussions and peer support. The students' different backgrounds, experiences of working life and individual personalities enriched group processes and the versatile sharing of knowledge. There also was an opportunity for individual learning tasks in the group, which meant that it was possible to take into account the respective learning styles of each student. The seminar days were implemented mainly

in the form of course tutor pair work, as working as a team enabled the use of different methods to be authentically introduced both in counselling and in interaction. Use of the instructors' teaching methods was directly comparable to the use of different rehabilitation methods.

The fourth principle was special expertise built through the gerontological rehabilitation studies (see Figure 1). This 25-credit module included a gerontological rehabilitation knowledge basis and studies in approaches which aimed to provide the students with criteria for conceptualising and valuing their work and, through this, the courage to develop and renew existing practices. Gerontological rehabilitation method studies familiarised the students with the methods of different rehabilitation processes, which the students piloted during the time of summer 2015. The studies included, among other things, physical activities, dancing, photography, sense stimulation, various methods of Green Care and home visits as well as different combinations of these. At the same time, management of the rehabilitation processes and the goal-orientedness of rehabilitation were deepened. The aim was to encourage students to try a method unfamiliar to them and to provide them with experiences of why changing rehabilitation practices is at the same time both challenging and professionally enriching.

In the late spring and early autumn of 2015, alongside method studies, the students started their own gerontological rehabilitation development work (10 ECTS cr.) by drafting an idea paper and a plan for a development task. At the time of writing this, 14 development tasks that will benefit working life as either content-related, structural or theoretical assessments, descriptions and experiments (see Appendix 1) are appearing from the field of gerontological rehabilitation.

In the autumn of 2015, gerontological rehabilitation effectiveness studies strengthened the students' resolve to renew and develop effective rehabilitation service for older adults by familiarising themselves with the principles of evidence-based activities. In addition, gerontology competence was deepened, as digital, virtual and mobile rehabilitation would seem to be a key developing sector in services for older adults in the future.

4.4 DIPLOMA OF HIGHER EDUCATION STUDIES IN GERONTOLOGICAL REHABILITATION – ASSESSMENT AND CONCLUSIONS

STUDENT EXPERIENCES AND FEEDBACK

During the programme, both individual PLP discussions and regular group feedback discussions were held with the students at the end of the semesters, i.e. in December 2014 and May 2015. In January 2015, a written questionnaire was administered to the students which surveyed their expectations towards the education programme, the support for studying provided by their work community and the benefits received from the education. Approximately half of the students reported that they were paying for the studies themselves, without support from work or elsewhere. Only a few students were able to study with the support of their employer. Some of the students received expenses for the studies from their employer; others time off from work or travel expenses. Students who were unemployed were supported through a discount on the UAS Open Studies study fees.

According to the feedback, the autumn of 2014 was especially hectic and stressful on account of new forms of online learning and various study assignments (learning diaries, written assignments, concept maps). The Optima virtual learning environment was considered confusing, and the teaching staff endeavoured to make it clearer throughout the course of the studies in accordance with feedback received from the students.

Preparation for the seminar days was regarded as challenging and therefore some of the students sought extra time to complete the assignments. The students felt that they had to update their personal studying skills, their schedules and their plans. Nevertheless, the monthly seminar days were felt to be most rewarding part of the studies, and there were few absences. Students had to make up absences with written assignments.

According to the feedback survey conducted in January 2015, the majority of the students obtained basic information about gerontology and rehabilitation, which they also took back to their colleagues and working life network and applied directly in their work (Figure 2). The students felt that their personal abilities to study and learn had developed continuously and that they benefited from the studies when applying for new employment or a study place. A key goal of the Diploma of Higher Education programme, i.e. the development of working life, was also seen as important.

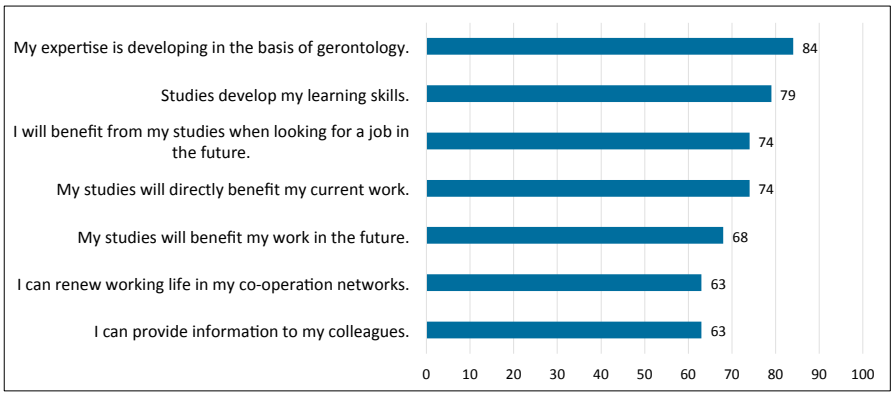

FIGURE 2. Benefits Diploma of Higher Education students experienced from gerontological rehabilitation studies, autumn 2014 (n=19, %).

In the autumn of 2015, the number of Diploma of Higher Education students studying gerontological rehabilitation totalled 17. Altogether, five students had dropped out by then on account of changes in their personal life circumstances or in working life. During the seminar days in September 2015, a group discussion was held with the students in connection with the course Effectiveness of Gerontological Rehabilitation (figure 3).

According to the students' feedback the benefits of the education, i.e. the effectiveness were: strengthening of professional identity, understanding the bases of own work, conceptualisation and internalisation and strengthening of the client-oriented approach. Overall, the students' appreciation of their work had increased when the perspective on care of older adults and on rehabilitation widened.

At the same time, the strengthening of theoretical knowledge and the foundations of students' own work gave rise to conflict and numerous questions in practical work. Why do practices fail to change? Why do people act contrary to guidelines and regulations? Who will stand up for ageing clients and their loved ones? The support of one's own student group was considered extremely important and the discussions helped to expand and deepen the issues being studied. Adopting and internalising new ways of thinking gave the students new enthusiasm to develop the work – and even to seek a new career. Three Diploma of Higher Education students began studies in the autumn of 2015 at JAMK University of Applied Sciences as degree students to become either Rehabilitation Counsellors or Bachelors of Social Sciences. They were able to continue the Diploma

of Higher Education studies to completion during the autumn of 2015 and were able go on directly to second-year studies at JAMK University of Applied Sciences.

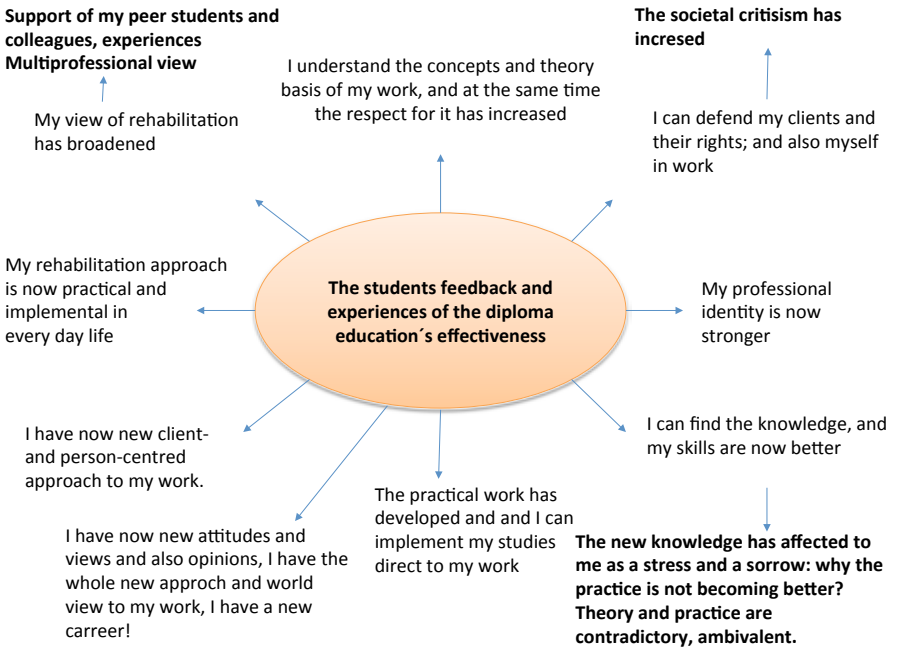

FIGURE 3. The education experiences, including impacts, described by the students during the last semester in September 2015.

SUMMARY OF IMPLEMENTATION OF EDUCATION

In contrast with the practices of the Open UAS, the students were selected for the Diploma of Higher Education programme in gerontological rehabilitation through entrance examinationsThis proved to be a good solution, as relatively few students dropped out during the first year. The cases of discontinuation at the beginning of the second year were due to typical situations related to social welfare and healthcare and to the challenges of a female-dominated field (changing employment, three-shift work and other reasons arising from life circumstances).

The basic principle of the Diploma of Higher Education, i.e. openness to people with different backgrounds, gave rise to challenges at times for those responsible for the studies, among other things, in content and preparation of

learning tasks as well in resourcing of counselling needs. The heterogeneity of the group was both an additional challenge and a surprising strength for the functionality of the group as well as for pedagogic development and experimental activities.

The scope of the education, 60 ECTS cr., was sufficiently large in terms of content and a sufficiently long process which produced deepened know-how in the restricted area of operation of social welfare and healthcare. The appropriateness of some learning contents, for example, medical dosage calculations, for all students should be reviewed critically in the future.

In the future, too, the field of study in Diploma of Higher Education programmes should be delineated theoretically and content-wise and be sufficiently clear that students are able to genuinely deepen their know-how, apply what they have learned and obtain capabilities for development work. According to experiences, in the first year of the Diploma of Higher Education programme, students went deeper in terms of competence in a targeted client sector (aged rehabilitees) than through the most comment approach currently in use in the first year of degree studies.

The opportunity to exceed 60 ECTS cr. (60–90 ECTS cr.) is an additional advantage, especially for those students who later apply for degree studies or who seek special expertise, for example, in management or entrepreneurship. During the pilot that was carried out, individual students used this additional study entitlement. If several students participate in the education from the same work unit, or from the same area or municipality, it will enable more efficient development and innovation activities during the course of the studies. Learning tasks can be integrated into students' own work, mentoring and management, in which case the entire working community will benefit from the competence obtained by students and from the development proposals they bring.

The monthly seminar learning linked to online learning supports the students' group formation and commitment to progressing in the studies, and strengthens opportunities for mutual peer support and learning. Seminar days punctuate studying and motivate the students in combining work, family life and other challenges. Characteristic skills of social services and healthcare, such as nursing, dialogue, interactional skills and group phenomena, require studying and practising them in natural or simulated situations.

Online and virtual learning should not only provide sufficient skills right at the beginning of the studies, but also continuous support and the possibility to recap the content during the course of the education. ICT skills should be integrated in other studies in areas other than written reporting. The importance

of feedback given to the students in online studies and its targeting is essential for the development of learning and competence.

For now, it is difficult to discern the place of Diploma of Higher Education programmes alongside UAS Bachelor's and Master's degree programmes and professional specialisation studies. At the same time, its marketing requires special effort and a clear description of where and how the Diploma of Higher Education meets changes in working life today and in the future.

The special expertise in gerontological rehabilitation module developed during the Diploma of Higher Education programme has been transferred nearly as such into the final year of studies of the degree programme in JAMK University of Applied Sciences' School of Health and Social Studies. In addition, this module has been offered as an option in Open Studies since autumn 2015.

The social welfare and healthcare (SOTE) reform may provide an opportunity to offer Diploma of Higher Education studies, for example, in reshaping management, purchasing competence in the social services and healthcare sector, home rehabilitation, social and digital rehabilitation, and child welfare.

APPENDIX 1. THEMES FOR GERONTOLOGICAL REHABILITATION DEVELOPMENT PROJECTS.

- Planning of an aesthetically pleasing environment for a housing service unit to be established in the area of Kangas in Jyväskylä. (Public and private sector, municipality and enterprise)
- Development of a client-oriented care and service plan from the perspective of the individual life course and future desires of older clients. (Public sector, municipality)
- Current situation and development challenges of rehabilitation plans for older municipal residents. Recommendations for harmonising rehabilitation paths and improving the transfer of information. (Public sector, municipality)
- Development of the professionalism of the community coordinators at Setlementtiasunnot Oy in improving services for older residents. (Private sector, enterprise)
- Development of services for older Finns living in Spain's Costa del Sol. (Private sector, enterprise)

- Specification of gerontological competence of employees in primary healthcare. (Public sector, municipality)
- Foot care for older rehabilitees as part of improving functional capacity and multidisciplinary rehabilitation. (Private sector, enterprise)
- Development of support for daily activities for clients of daytime activity centres. Harmonisation of observation and recording. (Public sector, municipality)
- Finnish Allergy and Asthma Federation: Bridging the contents and objectives of rehabilitation in the ICF frame of reference. (Third-sector activities)
- The special characteristics of older adults with ADHD, bipolar and Asperger symptoms and taking them into account as clients. Literature review and material for the use of the associations in question. (Third-sector activities)
- Nutrition rehabilitation as part of enhanced assisted living and a self-monitoring plan for catering. (Private sector, enterprise)
- Diaconal work – outreach work with the aged? Identification of cooperation with parish and municipal services for older adults and further development of activities. (Public sector, parish and municipality)
- Establishment plan and basis of activities for a business providing family care for older adults. (Private sector, enterprise)
- Motivating memory consulting. A client-oriented approach in preventing memory-related illnesses. (Modelling of method)

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5 PURCHASING PROFESSIONAL

Eero Aarresola, Sami Kantanen & Sanna Nieminen

5.1 INCREASING NEED FOR PURCHASING COMPETENCE IN ORGANISATIONS

Purchases typically account for 50–80% of an organisation's turnover. The management and implementation of purchases is essential for an enterprise's competitiveness. Successful purchases provide organisations with extensive opportunities to develop their business. Purchasing professionals are able to develop business in cooperation with the best suppliers. The issue involves creating added value for the customer together with the suppliers and ensuring that the products and services are produced cost-effectively – also together with the suppliers. Thus much more than simply buying and optimising the purchase price is involved.

This networked business needs purchasing professionals. The increased need for purchasing competence has been widely recognised in Finnish working life. The Federation of Finnish Technology Industries conducted an evaluation of businesses' needs for competence in purchasing, and states in its report the following: "Businesses increasingly require competence in purchasing activities, but there is insufficient training to become a purchasing professional available." (Yritysten hankintatoimen osaamistarpeet ja koulutustarjonta 2012 ("Competence needs of businesses in purchasing activities, and training opportunities 2012")). A similar message can be heard from national forums such as the Finnish Association of Purchasing and Logistics and the Prohankinta working group. The lack of purchasing expertise is evident, in particular, in the SME and public sectors.

Degree-level education for purchasing positions has not traditionally been available and, indeed, those working in purchasing have a highly heterogeneous educational background. Organisations frequently employ highly-educated people in purchasing activities but, especially in SMEs and the public sector, there are a large number of people working in purchasing tasks without the appropriate competence. The Diploma of Higher Education programme for purchasing professionals aimed to address this need, and

the programme was very attractive. The study places were filled in less than two weeks, and considerably more people would have come than could be accepted.

5.2 IMPLEMENTATION OF PROGRAMME

The purchasing professionals programme was carried out within a separate group as multiform education, with a total of 18 seminar days. Sanna Nieminen, Principal Lecturer, was in charge of the programme, and was also responsible for guiding the studies and development tasks together with Senior Lecturer Eero Aarresola. Additionally, Sami Kantanen, Head of Department, participated in the general development of JAMK University of Applied Sciences' Diplomas of Higher Education. Everyone cooperated actively with businesses regarding the programme.

The programme consisted of compulsory courses for all students (30 ECTS cr.), optional courses (10 ECTS cr.) and two development assignments (20 ECTS cr.). The participants were given flexibility to develop their competence through individual optional studies and development assignments. The content of the education is shown in Table 1.

TABLE 1. Content of purchasing professional education

Course	**Scope (ECTS cr.)**	**Scheduling**
Purchasing	5	Autumn 2014
Supply chain management	5	Autumn 2014
ICT skills of purchasing professionals	5	Autumn 2014 – spring 2015
Purchasing management	5	Spring 2015
Analysis and development of purchasing	5	Spring 2015
Business networks	5	Spring 2015
Optional courses	10	Autumn 2014 – autumn 2015
Development assignment	20	Spring – autumn 2015

In the autumn of 2014, two online courses, Purchasing and Supply Chain Management were started. These courses progressed according to a tight weekly rhythm in such a way that a new theme was studied every week and a related learning assignment was carried out. The aim of these courses was to provide all the students with a sound knowledge base of the basics of

purchasing so that they could deepen their competence in the spring “on an equal footing”, regardless of their previous level of know-how. Autumn 2014 was considered demanding and arduous, but at the same time rewarding. A guidance discussion was held with each student in person in September and December 2014, with the aim of ensuring that the studies progressed as smoothly as possible.

In the spring of 2015, the courses purchasing management, analysis and development of purchasing, business networks and ICT skill of purchasing professionals were implemented in the form of multiform study. Altogether, there were 10 seminar days during the spring and the learning assignments were wider modules than those in the online courses during the autumn. There were 1–4 learning tasks in each course. The seminar days were found to be exceedingly rewarding, which can undoubtedly be explained in part by the group’s diversity. The students came from very different organisations and many different fields, which proved to enrich learning. The participants were highly motivated to develop their competence in purchasing and they threw themselves enthusiastically into working together.

During the seminar days, various pedagogic methods were used in highly diverse ways, with the aim of obtaining the greatest possible benefit from working in a group and from the skills and expertise of the participants. Interaction was appreciated, and the teachers were given immediate feedback on this in an admirable way. Traditional one-sided lecturing was kept to a minimum. In addition, in the ICT skills course the teacher videoed the seminar session, enabling the students to return to the subjects later on, when they were doing the learning assignments. This procedure received much praise from the students and made it easier to carry out the Word and Excel assignments.

The students completed the optional courses they had selected in accordance with their own schedule during the autumn 2014 and during 2015. The optional studies enabled the students to supplement their know-how individually, in precisely the areas they found necessary. Management, languages and ICT studies, as well as strategic development studies, among other subjects, were completed in the form of optional courses.

The development tasks were performed mainly in the summer and autumn of 2015. The development tasks were individual assignments, which aimed to develop simultaneously both the student’s know-how and the organisation. The majority of the students performed the assignments for their own organisation. The development assignments endeavoured to make the working life development assignments part of the studies as smoothly as possible. The students who were unemployed jobseekers carried out

development assignments for selected organisations too. The counsellors familiarised the students with the principles of converting work into ECTS cr. before launching the development assignments. Below are some examples of the development tasks:

- Management of project purchases
- Development of a company's business network and supplier cooperation
- Monitoring of supplier tools
- Budgeting of purchases
- Information systems for purchasing
- Purchasing an ERP system in an SME
- Tool to support strategic purchasing
- Developing supplier cooperation with company X
- Enhancing the efficiency of inventory management through mobile data collection
- Implementation of ERP system for food production
- Development of JAMK University of Applied Sciences' purchasing

Interesting guest lectures and company visits were an essential part of the seminar days. They served brilliantly as good practical examples and stimulated ideas and joint discussions. The following lectures and visits were part of the education:

- Purchasing Management in practice, Sari Hakkarainen, Director of Procurement, Vaasan Oy
- Managing and developing purchasing in practice, Development Manager, Antti Puustinen, Skanska Oy, Nordic Procurement Unit
- Contractual matters in purchasing, Marja-Liisa Järvinen, Partner, Krogerus Attorneys Ltd

- Analysis, development and monitoring of purchasing, Sourcing Unit Manager, Mikko Halkilahti, KONE Elevators Ltd
- Building a new school – Challenges of purchasing, Alpo Suomi, Principal, Huhtarinne School
- Purchasing Management and development in practice, VP Procurement & Facilities Ville Halonen, Finnair Plc
- Purchasing Management and development in practice, Director Eija Repo, Helsinki Sourcing Office, Fiskars Services Oy
- Visit to Arabianranta, Krista Bister, Art and Design City Helsinki Ltd
- Company visit, Finavia – Helsinki-Vantaa Airport
- Company visit, Harvia Oy, Muurame

5.3 GOOD TEAM AS BASIS OF SUCCESS

DIVERSE COMPETENCE AND DIFFERENT BACKGROUNDS A RICHNESS

There were no prior requirements regarding students' previous education or work experience in respect of the purchasing professional studies. This naturally led to a situation in which the students' backgrounds varied considerably. Some of the students had very solid experience of purchasing tasks, but there were also students in the group whose previous duties did not involve purchasing. All the students, however, shared the desire to develop and supplement their previous know-how in purchasing activities. The students' background organisations consisted of both private and public sector operators, the private sector, however, accounting for the majority of the background organisations. The results strengthen the view that the private and the public sector can be well combined in the education.

The previous education of the students was also highly varied. Some of the students had completed an upper post-secondary degree, some a lower post-secondary degree and others had completed an upper secondary vocational qualification. The differing educational background naturally gave rise to challenges to some degree when planning the education, as studying was more familiar to some students than to others, and therefore study skills varied among different students.

TABLE 2. Background information of students in purchasing professional education	
Highest educational level attained	Vocational 32% Bachelor's degree 45% Master's degree 23%
Proportion of women	65%
Average age	41 years
Examples of completed studies	Bachelor of Engineering (information technology, automation, industrial engineering), qualification in business and administration, specialist qualification in management, vocational qualification in business information technology, vocational qualification in renovation, qualification as technical supervisor, Bachelor of Hospitality Management, Master of Social Sciences, continuing education programmes in management
Examples of duties	Engineer, material planner, project manager, buyer, purchasing manager, forwarding assistant, key account manager, senior manager, purchasing and development manager, cleaning service manager, managing director

The heterogeneous backgrounds of the students were translated into an enriching aspect when planning the education. We started from the idea that the different background of the group, specifically in relation to work experience, should be utilised in the teaching as much as possible. The sharing of students' personal experiences and practices within the group became a central concept in the education. Purely theory-focused lectures were delivered in a fairly tight fact-sheet type mode, after which the subject matter was discussed utilising the students' experiences. The method described provided us with valuable information for the group and the instructors on different practical application models and enabled us to engage the students in the learning situation more actively. The students' interest in the themes discussed also remained high, as they felt that they were getting new ideas and practical implementation models from existing organisations.

GENUINE DESIRE AND ENTHUSIASM TO IMPROVE COMPETENCE

On the whole, it can be said that all the students had a unanimous objective in respect of the education. Regardless of the students' educational/work experience background or personal situation, all of them were actively involved in developing their competence. Studying alongside work requires

that the students prioritise their use of time in many situations, and that they have the right kind of attitude towards studying. The group had this right kind of attitude.

The students who had more solid experience of purchasing, found the themes more familiar than was the case for students with less work experience of the field, but these more experienced persons, too, participated in the teaching enthusiastically. The more experienced students shared their experiences willingly and gave tips to their more inexperienced student colleagues. During the education programme, there was no frustration observed among experienced students to the discussion of "self-evident " matters. On the contrary, they experienced the opportunity to discuss and exchange ideas with peers and instructors as positive.

INTERACTION AT THE CORE

A positive spirit pervaded the group throughout the studies. On the whole, it can be said that the students found the seminar days to be one of the most positive aspects of the Diploma of Higher Education programme for purchasing professionals. Interactive seminar days, including discussions, worked very well in this group. Networking and exchanging new points of view and ideas in the group was indeed one of the main objectives of the education, and in this it succeeded very well.

There is seldom a single "right" way of doing things in purchasing; rather each organisation applies procedures in a way that is most appropriate for them. From this point of view, the ideas shared and the discussions held in the group supported learning very well.

5.4 PURCHASING COMPETENCE AS DIPLOMA OF HIGHER EDUCATION TRAINING

The basic task of JAMK University of Applied Sciences is to implement both higher education and applied research to the needs of working life, whilst taking into account regional development work (Degree Regulations of JAMK University of Applied Sciences 2015). Our university of applied sciences also promotes lifelong learning. At the beginning of the article, the importance of purchasing activities and growth in the need for purchasing competence was discussed. It is important for universities of applied sciences to observe changes in the needs of working life and to take them into account both in implementation and in content.

In planning the purchasing professional education, changes in the field were taken into account in order to meet the needs of working life. The contents of the education was made up of courses which developed the participants' purchasing competence. Competence was developed by means of individual development tasks, which the students adapted to their own work or focused, according to their own interest, to a particular theme in order to expand their know-how. The implementation of the teaching was flexible and individual. It can be justifiably stated that the education has met the changing competence requirements of working life extremely well.

According to the development plan of the Ministry of Education and Culture drawn up for 2011–2016, education policy will be built on the principle of lifelong learning (Koulutus ja tutkimus 2011–2016, 2012 ("Education and Research 2011–2016", 2012)). In practice, this means that learning does not end with a qualification; rather it continues throughout the individual's entire adult life. The participants in the purchasing professional education are individuals who have already previously completed degrees or qualifications of various levels. The principle of the lifelong learning was realised in practice when the participants in the programme improved their personal purchasing competence.

The programme partnered with working life in implementing the seminar days. At some of the lectures, company representatives shared their experiences and knowledge. In addition, the company visits enabled dialogue between representatives of working life and the students. The purchasing professional education also contributed to furthering regional development work, as some of the participants worked in organisations in the area carrying out development tasks, which were part of the studies, in their place of work. This approach enables intra-organisation competence development that takes place with the development of individuals.

5.5 AGILE PILOT WORTHWHILE

POSITIVE SUCCESS

On the whole, we can state from the implementer's point of view that the purchasing professional education has been a success. Official and unofficial feedback received from the students supports this belief. The planning and implementation of a new type of training package is naturally always challenging, and there certain things that we would do differently in the future, thus the implementers, too, have learned a great deal.

Generally speaking, we are nevertheless satisfied with the programme, as we felt that the students' competence has developed significantly during the studies. For example, three of the students were promoted to duties relating to purchasing during the course of the studies, and one unemployed student found employment. The education affects the students through growth in self-confidence especially: through the studies the individual developed into a professional in the field and was able to have more say in their duties and develop the work.

LET'S DARE TO TRY SOMETHING NEW AND TAKE A LEAP IN THE FUTURE TOO

The purchasing professional programme was organised mainly by two instructors, who enabled compact and agile planning, and implementation. We dared to bravely try new, unfamiliar teaching methods and ventured into situations without being entirely sure of succeeding. Specialists from JAMK University of Applied Sciences' Teacher Education College were used as sparring partners when new teaching methods were tried, and the tips they provided created belief that the pilot would succeed. The group was also highly receptive and open to new experiments, which facilitated the success of the new methods.

The successful experiments created belief in the future, too, and that bravely venturing into the "discomfort zone" would develop the teaching staff for the future. Not everything has to be always tried and tested. Sometimes, there is always that first time. A crucial insight also was that the teachers were required to think in a new way – not compare the learning outcomes to a degree requirements, but to how much the studies develop individual's competence. The students' backgrounds differ considerably in Diploma of Higher Education programmes. The Diploma of Higher Education programme develops the competence of all the students in a clearly defined manner, thorough competence module of 60 ECTS cr.

GOOD TO LEARN ABOUT MULTIFORM LEARNING AND ADULT EDUCATION

Finnish adults rank near the top in Europe with regard to enthusiasm for studying. On the basis of the latest information available, 56 per cent, i.e. more than every second Finn participates in adult learning. (Nevalainen 2015.)

The popularity of multiform adult education is considerable in Finland at the moment, as the above quote from an article in the newspaper *Keskisuomalainen* reports. The purchasing professional Diploma of Higher Education programme

provided JAMK University of Applied Sciences University of Applied Sciences (JAMK) with an excellent lesson and experience in organising this type of education. Programmes implemented in multiform will continue to grow in JAMK's offering, and therefore the experience gained from this programme will be useful in organising similar studies in the future.

One of the greatest challenges for adults and individuals studying alongside work is undoubtedly maintaining motivation throughout the studies. In many cases, at the start of studies motivation is high. A key theme, therefore, is maintaining this motivation as the studies progress. The role successful seminar days is clear in this context. The careful planning and appropriate realisation of these was highlighted.

An education package that is reasonable in terms of scope is important from a success perspective. A full degree is often too demanding option alongside work if a potential student is seeking additional competence and already has a good degree. Further education lasting a few days may, however, be too weak from the perspective of developing competence. The scope of Diploma of Higher Education studies was regarded as suitable.

AGILITY – REACTION TO THE NEEDS OF WORKING LIFE AND CUSTOMERS

Agility – one of the trend words in current organisation management. In this context, agility can be considered to have been achieved both in the cooperation between the small and close-knit team of implementers and in the intrepid attitude in implementing new pilots. The lack of the content and implementation structure of a ready-made programme brought with it, in part as a given, a flexible and adaptable approach. The feedback and suggestions given by the group as the studies progressed provided guidelines for planning the next seminar days. The main themes of the studies were, of course, planned in advance, but they were precisely targeted at the existing need as the studies progressed.

Capability of client-oriented (student-oriented) planning and implementation contributed to the success of this education. Agility was realised in these studies, as the training model enabled fast reaction to working life needs, planning of programme and start. As an organisation, a university of applied sciences is well equipped, with its specialists, infrastructure and existing competence, for an approach such as this. Implementation though open studies will increase the availability of the programme, as the cost of customised commercial education programmes may be too high for many belonging to the target group.

NEED FOR PURCHASING COMPETENCE EXISTS

The further expansion of purchasing studies is a fairly large focus area in JAMK's offering at the moment. Hence, from this perspective, the project serves all of JAMK's activities. A fundamental objective of the instructors is the development of purchasing competence in Finland in various education programmes, one application of which is represented by education of this kind. We know that there will be a demand for purchasing education in the future, too, and therefore what has been learned from this project will provide essential experience in realising programmes in the future.

Many of the participants had solid work experience, a good basic education, but shortcomings in purchasing competence. As the participants came from different organisations and different jobs, and effort was focused on networking and peer learning, realisation of the education simultaneously increased purchasing competence nationwide. This was one of the programmes more important outcomes. Training tailored to a narrower target group would not have had the same impact.

The purchasing professional module serves the development of purchasing education both in the traditional daytime studies of bachelor degree programmes, in multiform education and in part-time master programmes. The learnings related to adults studying alongside work were especially important. How then to build an education package where, without compromising on learning objectives, a functional, motivating approach can be created, which students will recommend in their own networks?

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6 HR AND FINANCIAL SPECIALIST

Maija Haaranen, Ari Karsikas & Pertti Pernu

6.1 STARTING POINTS OF THE PROGRAMME

The degree programme in Business Management realised HR and financial specialist studies in the Diploma of Higher Education project financed by the Ministry of Education and Culture. The decision to start the training was made at the end of 2013, the content was confirmed at the beginning of 2014 and the main theme and principles of the studies were confirmed in early spring 2014. The motto chosen for the education was "Management by Figures." This means that familiarity with financial key figures and indicators can enable the improvement and effectiveness of supervisory work and management.

On the basis of earlier interviews, comments of the advisory committee of the School of Business and an anticipatory survey, individuals in working life who rapidly needed new competence in the subject area were defined as the primary target group for HR and financial specialist Diploma of Higher Education training. Individuals who were changing their field or profession, or who were unemployed were designated as a secondary target group. Initially, the number of students aimed at was 20 but, on account of high demand, we increased the number of students to 25. Three of the students came from outside Central Finland. The Diploma of Higher Education studies differed from degree education, specifically in that the students were not selected through entrance examinations; instead individuals who wanted to participate in the studies were selected in order of registration in line with the procedure of the open UAS. This may have contributed to the fact that student turnover was considerable at the beginning of the studies.

The scope of the training was planned to be 90 ECTS cr., but it would not have been possible to implement such an extensive programme during a period of 16 months, from August 2014 to December 2015. We decided on 60 ECTS cr. and, for the first time, we implemented guidance and teaching entirely online. We also added a small-scale mentoring pilot as a new learning element for the four selected students.

In March 2014, we set for the studies and for learning eight qualitative targets: (1) flexible structure for supplementing competence; (2) accessibility, i.e. place of residence does not affect studies; (3) need-oriented approach, i.e. the labour market and the individuals in training have a need for the selected competence areas; (4) competence and learning achieved faster; (5) year-round studying, i.e. 16 month-long uninterrupted studies; (6) tutoring (teacher) and mentoring (substance specialist) are combined in guidance; (7) online learning path continues to degree education in 2015 and (8) testing of new learning and guidance methods.

A quantitative target of 17 Diplomas of Higher Education was set. The target was obtained from the average graduation percentage at JAMK University of Applied Sciences, which is approximately 70%. The quantitative target will not be met, as by the end of 2015, some 10–11 students will probably graduate, and at the end of spring 2016, the number of graduates is estimated to be 15. The number of students who started the studies was not actually 25, the figure on the basis of which 70% was calculated. The result regarding the graduates is good as, in line with the principles of open studies, we did not select students, for example, on the basis of entrance examinations or other criteria; rather anyone who had paid the study fee could begin the studies. The overall picture of effectiveness was extended by the Institute for Educational Research's interim report, which gave encouraging results in 2015 (Aittola, Siekkinen and Välimaa 2015).

6.2 STRONG SIGNALS REGARDING COMPETENCE NEEDS

The need for individuals in working life to obtain training rapidly and flexibly has brought the university of applied sciences (UAS) a new type of customer base. Even five years ago it was relatively rare to receive communications directly from the companies' specialists regarding individual courses or study modules in business administration. It seems that medium-sized and large companies have become accustomed to using commercial service providers in further education, and now commercial providers have been joined by open UAS education. The UAS has relatively little research information on the further education of employees in small-sized companies.

Employees' independent training through UAS Open Studies has increased and the reasons for this are intensified marketing, increased offering and the availability of more flexible studies without classroom learning. In the HR and financial specialist Diploma of Higher Education training, it was decided right in the early stages of planning to realise the studies online. The decision was

influenced in particular by the feedback received from individuals applying for the Bachelor of Business Administration degree programme and from adult and multiform students studying in the degree programme. The availability of training has been a clear shortcoming, as higher education is concentrated in the cities (Versatile and Smooth Study Paths 2013, 38) and the methods of study have favoured especially those who are not actively involved in working life.

Education planning and communication emphasised that the studies correspond in terms of content to those in the Bachelor of Business Administration programme. Students can utilise the Diploma of Higher Education studies in full if they apply later to become a degree student through the entrance examination or through the open study path. Altogether, 25 students were selected through the open study path for the Business Administration programme in 2015.

6.3 COSTS OF EDUCATION

The cost of realising the courses was not cheaper than in the degree programme, as only the rent-related costs were lower. The longer-term advantages were numerous courses produced for the first time in the programme as an online version. In this way, the Diploma of Higher Education developed implementation models for degree education too. The faster graduation of the students seeking a degree through this education reduces training costs and the recipients of the benefits are the student, the labour market and the educational institute.

TABLE 1. Background information of students in HR and financial specialist education	
Highest educational level attained	Vocational 71% Bachelor's degree 21% Master's degree 8%
Proportion of women	79%
Average age	43 years
Examples of completed studies	vocational qualification in business administration and marketing, qualification in business and administration, qualification in payroll accounting, further qualification in institutional cleaning, Bachelor of Business Administration, agronomist, specialisation studies in meeting and congress services (BBA) management, specialisation studies in security (BBA), specialist qualification in management, continuing education programmes in accounting and management
Examples of jobs	sales secretary, office assistant, technical sales assistant, administration manager, director of human resources, sales service supervisor, chief financial officer, safety coordinator, psychologist, human resources specialist, counsellor

6.4 PLANNING AND REALISATION OF COURSES FROM THE TEACHER'S PERSPECTIVE

Bowen (2013, 45) considers that now is the right time for online learning: "Increasingly wide access to the Internet, growth of Internet connection speeds, rapid spread and development of mobile devices and a mindset change that online learning can lead to a least as good learning outcomes as in face-to-face learning but at lower cost." However, there is no absolute proof that one mode of learning is superior to the other. On account of its flexibility, online learning in the Diploma of Higher Education pilot was viewed as being eminently suitable for the Ministry of Education and Culture's framework on the openness and accessibility of education.

Senior Lecturers Maija Haaranen and Ari Karsikas were the teachers, and they had a significant number of courses. Karsikas also acted as the group's career tutor. Nine teachers were usually involved. In addition, Head of Department Pertti Pernu participated in the wider development of Diplomas of Higher Education at JAMK University of Applied Sciences.

Ms Haaranen had previous experience of implementing a number of online courses. In spite of her experience, she found it challenging to change management themes and contents into online learning. Mr Karsikas did not

have prior experience of implementing online courses, but the starting of planning sufficiently early, in the spring of 2014, made it easier for him to familiarise himself with the work.

A number of the individuals selected for the final student group had strong know-how in the content of the studies (see Table 1). The preliminary assignment aimed at the students, which provided information on their backgrounds, experience and objectives, helped in planning the courses. As a counterbalance to its flexibility and reachability, online pedagogics requires from both teacher and students an approach to working that differs from traditional education. The aim was for the students to study on the basis of the material on the Optima learning platform, and separate online learning webinars would not be arranged. This was highlighted because the students worked and were therefore busy.

The preparation of the curriculum and the appointment of teachers well beforehand provided time to plan the pedagogics for the courses. Overall, it is emphasised in realising online courses that the course should be of a high standard in terms of content and quality, even though teacher and student are not face-to-face. For this reason, advance information had to be provided on the course content and, when opened in an online learning workspace, the module, including tasks, should emerge in front of the student. If the course progresses in week-specific themes and tasks, the material for each week can open at the beginning of the week in question. It emerged in the feedback that a weekly rhythm is eminently suited to the students' busy daily lives.

Ms Haaranen conducted an anticipatory survey before the courses started which ascertained the students' knowledge of the content and themes of the course. This significantly facilitated planning of the courses for the target group. It is worth asking about learning experiences during the course and collecting summarising feedback at the end of the course. Utilisation of the feedback and the students' self-assessment were regarded as significant factors in creating a successful learning experience.

The main changes as the curriculum progressed were the number of tasks, the working life-orientedness of the tasks, the deadlines for returning them and the teacher becoming "closer" – in other words, contact with the teacher was missed when studying online. The level of the background knowledge of the group was high, therefore each student spent in studying the number of hours which corresponded to the extent of their know-how using the Optima learning management system (LMS). Ms Haaranen made a video which presented the themes of the studies and introduced the students to course content. The

teacher became familiar to the students, and the core points in the course were communicated to them in a way that increased their motivation.

The teacher divided the course contents in weekly themes, including tasks, in such a way that the result was a consistent whole. Effort was put into the informative contents visually, too, such as by using descriptions that opened the topic up, examples, links and additional materials. Ms Haaranen also used discussion-type and open task solutions, so that it was possible to share know-how. The background to all the tasks was the need and possibility to immediately apply the studied theme to the individual student's assignments. Ms Haaranen approach received excellent feedback, and even the most experienced experts reported that they had learned a lot of new things.

TABLE 2. Outcome factors in courses within the Diploma of Higher Education in HR and financial specialist

STUDENT	**TEACHER**
Motivation and goal-orientedness	Online pedagogy
Time management	Content planning
Resourcing	Working life-orientedness
ICT skills	Enrichment and regulation

6.5 TUTORING AND MENTORING AS SUPPORT FOR ONLINE STUDENTS

One of the key aims of tutoring had been to help the students to graduate. The teachers endeavoured to help the students in challenges they encountered quickly, as and when issues come up. One workable tool in tutoring was a monitoring chart, by means of which the progress of each student's studies was monitored. With the help of colour codes it was possible to quickly get a good general idea of how the studies had progressed in respect of each student.

The students were activated in good time by getting in touch with them if course assignments had not been returned, the student did not participate in the studies or the courses were not completed. It was not possible however to completely avoid cases where students dropped out, as the amount of work required by the studies may have been a surprise for some individuals, and combining the studies with work and family life too demanding.

It also was decided to pilot mentoring in the education as a tool for professional development. Mentoring is a personal and versatile method of

professional development, the strength of which is considered to lie in its personal nature. The mentoring process proceeds according to the needs, wishes and objectives of the mentee, and the method is particularly suitable for active individuals who want to develop. Four mentees, i.e. individuals that would be mentored, were chosen from among the students. A joint introduction event at which mentoring and its rules were gone through was arranged. Senior Lecturers Maija Haaranen, Ari Karsikas and Erica Svärd from JAMK University of Applied Sciences served as mentors.

6.6 STUDENTS' FEEDBACK AND DEVELOPMENT IDEAS

It emerged from the students' feedback that they wanted more interaction. Adding, for example, video conferencing times during courses could help with this. The students found time management challenging and, in particular, those who worked wanted respites sometimes. The summer break was regarded as important. Attention should be paid to the above-mentioned issues in the future.

In the students' view, some of the things which worked best in the online studies were, for example, the excellent materials, the discussion tasks, flexibility and the practice-oriented tasks. The Optima workspace was considered good and easy to use. The reachability of the teachers was considered good, and being able to deal with issues outside so-called "office hours" was regarded as positive.

One challenge that came up was the number of e-mails in the students' control. One solution to the e-mail problem was a question site, to which the students were asked to send all questions relating to the course. It was also possible for other students to answer questions in the question column. The e-mails stopped almost entirely, and frequently the students answered each other's questions even before the teacher. This eased the teacher's work load significantly, and the solution was undoubtedly better for the students too. Furthermore, the self-correcting tasks that automatically guide the student appear to work well in online courses, as the student receives feedback quickly.

6.7 ATTAINMENT OF THE GOALS OF THE EDUCATION

We succeeded in creating a flexible construct for supplementing competence and, for example, place of residence was not a barrier to studying. The brisk demand for the training showed that there is a need for the selected programme and that the students can quickly utilise their competence in their

work. The training was year-round, as it was spaced over 16 months without a proper break. Tutoring was highlighted more than anticipated when contact teaching was lacking, and the students were able to help each other via the Internet more quickly than the actual career tutor. Instead of the original four students, only one was committed to the mentoring process, probably because, according to our experience, mentoring works better in workplaces than in a studying environment. Two students began the degree programme in the autumn of 2015 and we are expecting a few of the students who went through the Diploma of Higher Education programme to become degree students via the open study path in autumn 2016.

The education pilot provided a significant amount of new information about online teaching and guidance. The so-called self-correcting tasks that guide the student moved into wider use. With digitalisation, the automation of tasks accelerates learning, and the method will be disseminated to other courses. HR and financial specialist theories were introduced, for example, in the curriculum, guidance and course implementation of the multiform group for degree students that had begun in August 2015. With the pilot, closer integration of management and financial aspects was emphasised in planning the education, as these competence areas combine in the labour market and work tasks merge into a natural whole.

The quantitative graduation target is not being reached. Approximately 19 students, of whom 15 may complete the Diploma of Higher Education participated actively in the training, while the target was 17 graduates. The target was very ambitious for the student group. The fact that the studies did not involve an entrance examination or other elimination and that the studies required a significant investment time-wise alongside work and family – which may have surprised some of the students – may have played a role in this. In addition, studying in the online programme was highly independent. Based on these experiences, the Diploma of Higher Education studies corresponded to the needs of working life well, and the studies can unreservedly be recommended as a flexible way to increase competence in working life.

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7 AGRICULTURAL ENTREPRENEUR BUSINESS COMPETENCE

Jaana Auer

7.1 TOOLS FOR THE TRANSITION IN AGRICULTURE

Agriculture in Finland is undergoing major changes. The operating environment is changing continuously and at an ever-increasing pace. As the environment changes, agricultural entrepreneurs will need skills to adapt their operations. Entrepreneurs will have to intensify and expand production, invest in the latest technology, seek new, more profitable products, concentrate or slice up their business. (Rikkonen, Toikkanen & Väre 2013).

Due to the intense strong structural change in the industry, the size of farms is increasing. As the size of the business grows, the critical success factors change as well. In a one-person enterprise success often depends on know-how and diligence; in a family enterprise on the functionality of cooperation. In small enterprises management is emphasised, and the bigger the company, the more important formal organisations, job descriptions and management systems become. When the size of a company increases, management of production processes, financial management and personnel management becomes ever more demanding and the entrepreneur will need good management skills. However, there are farms which are redirecting their production and expanding the diversity of their operations outside agriculture. In that case, the entrepreneur will need a new perspective and skills in managing and developing their company.

Business competence refers to the entrepreneur's ability to position their business in the operating environment proactively, whilst anticipating changes in the environment. Business competence includes identification of personal success factors in relation to competitors and carrying out business through a management and revenue model which generates a competitive edge. Business competence consists of operative, strategic and visionary management in an enterprise. (Ibid.)

The agricultural entrepreneur business competence Diploma of Higher Education programme for agricultural entrepreneurs aimed to offer practically-oriented training and tools to develop farm processes, control finances and

manage farm businesses. The education was aimed at individuals who want to develop their farm's production by expanding or seeking better profitability by improving production processes or diversifying their farm's operations. Individuals intending to begin practising agriculture and who lack the vocational education required for young farmer's start-up support were regarded as one key target group.

7.2 IMPLEMENTATION OF AGRICULTURAL ENTREPRENEUR BUSINESS COMPETENCE PROGRAMME

The main idea was that participants in the training would be offered certain courses in the Bachelor's Degree Programme in Agricultural and Rural Industries, from which they could put together the package they wanted. The target scope of the education was 60 ECTS cr. and altogether 71 ECTS cr. were offered. In addition, an opportunity was given to choose other courses offered by the university of applied sciences, such as studies in data communications and technology. Dispensing with freedom of choice was appropriate, as those individuals participating in the training who aimed at the 30 ECTS cr. worth of studies required for young farmer's start-up support were able to choose at least 15 ECTS cr. worth of studies relating to economics and at least 15 ECTS cr. worth of studies in subjects relating to the production sector in which the farm was involved. No one, however, was compelled to study, for example, domestic animal production if it was not, taking into account the farm's production sector, a subject of interest. The students always made the choices before the start of the semester.

The course offering consisted of the following courses:

- Knowledge of the operational environment 5 ECTS credits
- Business competence 6 ECTS cr.
- Personnel as a resource 5 ECTS cr.
- Basic fodder cultivation methods 9 ECTS cr.
- Planning of plant production 9 ECTS cr.
- Feeding and breeding of production animals 8 ECTS cr.
- Planning of domestic animal production 9 ECTS cr.
- Farm economy accounting and taxation 5 ECTS cr.

- EU subsidies for agriculture and applying for them 5 ECTS cr.
- Strategic and operational management of a company 10 ECTS cr.

Senior Lecturer Jaana Auer was responsible for planning and compiling the course offering. The courses were implemented by Ilpo Värre, Mari Hakkarainen and Jaana Auer, Senior Lecturers in entrepreneurship; Mirja Riipinen, Senior Lecturer in domestic animal production; Erkki Anttonen, Senior Lecturer in plant production; Hanna Kaihlajärvi, Project Manager and Toni Haapakoski, part-time Visiting Lecturer in agricultural technology.

The courses were implemented in practice in such a way that the individual participating in the training joined, in accordance with his or her choice of courses, the teaching groups for daytime students in the bachelor's degree programme at JAMK's Institute of Bioeconomy in Saarijärvi and completed the same courses as the other students in the group. The students thus participated in the degree students' courses in an integrated manner and independently, and did not form a separate group.

The courses were implemented in the form of contact teaching and independent study, but it was possible to complete the studies alongside work. The contact hours were recorded using the Adobe Connect Pro video conferencing tool and the students were able to follow online lectures at the time and in the place they wanted. The recordings were not edited. It was also possible to participate in the seminars, but the distances did not allow this in practice.

The studies did not include compulsory seminars. The only contact occasion was the programme's kick-off event in August 2014, when the content of the education, the content of the various courses and the principles for completing the studies were gone through and the use of the Optima online learning environment was shown. The students also got to know each other, told the others about themselves and about their personal goals regarding the studies.

It was unfortunate that of the 15 students who had started the training only 6 were present at the only contact meeting. The participants were from such different parts of Finland and locations around the world that they were unable to attend the kick-off day. After the kick-off event, everyone was instructed on the progression of the training and study methods via e-mail, by means of joint as well as personal e-mail messages. In addition, the kick-off lesson of each course included a presentation of the course plan in which the objectives, methods of completion and assessment criteria were presented and agreed

on with the student group. The students also drew up personal learning plans where they selected the courses they would take.

In the Optima virtual learning environment, each course had its own work space, which contained the course plans, course materials, learning tasks and feedback boxes as well as recordings of lectures. Group work and online examinations were carried out in Optima in some courses. Communication and discussion was also carried out in Optima, as well as through e-mail. Also feedback on performances was given via Optima.

Students could take an examination by independently arranging an invigilated event in the locality in which they lived, for example, in conjunction with public examination events held at a local educational institution. The learning tasks were very practice-oriented and of a type in which the student could often use their own farm as a target company. It was therefore possible for a participant in the training to make various plans for use in his or her own company, such as a cultivation plan, feeding plan, financial and investment plan for the whole farm, which usually increases motivation to complete a task, as it benefits the participant right away. Responsibility for guiding the studies lay with the course tutor for each course.

TABLE 1. Background information of students in agricultural entrepreneur business competence education

Highest educational level attained	Vocational / upper secondary school 44% Bachelor's degree 12% Master's degree 44%
Proportion of women	63%
Average age	37
Examples of completed studies	vocational qualification in agriculture, Master of Science in Agriculture and Forestry Bachelor of Engineering, specialist vocational qualification in entrepreneurship, studies in educational sciences, social services and healthcare studies, vocational qualification in wood processing
Examples of duties	farmer, entrepreneur, early childhood educator, sales manager, laboratory assistant, marketing manager, engineer

A total of 16 students, whose background information is shown in Table 1, started the training. The students were mainly from outside Central Finland. The group included a number of individuals who needed the studies in order to meet the education requirements to receive young farmer's start-up support. This training was included in the Diploma of Higher Education Studies.

7.3 ASSESSMENT OF THE RESULTS OF THE CHALLENGING IMPLEMENTATION

Of the 16 students who joined the programme, three left early on because of work pressures or because of failure to pay the study fee. By November 2015, seven students had accumulated 9–41 ECTS cr. and, at the time of writing this, two have the chance of completing the 60 ECTS cr. required to receive the Diploma of Higher Education. The overall outcome therefore does not meet the targets.

There are several reasons for the poor end result. The idea of implementing the training in conjunction with the degree student groups was manifestly wrong. The selected method of implementation was based on experience obtained over the years when the courses included students pursuing the required studies to qualify them for young farmer's start-up support via the open UAS, and which they had succeeded in completing according to plan. Now, both the number of students and the need for guidance was too great. The students' varying studying skills and work pressure often resulted in failure to complete the courses.

Completion of the courses in the Diploma of Higher Education pilot did not succeed in the way hoped for. Responsibility for guiding the studies had been split between the course tutor for each course, in which case overall contact with the students was lacking. The agricultural entrepreneur business competence programme should have been organised in the form of a separate group receiving closer guidance. Although the method now implemented is cost-effective, the results have been disappointing.

The unedited recordings of contact lessons have not been of sufficiently high quality to encourage the students to listen to them. As the implementations and performances of the courses were not adapted in any way to the Diploma of Higher Education students, the number and scope of the tasks and the amount of work apparently surprised those students who, in addition to working, studied too. It was difficult for them to keep up with the course schedules. Also the level of difficulty of the studies was obviously higher than the practice-oriented farmers expected. Studies in the open UAS are part of the degree programmes, with their same level of difficulty. In other words, it was clear that the quality of the education would not be compromised.

The scope of the training package was 60 ECTS cr., which has proved too great a number for agricultural entrepreneurs to complete during one and a half years, in addition to working. The group was highly heterogeneous, and groups did not form spontaneously. The lack of group support and contact

studying has undoubtedly contributed to the fact that it has been easy to drop out of the studies. Online learning was new for many of the students, and brought an additional challenge to completing the studies. Moreover, on the basis of the feedback surveys, it is known that some students have dropped out on account of their own serious illness or that of their next-of-kin. The greatest obstacle, however, has been pressure of work, in which case there has not been sufficient time to study. The pilot has, however, made it possible to study and develop business competence regardless of time or place – even from the other side of the world – when the student has the right kind of motivation and studying skills.

7.4 DEVELOPMENT PROPOSALS

On the basis of the pilot, there is a need for and interest in development education in agricultural entrepreneur business competence. Individuals who are already working in the field and are intensively developing their farm, as well as those coming into the industry who lack vocational training want to participate in the education. Moreover, individuals working in agriculture development want to train.

The 60 credit scope of the Diploma of Higher Education programme is too extensive to be completed during a period of 1.5 years in this sector. Either the scope or the duration must change. The implementation of online studies should be planned to take those being trained into account more, in other words, the education should be planned to suit a separate group. JAMK's Bachelor's Degree Programme in Agricultural and Rural Industries started in the form of multiform studies in the autumn of 2015. Students in the open UAS can probably study through this group in the future, as the forms of its implementation are more suitable for individuals studying alongside work or in another locality than are so-called daytime studies. The costs may rise, but the results and the customer satisfaction will improve. More effort must be also be devoted to study guidance and the formation of groups than was the case in the pilot.

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8 DIPLOMA OF HIGHER EDUCATION FROM THE PERSPECTIVE OF JAMK, STAKEHOLDERS AND INTERNATIONAL HIGHER EDUCATION INSTITUTES

Elina Kirjalainen & Tytti Pintilä

8.1 STAKEHOLDER PERSPECTIVES ON THE DIPLOMA OF HIGHER EDUCATION

A public debate arose about the Diploma of Higher Education pilot already during the preparatory phase of the Ministry of Education and Culture's proposal. There was a debate about the new two-year "mini degree" and its necessity. There was concern about, for example, the short-cycle degree's relation to qualification requirements and the position on the labour market of individuals who had completed it. (e.g. YLE news, 14 February 2013, statements issued on the memorandum).

As reported above, the Ministry of Education and Culture 's proposal does not mention degrees; rather recognisable competence modules structured from parts of degrees, which are narrower in scope than actual degrees. The aim of this was to increase the diversity of the offering of higher education institutes in areas other than studies leading to a degree. (Versatile and Smooth Study Paths 2013, 38).

When the pilot started, many quarters were fairly critical of Diplomas of Higher Education and of their need in the Finnish educational structure. On the other hand, the same stakeholders have pointed out that higher education institutes should respond more quickly and flexibly to the needs of working life. Employee and employer organisations, among others, have been interested in the progress of the pilot from the outset, and therefore the representatives of the Confederation of Unions for Professional and Managerial Staff in Finland (Akava), the Confederation of Finnish Industries (EK) and the Finnish Confederation of Professionals (STTK) were asked to join the project's the steering group too (see composition of the steering group, Appendix 1).

Parliament, too, debated the Diploma of Higher Education on two occasions: in April and in October 2014, as two Members of Parliament

submitted written questions to the Minister of Education and Culture Krista Kiuru, and she responded to them by clarifying the backgrounds to and pertinence of the Diploma of Higher Education pilot (Sarkomaa 2014, Vahasalo 2014). Public debate was encouraged by organising seminars in March 2014 and in August 2014 and by inviting representatives of a wide range of various stakeholders to participate. In particular, the publication of the interim report on the follow-up study by FIER in Helsinki in February 2015 gathered a large group of higher education policymakers.

The labour market organisations have brought opinions from various perspectives regarding the development of the Diploma of Higher Education model – in a highly critical way too. In addition to the relation between the Diploma of Higher Education and formal degrees, discussion has also been provoked by the model's relationship to the fee-based continuing education provided by higher education institutes or the private sector, and positioning in specialisation education programmes (see Table 1). The recognisability of the Diploma of Higher Education alongside other education models has been a subject of consideration. The labour market organisations, especially, have brought up the fact that in future it will be important in education of this kind for different fields to cooperate in an open-minded manner and, in particular, for different institutes of higher education as part of the joint development work of the open UAS. Criticism has decreased with clarification of the model of implementing the Diploma of Higher Education, and the feedback obtained through the members of the steering group at the end of the pilot has been positive:

> *"A need for new, academic-level competence modules is growing, as the labour market is changing and the requirements for work are increasing. Post-secondary degree graduates lack paths for developing their competence, but by the same token, those who have completed a vocational qualification benefit from developing competence at an academic level."*

Likewise, many organisations representing students, such the General Assembly of the National Union of University Students in Finland (SYL), had already decided before the start of the pilot to resist "the planned two-year short-cycle degrees, in other words, Diplomas of Higher Education" (Sylofoni 7/2013). The student union JAMKO's education policy representative was invited to the project's steering group and representatives of student organisations to the interim seminar. As a whole, the debate and the criticism

questioning the need for the entire model has settled down during the pilot when it has been understood that the issue is an education package starting from working life and competence needs, not a new degree as part of the education system.

JAMK University of Applied Sciences provided information about the pilot to Central Finland Employment and Economic Development Office, and a representative of the EED Office has participated in the project's steering group. The rate of unemployment and the proportion of unemployed people with tertiary-level degrees in Central Finland is among the highest in the country. Few unemployed individuals primarily need a new degree. Individual study modules and courses, however, are not sufficiently comprehensive from the point of view of updating competence. Open higher education is a familiar path to studying for many unemployed people but, according to the experience raised by the Office, in the steering group discussions completion of university basic studies does not often as such improve employment.

An unemployed jobseeker can participate in studies at the moment only on a highly case-by-case basis. It is possible for an individual below the age of 25 to study if the studies can be carried out part-time (fewer than 5 ECTS credits per month), in which case they will not affect unemployment benefits. An unemployed person can pursue studies under certain conditions. The practices in this varied considerably in different parts of the country.

During the project, Central Finland's EED Office has given feedback that education for the employed needs specifically this type of open, sufficiently comprehensive competence modules where the requirements of regional working life have been considered, and corresponding options have not been available. A certificate of education and competence is also regarded as important.

In addition to the representatives of the EED Office and labour market organisations, the steering group included representatives of working life from every company or organisation close to the Diploma of Higher Education training. They were kept abreast of the progress of the pilot during the project and they were asked to comment on the implementation, content and significance in the labour market of the programmes from the standpoint of working life. Positive feedback was received from the steering group's business life representatives stating, in particular, that the education is a clear package planned in a competence-based way, which provides sufficiently deep but delineated know-how. Moderate student fees were also regarded as important for enabling participation. From the perspective of working life,

60 ECTS cr. appears to be in the upper limit in terms of scope. It was also appreciated that the model enables the relatively fast planning and launch of training on a needs-oriented basis. As a representative of working life in the steering group commented:

> *"It seems to me that this Diploma of Higher Education would be eminently suitable for our field, for example. It often happens that we forget to update know-how and skills under the pressure of working life, although we should take care of these. When we sell specialist services that aspect is highlighted even more. I also believe that under that title and those objectives the bar is set high enough to enable many employees to reach a totally new level in their work. Experienced employees who have seen working life for number of years have a great deal of potential to develop and learn new things. It is easy to apply what has been learned in practice. Both employees and employers will undoubtedly benefit from this kind of self-development."*

Most of the criticism in the debate has focused on how employers identify the competence training mode and recognise its status in relation to other education programmes. The matter was also discussed in the follow-up and evaluation study, which includes a number of employer interviews. Meetings of the steering group were monitored by the representatives of FIER as part of the follow-up and evaluation study.

8.2 DIPLOMA OF HIGHER EDUCATION AS A PART OF INTERNATIONAL DEVELOPMENT

The characteristics of the Diploma of higher education and the needs intended to be addressed with it closely follow international development. For this reason, information and contacts, too, were sought during the pilot from the international field of education. In Europe, corresponding education programmes, both in the International Standard Classification of Education (ISCED) and in the European Qualifications Framework (EQF), mainly rank level 5. During the Diploma of Higher Education project, at the Bologna Process Ministerial Conference in Yerevan held in May 2015, short-cycle higher education programmes, SCHEs, were approved as part of the EQF framework for level 5. All of the countries committed to the Process shall identify and recognise competence provided by an SCHE (Yerevan Ministerial Communique 2015, 4).

With the Diploma of Higher Education project, not only the Bologna Process situation but also the recommendations and reports of EURASHE have been closely followed. EURASHE is a broad organisation of professionally oriented institutes of higher education, which is also closely engaged in the Bologna Process. EURASHE prepared a report on level 5 studies (Kirsch, M. & Beernaert Y. 2011), on which the memorandum Versatile and Smooth Study Paths relies. For example, at the Annual Conference held in Lisbon in May 2015, it was tangibly apparent how commonplace and recognised SCHE education programmes are at universities of applied sciences.

On account of its objectives and implementation model, the Diploma of Higher Education can be compared to SCHE programmes, although Finnish UAS degrees correspond to level 6. Approximately half of EQF level 5 education programmes are, in the same way as the Diploma of Higher Education, academic short-cycle higher education programmes (SCHE) and the remainder are within the sphere of vocational education in the same way as a Finnish specialist qualification (Qualifications at level 5: progressing in a career or to higher education 2014, 106). According to the European Centre for the Development of Vocational Training, Cedefop report (ibid. 111) level 5 or equivalent education programmes support lifelong learning, are suitable for adult students and provide students with additional professional and technical competence, improve their employment prospects and support them in career advancement.

The Chain5 network has also been established around EQF level 5 education programmes. The Diploma of Higher Education project has participated in Chain5. The network is coordinated in the Netherlands, where a two-year ECTS credit associate degree become established as part of the country's education system in the 2000s (Broerse 2014). This is a degree which is implemented in universities of applied sciences, and the studies can be continued to a bachelor degree. The associate degree pilot was launched in part on an initiation by employers in 2006, and an act on the degree was adopted in 2013. The intent with the education programme has been to meet the needs of employers and employees more widely and to create an attractive model to increase competence as well as for transition situations in the labour market. In 2014, there were already 172 different education programmes within which 1% of degree students at universities of applied sciences studied. (Broerse 2014.)

During a benchmarking trip to the Netherlands, within the framework of the project, it emerged that the associate degree has been a low-threshold path to a higher education institution. It has not reduced the number of the

students studying for a bachelor's degree, but it has brought new target groups into higher education – young people as well as adults. Many people who have worked for many years have obtained their first degree. Some of the degrees are taken in cooperation with working life under a model resembling the apprenticeship-type education that has been tried in Finland. Others are pursued as ordinary daytime studies in an educational institute. The Netherlands does not have an entrance examination system in higher education institutions, so it is fairly easy to become a degree student. Students can, however, lose their entitlement to study if their studies do not progress by a specific number of ECTS cr. per year. Unlike the Diploma of Higher Education, an associate degree directly corresponds to the first two years of a bachelor's degree. It is not, therefore, a module formed on a competence basis from parts of a degree, as in the Finnish model.

In the United States, too, an associate degree corresponds to the first two years of a bachelor's degree, and approximately 36% of degree graduates have first been enrolled in a two-year degree (Two-Year Associates Degrees 2015). One form of a degree is the Associate of Applied Science (AAS), which is more practically oriented and targeted more at students who are aiming directly at employment, or at those who want to supplement their competence or who are already working. There are also numerous two-year programmes that award a certificate instead of a degree. (Ibid.)

It has emerged in the activities of the Chain5 network and from reports on the framework's level 5 education programmes (e.g. Qualifications at level 5: progressing in a career or to higher education 2014) that in many countries the challenges of these degrees or education programmes involve possibilities to move from vocational education to higher education as well as the identification and recognition of competence. The Finnish 60 credit model is regarded as rather narrow in the Chain5 network although, according to the aforementioned report (ibid., 110), SCHE education programmes are 60–180 ECTS cr. in terms of scope, usually 120. Likewise, the competence module comprised of parts of a degree is a new type of approach for many countries. In some of the countries, the education programmes are not as close linked to working life; rather they are full-time studies that cannot be pursued alongside working. Elsewhere, too, attention seem to be widening from degree-focused implementation models to different education packages. For example, the Chain5 network has presented an 80-credit competence-based education programme under development in the Netherlands. The content of this programme could be shaped on the basis of working life needs more flexibly than would be possible for a formal degree.

The fee element of education is an interesting theme internationally. In Finland, open UAS studies are subject to charge for students (Diploma of Higher Education €600, 20% discount for the unemployed). The students are not eligible for student financial aid or other benefits. With the Open Study Path it does, however, offer a new route to free degree studies without entrance examinations. The fee of €600, for example, is regarded as nominal in many countries, but these countries do not necessarily have entrance examinations for degree education. In the United States, a two-year degree costs on average 6,500 dollars (Two-Year Associates Degrees 2015), and in the Netherlands the average tuition fee for an EU citizen is €1,950 (Get value for money/Study in Holland 2015).

The debate regarding the fee element and equal possibilities to participate in education is highlighted, especially in Finland, which holds to the principles of equality and free degree education. On the other hand, the Diploma of Higher Education is not a degree programme and does not have any admittance requirements. In the United States, especially, the emphasis is on the cost-benefit approach, i.e. how investment in education contributes, for example, to an increase in average pay (e.g. 100 Associate Degree 2015; Adams 2015).

As a whole, the strengths of Finland's Diploma of Higher Education model are transfers between different educational levels, a working life-oriented approach and flexible planning of education as well as multiform methods of implementing education programmes. These generate interest internationally, too, as the status of the associate degree was confirmed in the Bologna Process and interest in shorter, more flexible and agile education models is increasing. According to the report, (Qualifications at level 5: progressing in a career or to higher education 2014, 111), level 5 education programmes appear to attract, in particular, people who are already academically educated, as the programmes offer an opportunity to specialise and acquire qualifications for the labour market. Of the Diploma of Higher Education students, 47% have a post-secondary degree, which seems to follow the international trend. In this way, students avoid taking consecutive full degrees.

8.3 DIPLOMA OF HIGHER EDUCATION AS A DEVELOPER OF JAMK UNIVERSITY OF APPLIED SCIENCES' ACTIVITIES

The implementation of the Diploma of Higher Education Project has provided JAMK University of Applied Sciences with an opportunity to pilot and develop its own pedagogic approaches. Open higher education consists of parts of degree education, and therefore it has been natural to develop both at the

same time. The education programmes selected for the pilot were sought by looking for ideas from different fields internally. Different methods of implementation were deliberately included from teaching integrated in degree teaching for online studies, from the HR and financial specialist suitable for a broad target group to agricultural entrepreneur business competence for a more restricted target group.

The implementers of the education programmes have already previously given examples of how the models were developed within the Diploma of Higher Education framework. With the pilot, however, it has been noticed, for example, that direct integration in degree education, which as such is an efficient option, requires support in group formation to work and excellent models for implementing multiform education in order to ensure that Diploma of Higher Education students will commit to the programme and be able to complete it on a part-time basis. Many of the challenges that emerged during the Diploma of Higher Education pilot were, however, the same as in adult education in any case, such as the reasons that led to students dropping out.

The structuring and expanding of the model will continue in The working life-oriented open university education -project (AVOT) funded by ESF that started in September 2015. A more agile, working life-oriented adult education model to meet, among other things, the challenges of sectors undergoing structural change will be implemented and modelled by open universities and open universities of applied sciences as a collaborative effort (press release of the University of Turku, 7 September 2015). JAMK is participating in the project in modelling the approach, which will enable the work done in Diplomas of Higher Education to be continued and utilised. The studies in the education packages being piloted in the project will be formed in cooperation with working life from the offering of various open universities of applied sciences and of open universities. The study offering across higher education institutions and the involvement of universities is a response to the criticism made in some contexts regarding the implementation of the Diploma of Higher Education. The model is also new by international standards, as in European countries corresponding education programmes are mainly the responsibility of universities of applied sciences.

Following the Diploma of Higher Education pilot, JAMK will continue to implement packaged competence modules in some form in the offering of the open UAS, as positive experiences of the Diploma of Higher Education have been obtained and there is demand for similar modules. The pilot has established a new kind of tool to flexibly meet the needs of working life and relatively quickly start education packages.

TABLE 1. Definition of terms used at JAMK University of Applied Sciences.			
	STUDY PATHS	**DIPLOMA OF HIGHER EDUCATION**	**PROFESSIONAL SPECIALISATION STUDIES**
Provider of studies	Open UAS	Open UAS	Collaborating higher education institutes
Target group	Individuals aiming at a degree, path applicants	Individuals supplementing competence, seeking a new career	Individuals with tertiary-level degrees who are supplementing their competence
Qualification requirements	No qualification requirements	No qualification requirements	Post-secondary degree and working life experience
Entrance examination	No entrance examination/ aptitude test unless required by the field of education (e.g. social services and healthcare)	No entrance examination/ aptitude test unless required by the field of education	Higher education institutes decide on student selection though a joint agreement: uniform selection criteria.
Status of student	Part-time. No social benefits for students. View depends of the authority (EED, KELA).	Part-time. No social benefits for students. View depends of the authority (EED, KELA).	Part-time. No social benefits for students. View depends of the authority (EED, KELA).
Price for students	Max. €15 / 1 credit	Max. €15 / 1 credit	Max. €120 / 1 credit
Contents of studies	Studies included in degree, usually first-year degree studies	Studies relating to the selected competence area included in degrees can be from different degrees, bachelor's and master's degree	Academic studies promoting professional development and specialisation.
Scope of studies	Bachelor's degree: 60 ECTS credits enables application into a degree programme. Master's degree: 20/30 ECTS credits	60 ECTS credits	At least 30 ECTS credits

TABLE 1. continues

	STUDY PATHS	DIPLOMA OF HIGHER EDUCATION	PROFESSIONAL SPECIALISATION STUDIES
Planning process for studies	Runs parallel with degree studies; usually first-year degree studies offered. Individual paths can also be planned.	Essential know-how and skills from the contents of degrees to the competence module. Flexible and rapid planning process based on the needs of working life, not regulated. Contents can value annually.	Higher education institutes entitled to providing degree education in the field in question through agreements, together with work and business life. The Finnish National Board of Education maintains a public list of specialisation education programmes.

Alongside the Diploma of Higher Education or corresponding competence modules the Open Study Path will be implemented. This is aimed more at those who are clearly seeking a path to degree studies. Universities of applied sciences are also starting professional specialisation studies, which have their own objectives and target groups. The position of the abovementioned education models in relation to each other is specified further in Table 1. Degree education will be increasingly implemented in the form of flexible multiform studies, which will provide the prerequisites to also implement the Diploma of Higher Education in an effective manner, as long as effort is devoted to the students' guidance and group formation. The boundary between the degree student and the open study path or between a student studying for a Diploma of Higher Education may well diminish in the future. Alone and together with other higher education institutes a model could be developed that would be sufficiently cost-efficient, but also effective and of a high quality.

APPENDIX 1: THE STEERING GROUP OF THE PROJECT

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Tytti Pintilä, JAMK University of Applied Sciences
Pertti Ruuska, MTK Keski-Suomi, The Central Union of Agricultural Producers and Forest Owners Central Finland
Eeva-Liisa Saarman, Jyväskylän kaupunki, City of Jyväskylä
Steering group meetings were also accompanied by Helena Aittola and Jussi Välimaa from the Finnish Institute for Educational Research.

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9 DIPLOMA OF HIGHER EDUCATION – COMPETENCE MODULES FOR EVERYONE

Elina Kirjalainen & Tytti Pintilä

In 2013–2015, in accordance with the objectives of the Ministry of Education and Culture, JAMK University of Applied Sciences piloted a Diploma of Higher Education, which is a competence module open to everyone, consisting of parts of post-secondary degrees, on the basis of the needs of working life. As the Diploma of Higher Education is not a degree, it is a freely and rapidly available form of education to address acute competence shortcomings in society.

Student who have completed a Diploma of Higher Education can demonstrate their competence by means of certificate, i.e. diploma. The Diploma of Higher Education is not therefore comparable to a degree; rather it provides the student with 60 ECTS cr. worth of advanced expertise in the chosen area to supplement his or her existing competence. The Diploma of Higher Education is realised through the open UAS, the aim being to make the studies open to everyone regardless of educational background, work experience or labour market situation. On the basis of the pilots, it seems that there is demand for the education model and that it is suitable for students starting the studies with very different educational and experience backgrounds. There have been restrictions, however, in the participation of unemployed jobseekers in the education programme, which has caused inequality. These restrictions are related to the decisions of the employment authorities. All open studies students are also excluded from student benefits, which can affect a student's possibility to participate in the education programme.

Based on experiences regarding the pilots, it would seem that a highly heterogeneous student group functions, as the participants nevertheless already have experience in working life in some field behind them. For a young person aiming to access degree education, a more suitable form of education in the open UAS than the Diploma of Higher Education is the right study path. The Diploma of Higher Education does not provide students with the skills to move into working life if they lack other education or work experience. The primary purpose of the Diploma of Higher Education is to provide advanced, supplementary know-how in a limited competence area

emanating from the needs of working life that will enable students to develop their work and careers. On the basis of the follow-up study and feedback, this has also been the objective of the students who have participated in the education programmes. In addition, Diploma of Higher Education studies can be credited if the student later transfers to a degree programme. A third of the students who participated in the pilot education programmes are planning to apply for degree studies.

The Diploma of Higher Education project has been an important part of the open UAS, which will continue and expand further in The working life oriented open university education -project and through other cooperation with open universities of applied sciences. The significance of the open university of applied sciences has also has increased in the financing models of universities of applied sciences. One of the main objectives is to reduce the number students taking consecutive degrees and to create functional models to obtain new expertise flexibly and efficiently regardless of background and labour market situation, starting with the needs of working life. Degree education has also been made more attractive because it is free. An important factor, therefore, is implementation of the Diploma of Higher Education through the open UAS. The moderate price per credit enables the participation of wide target groups.

The universities of applied sciences have added in their degree education multiform studies, which utilise flexible pedagogic solutions and make it possible to study alongside working outside educational institutions too. This development is increasingly offering good forms of implementation for Diploma of Higher Education programmes, which are not customised. Instead, they are carried out on the basis of degree education. On the basis of experience also obtained from the pilots it is important to offer, in addition to flexibility, sufficient guidance and support in the group formation of Diploma of Higher Education students, even if they are studying with degree students. Group formation brings students peer support and enables peer learning and professional networking, which at its most effective disseminates expertise more widely to the entire sector. Students who have formed groups well seem most likely to complete their studies too. These factors are key to enabling cost-efficient and impressive Diploma of Higher Education programmes to be carried out.

Compared to the study paths of the UAS Open Studies or to the basic and subject studies offered by open universities, for example, the special nature of the Diploma of Higher Education lies in that the package is composed of parts of bachelor's and master's degrees on a competence basis. The contents of degrees from different fields and even from different higher

education institutions, too, can be utilised here. This implementation model is interesting also from an international perspective. SCHE (short-cycle higher education) programmes corresponding to the Diploma of Higher Education have been started more and more in different countries, but in these, too, the starting point is to complete a specific part at the beginning of the degree. In 2015, SCHE was made part of the Bologna Process, which increases its importance. Behind international develop lie the same phenomena as in Finland: the aim to increase the proportion of people participating in higher education; to lower the threshold to participation in higher education and to offer a smooth path to supplementing expertise both for people with a tertiary-level degree and for people with a lower education. A competence-based approach; multiform, working life-oriented implementation models and smooth study paths from one educational level to another are Finland's strengths, towards which international interest is directed.

On the basis of feedback, working life values an education package offering packaged, advanced but delineated know-how. It is also important that the education is provided at academic level. The aim of the development of the Diploma of Higher Education training has not been to replace but rather to supplement degree education and fee-based continuing education. According to the views of the implementers, the Diploma of Higher Education brings at its most effective contents, specialists and students to all three of these forms of implementation. The low price of the education programme, however, is clearly linked to the fact that different target groups have a real opportunity to participate in the education.

The aim of the Diploma of Higher Education project has not been to make the Diploma of Higher Education recognised as a name, nor would this be possible either, during the education programmes that have only been running for one and a half years. Nevertheless, it is also clear from the perspective of working life that similar education programmes have a uniform name. For this reason, we propose that the Diploma of Higher Education be a uniform name for the 60-credit competence module packaged from parts of a post-secondary degree. With a certificate, Diploma of Higher Education students can show that they have 60 ECTS cr. worth of academic, advance expertise in a specific area. Correspondingly, uniform names and scopes could be determined for shorter modules. These restrictions would promote the point that the competence modules are clear and recognisable from the perspective of working life.

The scope of 60 ECTS cr. for the Diploma of Higher Education can be justified by the fact that it is sufficiently comprehensive to provide advanced

competence. In terms of scope it corresponds to many other advanced education programmed and qualifications, as Korva pointed out in her article. The duration of the education in this case is between 1.5 and 2 years when studying part-time. Smaller education programmes are no longer appropriate from the perspective of the objectives set for the Diploma of Higher Education. Cases of students dropping out from the programmes would also probably increase in longer education.

We also see that part of the Diploma of Higher Education is packaging of content. It would not be possible to receive a Diploma of Higher Education by completing a 60-credit package of open higher education studies selected by oneself. The Diploma of Higher Education can nevertheless include an optional studies part. The significance of the Diploma of Higher Education for working life and for the individual comes from the fact that he or she obtains advance competence in a chosen area, which entails planning the studies as a whole. As an education model, the Diploma of Higher Education is eminently suitable for universities of applied sciences that already have a suitable education portfolio and specialists, and which have invested in competence-based multiform methods of implementing education.

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In 2013–2015, JAMK University of Applied Sciences implemented a pilot project Diploma of Higher Education based on a proposal by the Finnish Ministry of Education and Culture. Diplomas of Higher Education are structured competence modules that consist of parts of degrees. The modules are open to all, regardless of educational background or previous work experience.

The pilot project investigated the needs of working life for new modules narrower in scope than existing degrees and how they best meet the needs of students with various backgrounds. The task was to build a national model of Diploma of Higher Education, in Finnish korkeakouludiplomi.

This publication addresses the higher education policies and international development that had an impact on Diplomas of Higher Education. Four pilot programmes are described in detail. The implementation and the significance of the model is also evaluated and suggestions to further development of such competence modules are given.

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