ENHANCING LEARNING OUTCOMES EVALUATION

Benchmarking learning outcomes evaluation in Finland, Scotland and Kansas

Tuija Vänttinen (ed.)

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CONTENTS

PREFACE

This publication collects together experiences of the project called EQLO – Enhancing Learning Outcomes Evaluation – from different points of view. The EQLO project was a cooperation project between Mikkeli University of Applied Sciences (Mamk), University of the West of Scotland (UWS), Kymenlaakso University of Applied Sciences (Kyamk) and Washburn University (WU), Kansas, the USA. The project was financed by the Finnish Higher Education Evaluation Council (FINHEEC) and it was implemented in 2014. Due to the organizational changes in the Finnish education evaluation the work of FINHEEC has now been continued by The Finnish Education Evaluation Center (FINEEC) since May 2014, and the results of the EQLO project will be presented in a FINEEC seminar in May 2015.

The three first articles of this publication give an overview of the European Higher Education Area (EHEA) and the Bologna Process. First, the EQLO project is introduced by Marjo Nykänen and Marjaana Kivelä. They describe the background, framework, purpose and the process of this benchmarking project, including an introduction of the participating universities. Their article also includes a brief presentation of the quality systems of the universities. At the end they summarize some experiences of the project. The second article of Marjo Nykänen discusses the broad framework of the Bologna process at the levels of Europe, Finland and Mamk. It focuses on the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), the European Qualifications Framework (EQF), the Finnish Qualification Framework (FNQF), HEIs' quality management in Finland, the Finnish audit model and the Quality System of Mamk. These elements also give the framework for defining learning outcomes and learning outcomes evaluation at HEIs. After that, Tuija Vänttinen in turn, concentrates on the institutional level learning outcomes definition and learning outcomes evaluation. The focus in this article is mainly on Mamk's learning outcomes definition in the curriculum and on the learning outcomes evaluation practices as UAS lev-

el examples. In addition, the concepts of competence and learning outcomes and learning outcomes definition in the Finnish legislation of universities of applied sciences (UAS) are discussed.

Following these overviews, the article of Christopher Collins explores the situation where the programmes of study from apparently different backgrounds with different legal systems, ethnic and cultural influences still effectively produce the same product – registered general nurses who are more or less equipped to deliver evidence-based, person-centred care anywhere in the world. Seija Aalto, in turn, focuses on the concept of prior learning and on the benefits of recognizing prior learning. Her article also surveys the methods used for recognizing prior learning in the four universities in Finland, Kansas and Scotland in general, and especially in nursing education.

The last four articles introduce the practical context of nursing programmes and examples of learning outcomes evaluation on two continents and in three countries. Firstly, Paula Mäkeläinen compares the benchmarking project experiences and the good practices that could be adopted to the Finnish nursing programme development. The article of Jane Carpenter and Debra Isaacson focuses on the learning and assessment practices for classroom learning, highlighting the background and specific characteristics of the assessments required in the USA, with an overview of classroom assessments at each of the campuses of the participating universities.

Practical training is an essential part of the learning process in nursing education, and Maria Pollard's article discusses the similarities and differences in the requirements of pre-registration nursing programmes in the universities involved in this benchmarking project. The aim is that the benchmarking results would facilitate appropriate assessment in the practice learning environments. Finally, Anna-Maija Uusoksa and Debra Isaacson briefly review the clinical evaluation methods used by each partnering institution with a focus on adopting a better system of clinical evaluation and on harmonizing the quality of clinical nursing education.

Student-centred pedagogy and evaluation is a challenge to all universities across the world. It is the task of the university community to develop student-centred teaching and assessment practices for the future. This requires holistic understanding of learning, new teaching skills and evaluation methods. I believe that this publication is useful to all who are interested in developing learning and teaching and learning outcomes evaluation at universities in the European and global context. In addition, I would like to thank all the professionals that contributed to this publication and shared their expertise.

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THE EQLO PROJECT: ENHANCING LEARNING OUTCOMES – QUALITY MANAGEMENT AT THE UNIVERSITY LEVEL AND IN NURSING PROGRAMMES

Marjaana Kivelä and Marjo Nykänen

This article reports on the essentials of the EQLO project by introducing the participating universities and their quality management systems and presenting the purpose as well as the implementation of the project. There is also a short discussion of the experiences the participants had of the project. The EQLO project was a cooperation project between Mikkeli University of Applied Sciences (Mamk), University of the West of Scotland (UWS), Kymenlaakso University of Applied Sciences (Kyamk) and Washburn University (WU), Kansas, the USA. The project was financed by the Finnish Higher Education Evaluation Council (FINHEEC) and it was implemented in 2014. The Finnish Education Evaluation Center (FINEEC) continues the work of FINHEEC since May 2014. The participating universities are presented below.

Kymenlaakso University of Applied Sciences

Kyamk is a multidisciplinary university of applied sciences with many international activities. The campuses are located in Kotka and Kouvola. Kyamk has 23 degree programmes, 7 of which are master level programmes, with a total of app. 4,333 students and 330 staff members. Kyamk's profile bases on expertise in international affairs and Russia, working in co-operation with

the field of Finnish higher education and the business world. Kyamk has a number of years developed the LCCE model (Learning and Competence Creating Ecosystem) as its pedagogical approach. FINHEEC has granted an award for this teaching and learning model for the years 2010–2012. (Vänttinen & Nykänen 2013.)

Mikkeli University of Applied Sciences

Mamk is a successful, financially thriving, award-winning educator of professionals with education in seven different fields of study, together with research, development and innovation activities and services for businesses and individuals in the region. Mamk has two campuses, in Mikkeli and Savonlinna. Mamk has 24 degree programmes, 9 of which are master level programmes, with a total of app. 4,500 students and 360 staff members. Mamk promotes an entreprising culture and profiles itself as a university for lifelong learning, a strong research and development institution and an expert in digital information management and services. Currently Mamk is Finland's most successful university of applied sciences, nationally ranked number 1 by a bi-annual ranking, and also the best performing UAS by the standards of Ministry of Education and Culture. This results to more funding per student compared to any other university of applied sciences. (Vänttinen & Nykänen 2013.)

Mamk and Kyamk are strategic partners. The universities began working together in 2009, and the ownership restructuring took place in 2012. Mamk and Kyamk have already adapted their operations in the fields of education, services and research, development and innovation in accordance with a jointly defined model. The universities are jointly committed to merge into a single university of applied sciences in the beginning of 2017. (Vänttinen & Nykänen 2013.)

University of the West of Scotland

UWS was founded in 1897 and it is Scotland's largest modern university with app. 15,375 students and 1,489 staff members. With campuses across the West of Scotland in Ayr, Dumfries, Hamilton and Paisley, the University occupies an integral position within Scotland. UWS is organised into three Faculties and eight Academic Schools. UWS's quality system has been developed in accordance with the Enhancement Themes project since 2003. The project is part of the Scottish Quality Enhancement Framework (QEF) which aims to enhance quality management as regards to students' learning experiences at universities and to increase trust in the quality and standard of higher education. The theme of Developing and Supporting the Curriculum, a part of the Enhancement Themes project, is particularly relevant to the EQLO project. Scotland: Strategic Directions 2012 – 2016 will be examined with reference to the University of the West of Scotland's strategies and practices during the project. (Vänttinen & Nykänen 2013.)

Washburn University

Washburn University School of Nursing was established in 1974. Currently WU has 6,900 students and 1,000 staff members in Topeka, Kansas. The mission of WU School of Nursing is Washburn University School of Nursing emphasizes excellence in teaching that prepares students to value lifelong learning as professional nurses who embrace the principles of evidence-based practice. Washburn nursing graduates collaborate with communities applying ethical leadership, critical thinking, and technological skills to design caring, innovative health solutions to diverse populations. (Vänttinen & Nykänen 2013.)

School of Nursing has over 3,000 graduates of the Bachelor of Nursing Science (BSN) program since 1976. It is accredited by the Commission on Collegiate Nursing Education, and was last accredited in 2009 for a full ten-year period. The educational programs currently offered at WU include BSN, the Masters in Nursing Science (MSN) and the Doctor of Nursing Practice (DNP). There are over 300 bachelor of nursing science students currently admitted to the BSN program, in addition to over 100 students enrolled in one of the educational tracks within the graduate programs (e.g. Clinical Nurse Leader, Family or Adult-Geriatric Nurse Practitioner, post-Master's Doctor of Nursing Practice. (Vänttinen & Nykänen 2013.)

Quality management systems in participating universities

Under the Finnish Universities of Applied Sciences Act, Higher Education Institutions (HEIs) are responsible for the quality and continuous development of their education and other operations. Legislation also requires them to regularly perform external evaluations of their operations and quality systems and to publish the results of such evaluations. FINHEEC is an independent expert body that organizes evaluations of the operations and quality systems of HEIs. (Vänttinen & Nykänen 2013.)

FINHEEC conducted an audit of Mamk in 2013 and awarded the institution with a quality label that is valid for six years from 21 February 2013. Mamk's quality system fulfills the national criteria set for the quality management of higher education institutions, and the system corresponds to the European quality assurance principles and recommendations for higher education institutions. The aims of Mamk's quality system are to systematically produce information in aim to support management and development of activities and this way ensure the quality of the activities, to standardize the practices and to spread good practices, to support the participation of the Mamk community members in developing the activities and to strengthen the quality culture. The circle of continuous development is applied to the quality system and to the quality work. (Vänttinen & Nykänen 2013.)

Kyamk's quality system of education bases on the European Qualifications Framework (EQF). The self-evaluation is made according to the EQF. The lean management system bases on Balanced Scorecard Framework which is combined to the EQF. Kyamk carries out internal (management rounds, curriculum audits, self-evaluation, quality rounds) and external audits of education. Kyamk has participated twice in the FINHEEC external auditing in 2005 and 2012. The label is valid for 6 years. (Vänttinen & Nykänen 2013.) Scottish Quality Assurance Agency (QAA) is responsible for the higher education quality assurance codes. The Enhancement Themes project has been going on in Scotland for ten years. Its crucial principle is Enhancement led Institutional Review (QAA 2012). At UWS quality assurance bases on QAA's guidelines and UWS's own quality assurance and enhancement system (QAE). The QAE organization consists of five parts: subject development group, assessment panels, faculty boards, senate and court. UWS has a Quality Enhancement Unit which is working in close cooperation with subjects. (Vänttinen & Nykänen 2013.)
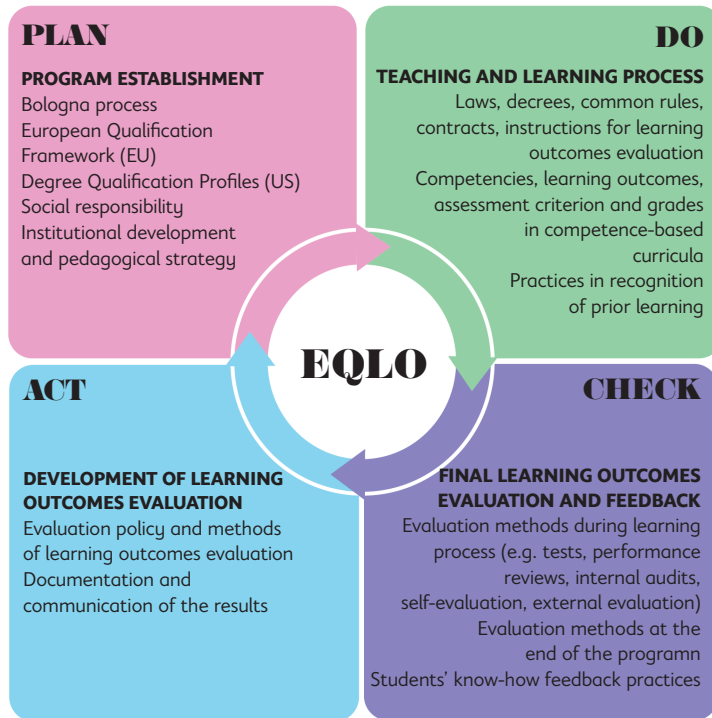
In Washburn School of Nursing completes an assessment of the student-learning outcomes annually and sends the assessment report to the WU Assessment Committee who provides an external evaluation of the School's assessment report as it relates to student-learning outcomes. The assessment report provides information about the BSN and MSN programs. Starting in 2013, the annual assessment report will include process evaluation data from the DNP program. Learning Outcomes for the School of Nursing are based upon the American Association of Colleges of Nursing *BSN Essentials*. The School of Nursing learning outcomes are changing along with the BSN curriculum. The new BSN curriculum introduces the content on quality management within the first semester of the upper division nursing program. The metrics associated with assessing quality management will be identified and used in the 2013-2014 School of Nursing's annual assessment report. (Vänttinen & Nykänen 2013.)

Purpose of the EQLO project

The purpose of the EQLO project was to benchmark and compare quality management procedures used for the evaluation of learning outcomes in Finland (Mamk, Kyamk), Scotland (UWS) and Kansas, USA (WU), both at the university level and in nursing programs. In addition, the aim was to find good practices for learning outcomes evaluation in order to improve management procedures and learning outcomes evaluation in nursing programs. (Vänttinen & Nykänen 2013.)

The results of the benchmarking project will be used to improve learning outcomes evaluation in partner universities' quality systems and in nursing programmes. The results have been reported to partner universities' manage-

ment teams and faculties, and they will be made public at a FINEEC seminar in May 2015. The benchmarking results are also published in the form of this publication in Mamk's publication series. (Vänttinen & Nykänen 2013.)

PLAN

PROGRAM ESTABLISHMENT
Bologna process
European Qualification
Framework (EU)
Degree Qualification Profiles (US)
Social responsibility
Institutional development
and pedagogical strategy

DO

TEACHING AND LEARNING PROCESS
Laws, decrees, common rules,
contracts, instructions for learning
outcomes evaluation
Competencies, learning outcomes,
assessment criterion and grades
in competence-based
curricula
Practices in recognition
of prior learning

EQLO

ACT

**DEVELOPMENT OF LEARNING
OUTCOMES EVALUATION**
Evaluation policy and methods
of learning outcomes evaluation
Documentation and
communication of the results

CHECK

**FINAL LEARNING OUTCOMES
EVALUATION AND FEEDBACK**
Evaluation methods during learning
process (e.g. tests, performance
reviews, internal audits,
self-evaluation, external evaluation)
Evaluation methods at the
end of the programn
Students' know-how feedback practices

FIGURE 1. Framework for benchmarking learning outcomes evaluation

Higher education systems are increasingly interconnected and operating on a global scale. Such a paradigm change is not without implications for student mobility, transferability of credentials and degree recognition. Examples of this change are the European Higher Education Area (EHEA) practices (described below) within a number of major academic disciplines and Degree Qualification Profiles, a U.S. version of the Bologna-based degree frameworks, as part of the accreditation or other quality assurance and public accountability provisions. The EHEA practices:
- define desired learning outcomes across institutional and national boundaries and in various disciplines (the Tuning process);
- integrate learning outcomes perspectives in quality assurance processes
- measure learning outcomes, first at national levels and then across borders with the AHELO initiative. (Tremblay et al. 2012.)

The other major change is towards a "learning paradigm" in which the emphasis is no longer on the means but on the end, i.e. in supporting the learning process of students. Associated with the move towards a learning paradigm, the dominant pedagogy has also changed to a learner-centered focus. This change has been most evident in Europe where the Bologna Declaration of 29 European ministers of education in June 1999 stated as a key objective for Europe to establish a European Higher Education Area (EHEA) by 2010 and committed to write all higher education modules and programs in terms of learning outcomes. A similar shift is also underway across the Atlantic. The Liberal Education and America's Promise (LEAP) initiative launched by the Association of American Colleges and Universities (AAC&U) outlines the essential learning outcomes that contemporary college students need to master. In addition to and related to LEAP, there is also a growing interest among U.S. HEIs and States in applying European-based Tuning. (Tremblay et al. 2012.)

Implementation of the project

The EQLO project is a benchmarking project. Benchmarking can be defined as a process in which organisations evaluate various aspects of their processes and procedures at strategic and operational levels against those of one or several other organisations. Benchmarking is a proven tool that can help organisations to improve their activities and to gain competitive advantage. Key factors for success in benchmarking are the use of a suitable benchmarking model and the choice of appropriate benchmarking partners. On the other hand, the challenges of the benchmarking process include e.g. difficulties in comparing data and resource factors such as lack of time, finances or expertise plus staff resistance. (Cips 2014; Bpir 2014.) The operational and cultural benefits of benchmarking can be summarized in the following way:

- removes the need to reinvent the wheel
- leads to outside-the-box thinking, encouraging organisations to look for ways to improve that come from outside
- forces organisations to examine current processes, which can often result in improvement in itself
- accelerates change and restructuring by using tested and proven methods and creates a sense of urgency when gaps are identified
- helps to prevent complacency and inertia within the organisation and its people by setting stretch goals and by stimulating new ways to plan for the future
- promotes the emergence and evolution of a learning culture throughout the organisation

- promotes the development of a customer-oriented culture by constantly reminding people of the customer and focusing on critical processes that add value
- overcomes the 'not-invented-here' mindset by offering evidence that ideas invented outside the organisation can and do work. (Zairi & Al-Mashari 2005.)

In the EQLO project the partners were chosen among the existing partners of Mamk and Kyamk before the project started. UWS has been a partner of Kyamk and it was known to be very advanced in quality assurance processes. Washburn has been a good partner of Mamk for a number of years, especially in the nursing field, and both organisations were interested in getting more insight on the quality procedures concerning learning outcomes. At the beginning of the project a project group was defined to carry out the process. The list of group members is available in attachment 2 at the end of this article. It consisted of lecturers and other staff members from each university.

The benchmarking process consisted of the following phases:
1. *planning the benchmarking:* drawing up the benchmarking framework
2. *describing the present state:* sharing benchmarking questions, sharing documents giving answers to questions, describing the present state in each university plus reading and analyzing the materials and defining the benchmarking questions
3. *exchanging experience and knowledge:* planning and executing the visits, writing the evidence of practices and sharing them, correcting the evidence if needed (each partner wrote about other universities)
4. *analyzing differences* and
5. *recognizing best practices and making development plans for improvements or for adapting specific best practices:* comparing and analyzing by discussion via web, writing summaries of the results
6. *reporting to FINEEC*
7. *writing articles* to summarise the most interesting themes and observations
8. *presenting the results in FINEEC's seminar, May 2015*

All four partners took part in all the phases. Mamk was the coordinating university in the project. Benchmarking questions had been planned as part of the project plan, but they were modified into a framework for benchmarking during the process (Attachment 1. Benchmarking Framework). The process in more detail and the timetable can be seen in the following table.

TABLE 1. Benchmarking process

Action	Date	Actors
Material (describing the present state) distributed (UWS, Mamk, Kyamk)	Jan 15	UWS, Mamk, Kyamk
Material (describing the present state) distributed (WU)	Jan 31	WU
Analysing the material, defining benchmarking questions	Before benchmarking visits	All attendants of benchmarking
Benchmarking visits		All partners, Mamk coordinators
to Washburn	March 10–14, Topeka, KS, the USA	Mamk, Kyamk and UWS, WU hosts
to UWS	Apr 7–11, Paisley, Scotland	Mamk, Kyamk and WU, UWS hosts
to Mamk and Kyamk	May 5–9, Kotka and Mikkeli, Finland	UWS, WU, Mamk and Kyamk, Kyamk and Mamk host
Comparing practices and analysing differences	After the visits	All attendants of benchmarking
Discussion on writing the reports and articles	May 22 videoconferencing	All partners, the project group
Correcting the evidence others have written	Aug 15	All partners
Comparing and analyzing the results together in project group	Sep 16 videoconferencing	All partners, the project group
Reporting findings to Mamk = summaries	Oct 15	All partners
Reporting findings to FINHEEC	Oct 31	Mamk
Writing articles (Mamk publication series)	Jul 2014–Jan 2015	Mamk & all partners
Publishing the publication	March 2015	Mamk
Presenting findings in FINEEC's seminar in Helsinki, Finland	May 5, 2015	Mamk

Summarizing the experiences

Planning is crucial for the success of a benchmarking project. The themes and questions should be as focused as possible to guarantee that the information gained would be as comparable as possible. Research in benchmarking shows that difficulties in comparing data are very common (Bpir 2006). This was the

case in this project, too. The benchmarking questions were included into the project plan which was made by Mamk, and they were not modified together with the partners before the first benchmarking visit in Washburn in March 2014. As a consequence, some modifications needed to be done during the first visit. The lesson learnt was that it would have been better to specify the themes and questions with the partners beforehand so that everybody would understand them in the same way. Many terms are used in a different way in different countries. The use of some international source in refining the questions and definitions could have decreased the difficulties in understanding the data. A couple of examples of the terms that were difficult to understand were quality management system which was unknown for the American partners, and recognition and accreditation of prior learning which was also a difficult concept to compare.

The focus of the benchmarking framework and the questions and themes was somewhat too wide. The amount of material which was shared was huge, and during the visits there was not very much time to focus deeply on one topic. The benchmarking was an extra task to be carried out besides the participants' normal duties, like lecturing for example, and thus it was not always easy to find time for the project.

Site visits to benchmarking partners are often found to the most valuable stage of a benchmarking project, and the same applied in this project. They give a broader and more complete picture of the systems and culture in place than other benchmarking methods such as questionnaires (Bpir 2006). Meeting the people face-to-face is a great way to build up confidence. Some of the participants of the EQLO project had known each other for a long time (between Kyamk and UWS and between Mamk and Washburn), but there were also completely new acquaintances for some. The partners appreciated the opportunity to meet new international colleagues as well as the opportunity to work with established partners in a new context. To actually meet the people, also socially, and to talk with them and to see just a hint of their culture and life makes understanding much easier and perhaps makes people tell more about their practices than they would do without meeting them. There were four site visits during the project, a visit to each participating university. During the visits many experts were heard, but the main project group was together all the time and they listened to the introductions together and they could discuss the topics all the time. All meetings before and after the benchmarking visits were arranged online. If some technical problems are ignored, this worked well. One more meeting before finalizing the results based on the observations and conclusions would have been worthwhile.

Communication during the project between the visits and meetings is also very important. A thoroughly planned and well distributed timetable is essential, especially in international cooperation projects. All partners need to

know what happens next and what they need to do and when. The easiness of communication is also very important: to have direct contacts between people, to know who to ask for assistance or where to check the timetable for example. This project had a project manager who took care of distributing the information, answering the questions and providing a site on the internet for sharing the documents.

The EQLO benchmarking process produced a huge number of observations and generated a lot of development ideas. Some of these are presented in the other articles of this publication. One of the participants observed that although the focus of the project was learning outcomes evaluation, the project generated lots of qualitative data on top of the topic. The purpose of benchmarking is to learn from others and not to reinvent the wheel, and all partners found something of interest that could be applied to the procedures of their own universities. Also, they identified many of their own strengths which they perhaps can make better use of in the future. This publication offers only a superficial view on what the participants have seen and learned during this process. The benchmarking gave a great opportunity to learn from other universities' good practices. It remains to be seen what kind of changes - preferably permanent - will take place in the partner universities.

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Framework for benchmarking learning outcomes evaluation

A Program establishment stage

1. Which factors direct the definition and evaluation of competencies and learning outcomes?
2. How do universities describe competencies and learning outcomes in their quality management systems?
3. How are competencies and learning outcomes defined (academics/working life/others)?
4. What is the emphasis of generic and discipline specific competencies and learning outcomes?
5. What kind of university laws, decrees, common rules, contracts and instructions guide learning outcomes evaluation?
6. Do you recognize prior learning at your university? If so, please describe.

B Teaching and learning process

1. What are the nursing program specific laws, decrees, common rules, contracts and instructions that guide learning outcomes evaluation?
2. How are the learning outcomes defined in nursing program curricula: goals, teaching method, evaluation?
3. How are the learning outcomes assessment criterions, scales and methods defined?
4. How are the learning outcomes evaluation made and what kind of methods are used during the learning process?
5. Does the School/Department of Nursing recognize prior learning? If so, please describe.

C Systematic Evaluation of the Assessment Process

1. Describe the learning outcomes evaluation made at the end of nursing program?
2. What is the process for student-feedback that occurs at the end of the nursing program?
3. How is the overall assessment/quality improvement process evaluated by the School/Department of Nursing?

Template for Benchmarking Exercise

Section	Program establishment stage	Signposting to Evidence	Summary of Evidence/ Comments
A 1	Which factors direct the definition and evaluation of competencies and learning outcomes? *Competency is defined as: Successful demonstration of a broad-based set of knowledge/skills/attitude (KSA) that pertain to essential behaviours required for professional nurses. Competencies can be levelled to indicate an increase in breadth and/or depth of KSAs. In addition competencies can be tailored to address the specific role (field) of the professional nurse.* *Learning outcomes are the link between curriculum and competencies and are defined by the following characteristics:* *a) The not as broad-based as competencies* *b) Are linked to either course content(didactic) or practicum* *c) Are specific and measurable* *Factors are the rules/directions that arise from large external governing bodies that have some regulatory power over the higher education institution.*		
A 2	How do universities describe competencies and learning outcomes in their quality management systems? *Quality Management Systems by which quality of education is defined and evaluated in higher education systems.* *Examples of Quality Management Systems are the Regulatory Framework used by the University of West Scotland, the QSEN Framework for the U.S., etc.*		
A 3	How are competencies and learning outcomes defined (academics/working life/others)?		
A 4	What is the emphasis of generic and discipline specific competencies and learning outcomes? *Generic= all students completing a first-time bachelor's degree* *Nursing generic = all undergraduate nursing students* *Discipline specific= field of nursing*		
A 5	What kind of university laws, decrees, common rules, contracts and instructions guide learning outcomes evaluation?		
A 6	Do you recognize prior learning at your university? If so, please describe.		

Section	Teaching and learning process	Signposting to Evidence	Summary of Evidence/ Comments
B 1	What are the nursing program specific laws, decrees, common rules, contracts and instructions that guide learning outcomes evaluation?		
B 2	How are the learning outcomes defined in nursing program curricula: goals, teaching method, evaluation?		
B 3	How are the learning outcomes assessment criterions, scales and methods defined?		
B 4	How is the learning outcomes evaluation made and what kind of methods are used during the learning process?		
B 5	Does the School/Department of Nursing recognize prior learning? If so, please describe		

Section	Systematic Evaluation of the Assessment Process	Signposting to Evidence	Summary of Evidence/ Comments
C 1	Describe the learning outcomes evaluation made at the end of nursing program?		
C 2	What is the process for student-feedback that occurs at the end of the nursing program?		
C 3	How is the overall assessment/quality improvement process evaluated by the School/Department of Nursing?		

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THE EUROPEAN CONTEXT FOR LEARNING OUTCOMES DEFINITION AND LEARNING OUTCOMES EVALUATION

Marjo Nykänen

This article discusses the broad framework of the Bologna process at the levels of Europe, Finland and Mamk University of Applied Sciences (Mamk). It focuses on the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), the European Qualifications Framework (EQF), the Finnish Qualification Framework (FNQF), HEIs' quality management in Finland, the Finnish audit model and the Quality System of Mamk. These elements also give directions for defining learning outcomes and learning outcomes evaluation at HEIs.

The Bologna process

The Bologna process was launched in 1999 by the Ministers of Education and university leaders of 29 countries with the aim to create a European Higher Education Area (EHEA) by 2010. By the year 2015 as many as 47 countries have joined the process on a voluntary basis. Each country and its higher education community has made a decision to acknowledge the principles of EHEA. (EUA 2015.)

The Bologna Process aims to provide tools to connect national educational systems in Europe. The diversity of national systems and the practices of universities is still allowed, but the aim is to improve transparency between higher education systems within EHEA. The process seeks tools to facilitate the recognition of degrees and academic qualifications, mobility, and exchanges between institutions. (EUA 2015.)

One of the most important goals has already been achieved, as all participating countries have agreed on a comparable three-cycle degree system for the degrees of Bachelor, Master and PhD. In order to reach this goal many participating countries have made significant changes to their systems. A majority of European HEIs has reviewed their curricula as well as implemented a more student-focused approach and new quality procedures. Other central elements in the Bologna Process are the European Credit Transfer and Accumulation System (ECTS), diploma supplements, quality frameworks, the recognition of qualifications and joint degrees. (EUA 2015.)

The promotion of European cooperation in quality assurance is one of the objectives of the Bologna Process, and quality has been in the center of the process ever since the early stages. For a majority of HEIs, enhanced internal quality processes have been one of the most important changes during the ten-year-long Bologna period. The European Standards and Guidelines (ESG) have been developed for internal and external quality assurance in order to provide universities and quality assurance agencies with common reference points. In addition, the Qualifications Frameworks based on learning outcomes have become a central part of the Bologna Process and EHEA. Learning outcomes that promote the shift from a teacher to student-centered learning have been described as "the basic building blocks of the Bologna package of educational reforms". (EUA 2015.)

Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)

In 2003, as a part of the Bologna process, work was started to develop an agreed set of standards, procedures and guidelines for quality assurance for HEIs. The European Network for Quality Assurance in Higher Education (ENQA) had the main responsibility for the process, and the first report was published in 2005. One of the main results and recommendations of the report is that there will be European standards for internal and external quality assurance for HEIs, and for external quality assurance agencies. When the recommendations are implemented at HEIs e.g. the consistency of quality assurance across the EHEA will be improved. Furthermore, HEIs and quality assurance agencies across the EHEA will be able to use common reference points for quality assurance and the procedures for the recognition of qualifications will be strengthened. (ENQA 2005.)

The 2005 edition of the EGSs includes seven recommendations for internal quality assurance within HEIs (EQAR 2014). They are the following:

1. Policy and procedures for quality assurance:
Institutions should have a policy and associated procedures for the assurance of the quality and standards of their programmes and awards. They should

also commit themselves explicitly to the development of a culture which recognizes the importance of quality, and quality assurance, in their work. To achieve this, institutions should develop and implement a strategy for the continuous enhancement of quality. The strategy, policy and procedures should have a formal status and be publicly available. They should also include a role for students and other stakeholders.

2. Approval, monitoring and periodic review of programmes and awards:
Institutions should have formal mechanisms for the approval, periodic review and monitoring of their programmes and awards.

3. Assessment of students:
Students should be assessed using published criteria, regulations and procedures which are applied consistently.

4. Quality assurance of teaching staff:
Institutions should have ways of satisfying themselves that staff involved with the teaching of students are qualified and competent to do so. They should be available to those undertaking external reviews, and commented upon in reports.

5. Learning resources and student support:
Institutions should ensure that the resources available for the support of student learning are adequate and appropriate for each programme offered.

6. Information systems:
Institutions should ensure that they collect, analyse and use relevant information for the effective management of their programmes of study and other activities.

7. Public information:
Institutions should regularly publish up to date, impartial and objective information, both quantitative and qualitative, about the programmes and awards they are offering.

The ESG will be revised in 2015. According to the draft which is subject to approval on 14–15 May 2015 there will be ten recommendations instead of the previous seven. The focus of the revised ESG is on quality assurance related to learning and teaching in higher education, including the learning environment. Quality is seen mainly as a result of interaction between teachers, students and the learning environment. Quality assurance and quality enhancement can support the development of a quality culture that is embraced by the whole HEI community from the students and academic staff to the management. The list below quotes the ESQ 2015 and presents the new recommendations. (EQAR 2014.)

1. Policy for quality assurance
Institutions should have a policy for quality assurance that is made public and forms part of their strategic management. Internal stakeholders should develop and implement this policy through appropriate structures and processes, while involving external stakeholders.

2. Design and approval of programmes
Institutions should have processes for the design and approval of their programmes. The programmes should be designed so that they meet the objectives set for them, including the intended learning outcomes. The qualification resulting from a programme should be clearly specified and communicated, and refer to the correct level of the national qualifications framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area.

3. Student-centred learning, teaching and assessment
Institutions should ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach.

4. Student admission, progression, recognition and certification
Institutions should consistently apply pre-defined and published regulations covering all phases of the student "life cycle", e.g. student admission, progression, recognition and certification.

5. Teaching staff
Institutions should assure themselves of the competence of their teachers. They should apply fair and transparent processes for the recruitment and development of the staff.

6. Learning resources and student support
Institutions should have appropriate funding for learning and teaching activities and ensure that adequate and readily accessible learning resources and student support are provided.

7. Information management
Institutions should ensure that they collect, analyse and use relevant information for the effective management of their programmes and other activities.

8. Public information
Institutions should publish information about their activities, including programmes, which is clear, accurate, objective, up-to-date and readily accessible.

9. On-going monitoring and periodic review of programmes
Institutions should monitor and periodically review their programmes to ensure that they achieve the objectives set for them and respond to the needs of students and society. These reviews should lead to continuous improvement of the programme. Any action planned or taken as a result should be communicated to all those concerned.

10 Cyclical external quality assurance
Institutions should undergo external quality assurance in line with the ESG on a cyclical basis.

The European Qualifications Framework (EQF)

Understanding and recognizing diplomas and certificates issued in the different national education and training systems is essential for increasing free movement of people in Europe, which is one of the most important goals of the EU. However, this can be very challenging because of the diversity of the systems. The European Qualifications Framework (EQF) was developed in order to promote workers' and learners' mobility and to facilitate their lifelong learning across Europe. (EU 2014.)

The EQF is a tool to help communication and comparison between qualifications systems in Europe. There are eight common reference levels which are described in terms of learning outcomes: knowledge, skills and competences. National qualifications systems, national qualifications frameworks (NQFs) and qualifications in Europe can be related to the EQF levels. The purpose is to help both learners, graduates and employers to understand and compare qualifications awarded in different countries and by different education and training systems. (EU 2014.)

Each of the eight levels is defined by a set of descriptors indicating the learning outcomes relevant to qualifications at that level in any system of qualifications. The following Table 1 only presents the levels 6, 7 and 8 which represent the Bachelor (level 6), Master (level 7) and Doctoral (level 8) levels at HEIs. (EU 2014.)

TABLE 1. The EQF levels 6, 7 and 8

EQF Level	Knowledge	Skills	Competence
	In the context of EQF, knowledge is described as *theoretical and/or factual.*	In the context of EQF, skills are described as *cognitive* (involving the use of logical, intuitive and creative thinking), and *practical* (involving manual dexterity and the use of methods, materials, tools and instruments).	In the context of EQF, competence is described in terms of *responsibility and autonomy.*
Level 6	Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialized field of work or study	Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups
Level 7	Highly specialized knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research Critical awareness of knowledge issues in a field and at the interface between different fields	Specialised problem- solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields	Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches; take responsibility for contributing to professional knowledge and practice and/ or for reviewing the strategic performance of teams
Level 8	Knowledge at the most advanced frontier of a field of work or study and at the interface between fields	The most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/ or innovation and to extend and redefine existing knowledge or professional practice	Demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research

The most important principle of the EQF is the learning outcomes approach which moves the focus to what knowledge, skills and competences the learner has acquired by the end of the learning process. Implementing the EQF requires that all qualifications that are related to the EQF via the NQFs are described in terms of learning outcomes.

The Finnish Qualification Framework (FNQF)

On 21 August 2008, the Finnish Ministry of Education appointed a committee to prepare a national qualifications framework describing qualifications and other learning outcomes. The committee made a proposal on the Finnish National Qualifications Framework (FNQF) and its levels according to the EQF. The committee also proposed how the National Qualifications Framework (NQF) ought to be maintained, updated and developed. The committee also described how the quality assurance should be arranged and made a proposal on whether the national framework could be extended to cover all learning in addition to formal qualifications. One task of the committee was to discuss the necessary legislative reforms.

Quoting the Ministry of Education (2008), the committee's key proposals for higher education are as follows:
-   The higher education NQF will have three levels (6, 7, 8) based on the EQF. The framework describes the requirements of Finnish qualifications (learning outcomes) in terms of knowledge, skills and competence, which are the criteria agreed upon in European cooperation based on the EQF levels. The dimensions of learning are not, however, distinguished from one another and the EQF levels are specified based on a national perspective.
-   Finnish higher education degrees are placed in the NQF according to the three cycle system of the Bologna Process: the first cycle includes university and UAS Bachelor's Degrees (level 6). The second cycle includes university and UAS Master's Degrees (level 7). The third cycle includes scientific and artistic post-graduate degrees, such as licentiate and doctoral degrees.
-   The framework will be provided for in an act compiling the qualifications and syllabi as a whole as they are enacted in various statutes. The act will also compile the specific competencies of graduates with higher education degrees. The act will provide for authorisation to describe the levels as well as to enact government decrees placing the specific competencies of graduates on these levels. The statutes, decrees and instructions concerning qualifications and other certificates will also be revised.
-   The framework will be maintained in the same manner as similar statutes. The Finnish Ministry of Education will present the statutes relating to the national framework and is responsible for the drafting and presentation of the legislative amendments and for hearing the opinions of the other ministries and stakeholders in the drafting stage of the legislation. The mapping of the development and updating needs of the framework that is done in cooperation with the stakeholders will be integrated with the existing forms of stakeholder cooperation and the preparation of the qualifications structure proposals. The expertise of education and qualifications committees will be utilised in the mapping of the development and updating needs.

- Prior learning will primarily be incorporated into the qualifications in the national qualifications system and framework.
- The qualifications framework should be extended to cover all knowledge, skills and competences. The primary focus should be on the broad courses of various administrative sectors that are not included in the qualifications system, but are often completed and have learning outcomes defined by a competent authority. These courses include, for example, those related to professional eligibility and competence and those aiming at developing and improving professional expertise.

HEIs' quality management in Finland

Under the Finnish Universities Act and the Universities of Applied Sciences Act, HEIs are responsible for the quality and continuous development of their education and other operations. Autonomous HEIs independently decide on what kind of quality assurance suits their needs. They have a legal obligation to regularly undergo external evaluations of their operations and quality assurance systems as well as to publish the evaluation results. In Finland the quality assurance of HEIs has traditionally been based on the principle of enhancement-led evaluation. The Finnish audit of HEIs focuses on the quality assurance system that HEIs have developed for themselves based on their own needs and goals. Audits evaluate whether the system meets the national criteria and the European quality assurance principles. (Moitus 2010, 3–4; Talvinen 2012, 19.)

The quality assurance systems of 19 HEIs were analysed in 2010 on the basis of their audit reports (Moitus 2010, 7). Even though each HEI can build a quality assurance system for its own needs, there are several common features in the structures of HEIs' quality assurance systems. All the HEIs use several quality assurance methods side by side and only a minority of them uses ready-made quality standards, such as the European Foundation of Quality Management (EFQM) model or ISO standards as the sole basis of their quality system. Nine out of the 19 HEIs used the PDCA (Plan, Do, Check, Act) cycle of continuous development as the structure of their quality system, and later on it has become even more common, almost like a standard procedure (Talvinen 2012, 31). All the HEIs have had some quality assurance procedures even before the audit, but in many HEIs a harmonized and systematic quality assurance system was only built for the audit. Figure 1 presents the basic elements and procedures of HEIs' quality assurance systems. (Moitus 2010, 15)

Planning	Activities
- Steering of operations - Planning processes - Financial and action planning process - Strategy (planning) process - Annual activities calendar of strategic and financial planning - Internal funding distribution model - Evaluation plan or programme	- Quality manual/*description of quality system, internal webpages* - Processes and process descriptions - Process evaluations - *Contracts and instructions* - Quality assurance of recruitment
Development	**Evaluation**
- Monitoring, evaluation and reporting of activities - Management reports and monitoring systems - Indicators, BSC - Management reviews - *Performance reviews* - Feedback systems and development measures - Feedback systems of faculties/units - Quality feedback	- Feedback systems - Units' self-evaluations and EFQM/*CAF* self-evaluations - Self-evaluations and cross-evaluations of degree programmes - Internal audits *of e.g. curricula, R&D activities, quality system* - External audits, audits and accreditations - Benchmarking within the HEI and with other HEIs

FIGURE 1. Summary of QA procedures used by Finnish HEIs (Moitus 2010, 15 (*Supplemented with Mamk's procedures in Italics.*)

The Finnish Audit Model

In accordance with the implementation of the Bologna process, a discussion of systematic quality assurance in the Finnish HEIs begun in 2004. It was then proposed by the committee of the Ministry of Education that HEIs should develop comprehensive quality assurance systems. These systems would then be audited by The Finnish Higher Education Evaluation Council (FINHEEC). After that, the FINHEEC audit model was developed in 2005–2007 by launching pilot audits in two universities of applied sciences. The model has been further developed on the basis of feedback and experiences at two stages: in 2007 and in 2011. (Moitus 2010, 3; FINHEEC 2012, 3–4.)

FINHEEC has audited the quality assurance system of all Finnish higher education institutions during the years 2005–2011, and the results of each audit have been published in audit reports. The Finnish audit model is in accordance with the European quality standards, the ESG. FINHEEC and the national audit model were externally audited in 2010, and the model was found to be compliant with the ESG standard. (Talvinen 2012, 19, FINHEEC 2010, 35.) Compared with many international audits, the Finnish audit model is very comprehensive. All relevant procedures of the institutions are reviewed in the audit, e.g. the strategic management and steering of operations plus the procedures of collecting feedback on the quality of education and other operations. (Moitus 2010, 9; Talvinen 2012, 19; FINHEEC 2012, 9.)

The FINHEEC Audit Manual (2012) describes the audit aims, targets, criteria and methods. The audit focuses on the quality assurance system that HEIs have developed for their own needs and goals. The purpose is to evaluate whether the system meets the national criteria and the ESG. According to the valid audit manual (FINHEEC 2012, 9) the targets of the audit are as follows:

1. The quality policy of the higher education institution
2. Strategic and operations management
3. Development of the quality system
4. Quality management of the higher education institution's basic duties:
    a. Degree education (including first-, second- and third-cycle education)
    b. Research, development and innovation activities, as well as artistic activities
    c. The societal impact and regional development work (including social responsibility, continuing education, open university and open university of applied sciences education, as well as paid-services education)
    d. Optional audit target
5. Samples of degree education: degree programmes
6. The quality system as whole.

The audit results are evaluated on a scale of four development stages: absent, emerging, developing and advanced. The audited HEI passes the audit if none of the targets is evaluated as 'absent', and if the quality system as a whole is evaluated as 'developing' at least. The HEIs that pass the audit are added to the register of audited HEIs maintained by FINHEEC. They also receive a quality label which is valid for six years. (FINHEEC 2012, 11–12.)

The Quality System of Mamk University of Applied Sciences

Quality is valued at Mamk and operations are developed on the basis of feedback from the members of the university community and customers. Good quality can be achieved by developing the quality of the university's education, research, development and innovation operations, service operations and support services towards excellence. The strategic and operations management are based on information obtained from the systematic quality evaluation. (Nykänen & Voutila 2014, 13.)

High quality of the operations ensures the societal impact of Mamk and provides an important source of competitive advantage. The aims, maintenance and improvement of quality are based on Mamk's strategies and they are integrated in the activities of the university and its various departments. Efficient and economical operation plans and methods, which also motivate the per-

sonnel and the students to improve quality, are chosen for quality evaluation and development. The quality work includes the principles of transparency, reliability and confidentiality. (Nykänen & Voutila 2014, 14.)

The development of quality is included in the actions of the personnel and the students. In addition, members of the stakeholder groups participate in the evaluation and development of activities. Each member of the Mamk community is responsible for the quality and development of his/her own activities. The quality organisation consists of the director of quality and services, quality development officer, quality team and the persons in charge of quality work in the departments. The quality organisation is responsible for the functioning and the development of the quality system. (Nykänen & Voutila 2014, 14.)

The quality system and the information produced by it are documented on the personnel and student websites in accordance with the needs of the user groups. There is also some material in English on the websites. The information produced by the quality system is efficiently communicated. The aims of the Mamk quality system are:
- to systematically produce information in aim to support the management and development of activities and this way ensure the quality of the activities.
- to standardize the practices and to spread good practices.
- to support the participation of the members of the Mamk community in developing the activities.
- to strengthen the quality culture.

The cycle of continuous development is applied to the quality system and to the quality work: PLAN – DO – CHECK – ACT. The quality system consists of the description of the quality system, the documents that steer the planning stage, the core and support processes of the implementation stage with the related contracts and instructions, the evaluation and feedback system plus the documentation and communication concerning all the stages. The main elements of the quality system are shown in Figure 1. (Nykänen & Voutila 2014, 14–15)

FINHEEC conducted an audit of Mamk in 2013 and Mamk was awarded a quality label that is valid for six years. The quality system of Mamk meets the national criteria set for the quality management of higher education institutions, and the system corresponds to the European quality assurance principles and recommendations for higher education institutions. The object of the audit was the quality system that Mamk has developed based on its own needs and goals. The following were regarded as key strengths of the quality system in the audit report (Antikainen et al 2013, 5.):
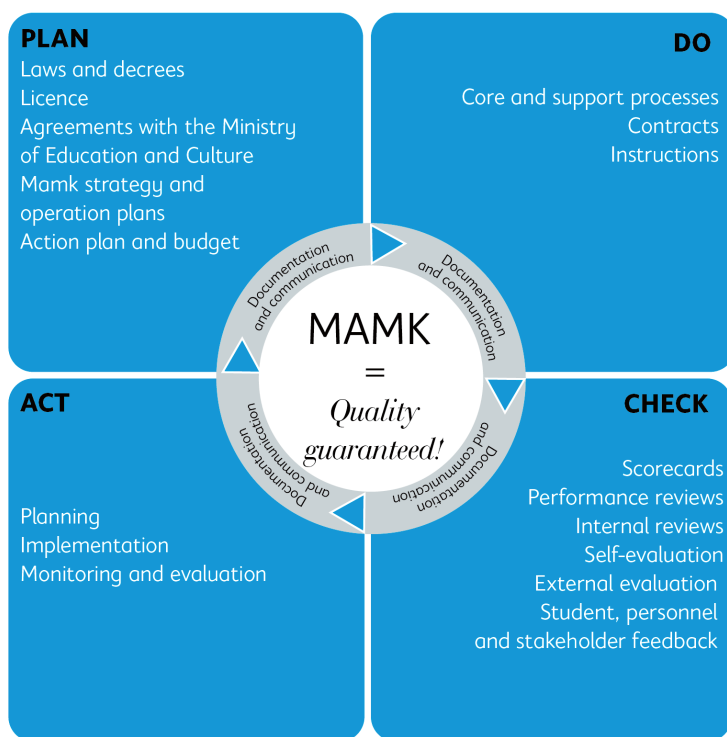
FIGURE 2. The quality system of Mamk

- The quality system supports the management of Mamk very well. The management systematically uses the data generated by the quality system in its steering and strategic decision-making procedures.
- A good case of how well the quality system works in practice is the way in which all staff members take care of the students from the beginning of their studies all the way to graduation. The principle of taking care of students has a crucial impact on the wellbeing of students, and consequently on the educational results.
- There is an open and interactive quality culture at Mamk. All members of the university participate actively in activities related to quality.

This article described the European context for the EQLO (Enhancing learning outcomes - Quality management at the university level and in nursing programmes) project which is presented in another article of this publication. The basis for learning outcomes evaluation lies in the European level documents, such as Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) and the European Qualifications Framework (EQF). These are complemented with national frameworks and legislation together with university level instructions.

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TOWARDS COMPETENCE BASED CURRICULA AND LEARNING OUTCOMES EVALUATION AT MIKKELI UNIVERSITY OF APPLIED SCIENCES

Tuija Vänttinen

Marjo Nykänen's article in this same publication discusses the broad framework of the Bologna process at the European, Finnish and Mikkeli University of Applied Sciences (Mamk) levels. Her article introduces the viewpoints of standards, including Guidelines for Quality Assurance in the European Higher Education Area (ESG), European Qualifications Framework (EQF), Finnish Qualification Framework (FNQF), HEIs' quality management in Finland, the Finnish Audit Model and the Quality System of Mamk. These elements also give the background for the definition and evaluation of learning outcomes at an institutional level.

The focus in this article is mainly on Mamk's learning outcomes definition in the curriculum. It introduces practices of learning outcomes evaluation as UAS level examples. In addition, the concepts of competence and learning outcomes and the definition of learning outcomes in the Finnish legislation for universities of applied sciences (UAS) are discussed.

COMPETENCE AND LEARNING OUTCOMES – OVERLAPPING CONCEPTS

Competence-based education (CBE), an outcome-based approach, has shown promise in reducing the gap between education and employment. The concept of competence is derived from the Latin word *competens,* which means

capable or *qualified*. The features which are attached to the concept of competence are e.g. personality characteristics associated with superior performance and high motivation. Several definitions for the concept of competence have been proposed, and there is a general lack of consensus about the meaning and the use of the term. Articles in the educational literature present two alternatives for spelling the word, namely, 'competence' and 'competency' offering the same meaning to each with their respective plurals 'competences' and 'competencies' as readily interchangeable. (Castillo et al. 2011.)

Competence-based education has been strongly enhanced and studied e.g. in the Netherlands since the 1990s. Wesselink et al. (2007) define the characteristics of this type of education as follows:
- Knowledge that is the basis of education is defined.
- The main professional problems are the basis of curriculum, including learning and assessment.
- Learning is assessed before, during and after the learning process.
- Learning takes place in different authentic situations.
- Learning and assessment account for knowledge, skills and attitudes.
- Students are encouraged to take responsibility and to reflect their own learning.
- The role of teachers and other assessors is more a role of a coach and expert.
- Students are made familiar with the attitude of lifelong learning.

Outcome-based education (OBT), or outcome-based teaching and learning (OBTL), is sometimes related to competence-based education. According to Biggs & Tang (2007) competence-based education is one example of outcome-based education. Thus, competence-based teaching and learning define the whole educational process from the curriculum planning to the evaluation phase. It also includes the broader meaning of student-centred and outcome-based learning and teaching combined with work-based pedagogy.

The concept of competence is in general used in EHEA, European Higher Education Area, and in the Tuning documentation. The alternative term, competency, is used in the documentation from the US, Canada, Australia and New Zealand. Some authors and organisations contributing to the professional literature propose a distinction between 'competence' and 'competency'. For example, the Chartered Institute of Personnel and Development from the the UK offers the following distinction: "Competency is generally defined as the behaviours that employees must have, or must acquire, to input into a situation in order to achieve high levels of performance, while competence relates to a system of minimum standards or is demonstrated by performance and outputs." Another similar distinction can be found: "A competency is the set of behaviour patterns that an incumbent needs to bring

to a position in order to perform its tasks and functions with competence. The inference here is that 'competency' is a level of behavioural excellence to aspire to, whilst 'competence' is simply a statement of minimum observable performance which is considered acceptable." (Castillo et al. 2011.)

Various definitions of competence are found in the research literature and other educational documents in Europe. Quoting Castillo et al. (2011) the Bologna Working Group in Europe suggests that competence includes:

a. cognitive competence involving the use of theory and concepts as well as informal tacit knowledge gained experientially,
b. functional competence (skills or know-how) referring to those activities that a person should be able to do when functioning in a given area of work, learning or social activity,
c. personal competence involving knowing how to conduct oneself in a specific situation, and
d. ethical competence involving the possession of certain personal and professional values.

In a later document leading to the EQF recommendations, the terminology was simplified: 'cognitive competence' was termed 'knowledge', functional competence was termed 'skills' and personal and ethical competences were combined into a single category termed 'wider competences'. The wider competences included autonomy and responsibility, learning competence, communication and social competence and professional and vocational competence. (Castillo et al. 2011.)

However, in the final EQF recommendations the term 'wider competence' was dropped in favour of the simpler term 'competence'. The definition of competence in the EQF emphasizes the terms 'responsibility' and 'autonomy'. This reflects the importance of these concepts in work and study situations in which practitioners assume responsibility in an autonomous manner for their professional practice and also for their own learning. (Castillo et al. 2011.)

The other concept used in the context of student-centred learning in the Bologna process is learning outcomes. The Tuning project brought learning outcomes to the European higher education discussion. Bollaert (2014) points out that the translation of the learning outcomes of a programme into learning outcomes on the level of modules or courses is undertaken via key competence definition. In the Finnish universities of applied sciences the key competences highlight work-based learning, and these work-based key competences summarize and integrate different learning outcomes into the essential and most important competences that should be gained by the learners at the end of their studies.

In EHEA the concepts of learning outcomes and competence are often used with different meanings and in somewhat different frames of reference (BFUG 2015). The Bologna Follow-Up Group's, in short BFUG's (2015), draft version for the ECTS Users' Guide defines these concepts as follows:

> *"Competence means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. In the context of EQF, competence is described in terms of responsibility and autonomy. Competence can be generic or subject specific. Fostering competence is an object of a learning process and an educational programme."*

> *"Learning outcomes express the level of competence attained by a student and verified by evaluation and assessment. They are statements of what learner knows, understands and is able to do on completion of a learning process. They are formulated by academic staff, involving students and stakeholders. In order to facilitate assessment, these statements need to be verifiable."*

Learning outcomes can be formulated nationally at field level or at HEIs' level according to their strategies. Eventually, learning outcomes can be defined at a programme, module or course levels (see Biggs & Tang 2007). This article uses the competence and learning outcomes definitions of BFUG (2015). Thus, learning outcomes can be operationalized by describing competences. However, competence and learning outcomes as concepts are tightly connected to each other and can be understood even as synonyms, but learning outcomes can be seen more as a result of an educational process.

The broad framework of the Bologna process defined in Nykänen's (2015) article in this publication provides the basis for the next sections' discussion on the learning outcomes definition and learning outcomes evaluation. Figure 1 below aims at providing the framework for discussing these concepts further in a more operationalized manner at UAS institutional and programme levels. The abbreviation LO in the figure is short for learning outcomes.
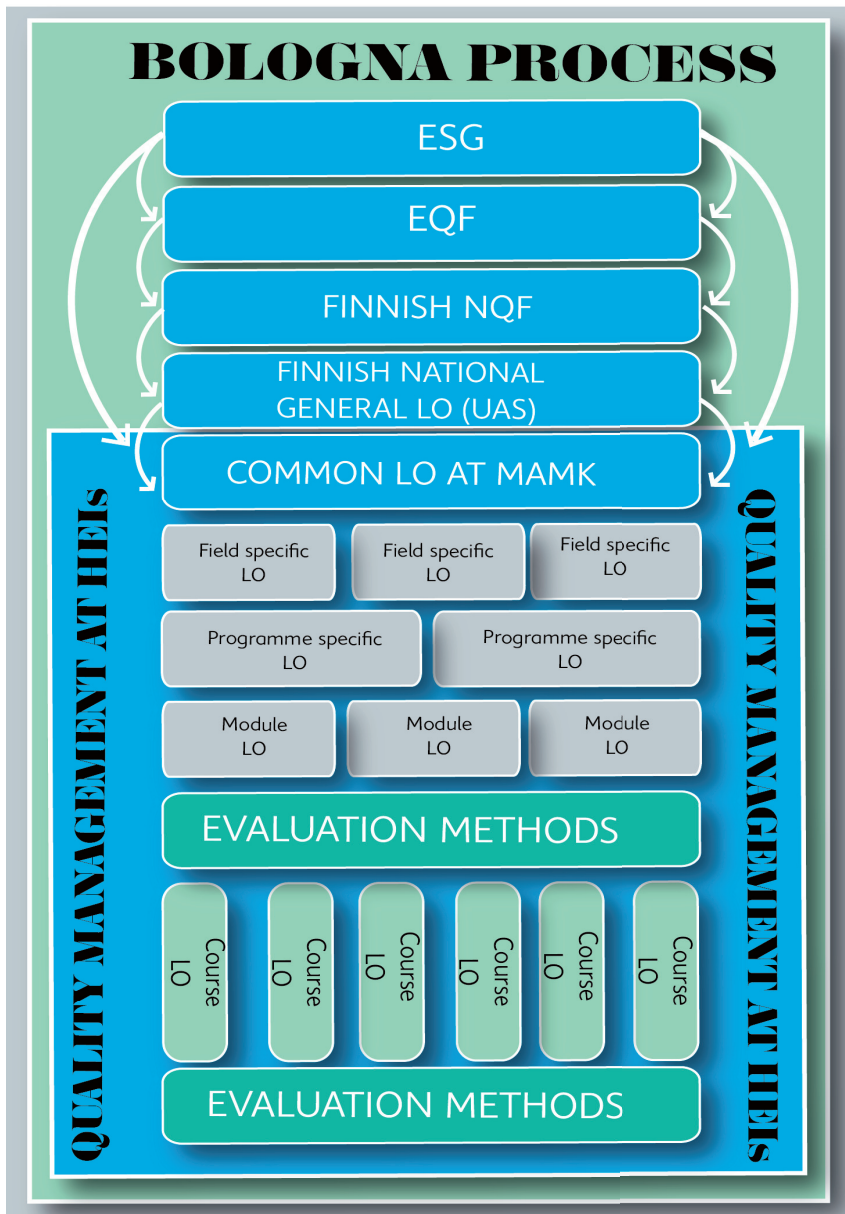
FIGURE 1. The framework for learning outcomes definition and learning outcomes evaluation

LEARNING OUTCOMES DEFINITION

As Nykänen's (2015) article already introduced in this publication, Finland's new UAS legislation follows the Finnish NQF committee's proposals. According to Moitus & Pyykkö (2014) learning outcomes have been either defined,

or they are currently in the process of being defined in Finnish HEIs. Many higher education institutions reported in the survey of Moitus and Pyykkö (2014) that they are applying the EQF and FNQF in their curriculum work, even though the FNQF has not been officially confirmed.
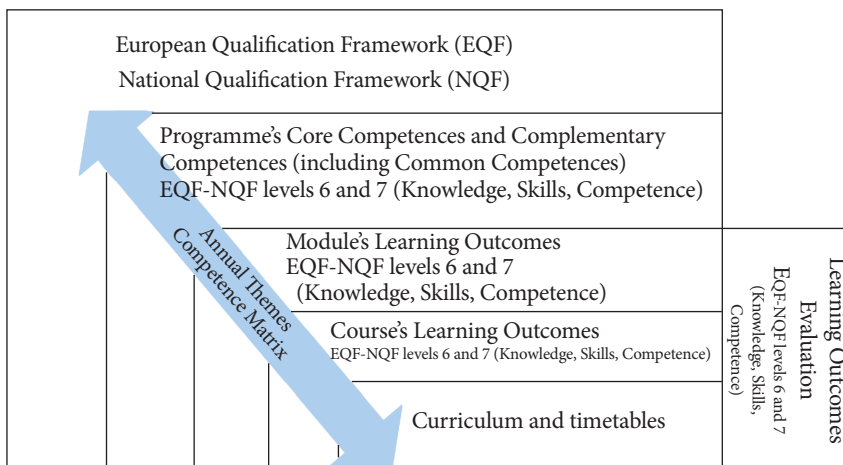
The learning outcomes of the Bachelor's and Master's levels are described in the Finnish legislation (Valtioneuvoston asetus ammattikorkeakouluista 932/2014). According to the Act 932/2014, Chapter 4 § Bachelor level students should have:

1. broad practical knowledge and skills and theoretical basis in order to work in the expert duties of their own field,
2. competence to follow and promote development in their own field,
3. skills to develop their own professional competence and readiness to lifelong learning,
4. sufficient communication and language skills for working in their own field and in international operations and cooperation.

According to the same act's Chapter 5 § Master level students should have:

1. broad, profound and necessary theoretical knowledge in order to work in their own field as developers in demanding expertise and management tasks,
2. profound understanding of their own professional field, its position in working life and society as well as competence to follow and analyse the progress of the development in the research and practical work of the field,
3. competence to develop their own professional competence and readiness to lifelong learning,
4. good communication and language skills for working in their own field and in international operations and cooperation.

In addition to the EQF an institutional FNQF framework for implementing outcome-based education is needed. Universities of applied sciences, including Mamk, usually regulate curriculum planning with guidelines for all the degree programmes of the Bachelor's and Master's levels. Curriculum is a learning outcomes oriented and competence-based plan which steers the learning process and professional growth of students in a holistic way. Figure 2 shows the general framework for the curriculum planning, learning outcomes definition and evaluation at Mamk.

FIGURE 2. General framework for curriculum planning at Mamk

The generic learning outcomes in the curriculum are defined at the national level. The learning outcomes of the Bachelor (level 6) and Master (level 7) degrees of Finnish UASs comprise the following competences: learning competence, ethical competence, working community competence, innovation competence and internationalization competence (Auvinen et al. 2010). At Mamk the learning outcomes of a specific degree programme naturally vary according to the field of study and degree programme. These referred learning outcomes form the basis for describing the degree programme's core competences and complementary competences. The core competence (must know) refers to the knowledge, skills and competence that are required of the graduates in working life as well as in the acquisition of new knowledge and skills. All graduates from a specific degree programme must possess the core competence. In the degree structure the core competence is described in terms of degree specific advanced professional studies. The curricula, in turn, describes the core competence in terms of modules and courses.

The complementary competence (should know) enhances the core competence provided by the degree programme. In the degree structure the complementary competence is described in terms of optional advanced professional studies. The curricula, again in turn, describes the complementary competence in terms of modules and courses.

BFUG (2015) gives some guidelines for formulating learning outcomes at a programme level. For example, learning outcomes should adequately reflect the context, level, scope and the content of a programme. The statements have to be concise and not too detailed. A widely accepted way of formulating

learning outcomes bases on three essential elements where the writer should: 1) use an active verb to express what students are expected to know or able to do, 2) specify what this outcome refers to, among other things, the objects of learning or skills achieved and 3) specify the way for demonstrating the achievement of the learning outcomes.

When formulating learning outcomes evaluation, the acronym RUMBA, widely used in the business and health care management literature, can be worth using (Maguire et al. 2013). In order to evaluate learning outcomes the criteria of reasonable, understandable, measurable, believable and achievable can be a useful aid when phrasing statements for learning outcomes. The whole list of useful criteria for the learning outcomes statements is described by BFUG (2015, 10–11). Biggs & Tang (2007, 64–90) include graduate attributes and specific programme aims in defining intended learning outcomes. They also give a detailed instruction for specifying learning outcomes.

LEARNING OUTCOMES EVALUATION AND ASSESSMENT AT MAMK

The focus in learning outcomes evaluation is on students' professional growth, knowledge, skills and competences during the whole learning process. Evaluation is carried out by assessing students' progress according to assessment criteria (Table 3). The student-centred orientation involves students' active role in all the stages of the learning process, including learning outcomes evaluation (Figure 3).
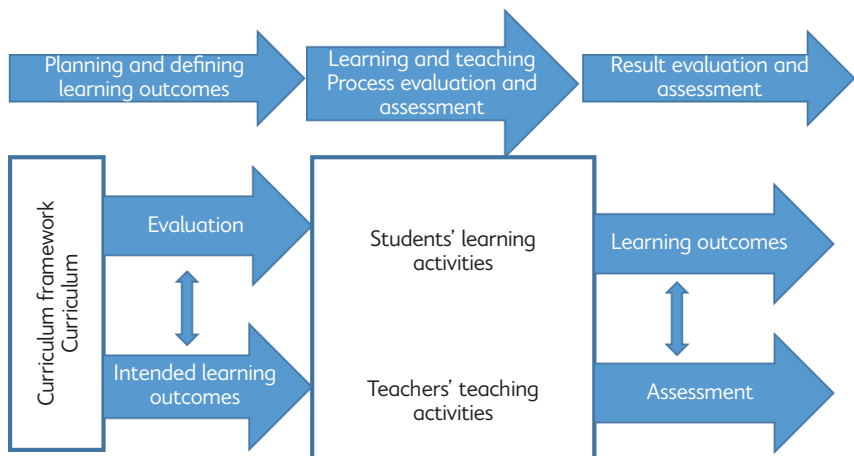
FIGURE 3. Learning outcomes evaluation and assessment during learning and teaching process

From the teachers' viewpoint assessment takes place at the end of the teaching-learning activities. But, from the students' point of view it already starts in the beginning - What do I know? What can I already? And what more should I learn from a specific module or course? Learning outcomes evaluation can be implemented e.g. through a personal study planning discussion with the student's mentor teacher, self-evaluation or peer evaluation. Learning outcomes evaluation can be either quantitative or qualitative. The assessment methods used at Mamk vary from different written tests to self and peer evaluation.

Kuh & Ewell (2010) have studied learning outcomes assessment approaches in the United States from the viewpoint of academic management personnel (n=1518 colleges and universities). Most institutions use a combination of institution level and programme level assessment approaches. One of the main observations is that American colleges and universities tend to use the institutional learning outcomes evaluation data for accreditation purposes and for indicating their accountability. The most common assessment measures at the programme level involve specialized knowledge measurements, student portfolios, interviews and focus groups, other performance measures, external experts' judgements and employer interviews. (Kuh & Ewell 2010.)

Competence-based education requires evaluation that bases on learning outcomes. According to Kuh & Ewell (2010) this demands HEIs to create their own "qualification frameworks" and to move towards diverse evaluation methods. Assessment in Mamk's degree programmes adheres to the common assessment criteria which follow the EQF and FNQF levels in the Bachelor's progammes (Table 3). The assessment criteria for each module and course base on these criteria. The courses are graded in accordance with Mamk's degree regulations.

The assessment criteria structure in Mamk's Master level programmes is similar to the criteria of the EQF level 7.

TABLE 3. Mamk's FNQF tool for assessing UAS Bachelor students' knowledge and skills (either knowledge or skills or both together)

LEV-EL	Entry-level knowledge and skills Students can	Graduation-level knowledge and skills Students can
5	a. use professional vocabulary and concepts proficiently. b. manage appropriate methods of information search. c. carry out interrelated tasks fluently. d. justify their actions in customer, user and target group situations. e. apply the key models, methods, software and techniques of the professional field. f. show skills in managing team work. g. apply the ethical principles of the professional field according to the situation.	a. use professional vocabulary and concepts extensively and proficiently in different situations. b. justify their information sources in a versatile and critical way. c. work innovatively and independently in working life expert duties and creatively identify and solve the problems of the professional field. d. promote and develop operations in customer, user and target group situations. e. evaluate and develop models, methods, software and techniques. f. manage and develop team operations. g. promote the application of ethical principles in unfamiliar situations.
3	a. use professional vocabulary systematically. b. look for information in the key information sources of the field. c. identify interrelated tasks. d. work together with customers, users and target groups. e. use the key models, methods, software and techniques of the professional field. work as team members in a goal-oriented way. f. justify their actions according to the ethical principles of the professional field.	a. use professional vocabulary and concepts in an expert way in different situations. b. evaluate information sources critically. c. work as team members in working life expert duties and identify and describe the problems of the professional field. d. evaluate operations in customer, user and target group situations. e. choose appropriate models, methods, software and techniques according to the purpose and justify these choices. f. promote teams' goal-oriented operation. g. apply critically the ethical principles of the professional field in different situations.
1	a. use professional vocabulary and concepts and show their information-based know-how. b. use the basic techniques of searching information in specific situations. c. carry out individual tasks. d. take customers, users and target groups into consideration. e. use the key models, methods, software and techniques of the professional field under guidance. f. work as team members. g. observe the ethical principles of the professional field in their actions.	a. use professional vocabulary and concepts in different situations. limit and justify the use of information sources. carry out unfamiliar interrelated tasks fluently. b. work together with customers, users and target groups according to the requirements of the situation. c. apply the models, methods, software and techniques of the professional field and justify their use. d. work in teams in a goal-oriented way. e. apply the ethical principles of the professional field in different situations.

(Information-based knowledge (a,b),, skills-based knowledge (c,d, e),, team work /management / readiness to take responsibility (f,g).)

Student-centred learning (SCL) in higher education is a key driver in developing HEIs' educational structures and pedagogical solutions. BFUG's (2015) draft version for the ECTS Users' Guide defines SCL as a process of qualitative transformation for students and learners in a learning environment, aimed at enhancing their autonomy and critical ability through an outcome-based approach in education. Learning outcomes assessment usually refers to the process of examining individual students in order to award a degree, marks or grades (Kuh & Ewell 2010). Thus, student-centred learning outcomes evaluation can have much broader meaning in HEIs' quality management systems in the educational process. Accountability to the society and working life challenges HEIs' quality systems and quality audits also from the perspective of learning outcomes.

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LEARNING OUTCOMES EVALUATION IN NURSING PROGRAMS

Paula Mäkeläinen

The nurse's profession requires the right to practice the profession, mere training is not enough. The right to practice the profession bases on the laws of the countries, in Finland, on the act on health care professionals (Health Care Professionals Act 559/1994). The purpose of this act is to protect the public's health and welfare by ensuring that safe and competent nursing care is provided by registered nurses. This article bases on the benchmarking project of Enhancing the Quality of Learning Outcomes where quality management was compared and evaluated between four universities, especially in nursing programs. The universities were Mikkeli and Kymenlaakso Universities of Applied Sciences, Washburn University (Kansas, USA) and the University of the West Scotland. The purpose of this article is also to compare good practices that could be worth adapting to the development of Finnish nursing programs.

Before graduation each nurse student must apply for registration. The registration processes vary in different countries so that the processes are governed by government bodies in Europe, but private by organizations in the USA. In Finland it is the National Supervisory Authority for Welfare and Health that grants the right to practice as a licensed professional in Finland. (Valvira 2015.) In Scotland the Nursing and Midwifery Council (NMC 2010a), and the National Council of State Boards of Nursing in the USA register

the nurses. Whereas in Scotland and Finland exams are not required before registration, in the USA nursing students must pass the test before they can be registered (NCSBN 2015). When hiring nurses the employers can check that they have the right to practice the profession. They also have to make sure that the nurses have the sufficient competence to work as nurses. Therefore, it is the educational organization's task to guarantee that graduated nurses have the competences that are needed in working life.

Competences and learning outcomes required in nursing programs

The general structures of university programs in Europe are similar. In the USA the entry into nursing programs has many pathways and options. The curricula have very similar contents, even if the curriculum development processes differ. In the USA the American Association of Colleges of Nursing (AACN) guides the curriculum development, and the Higher Learning Commission gives the permission to provide education after university accreditation. Scotland's Nursing and Midwifery Council (NMC) grants the permission to arrange nursing education after checking the curriculum. In Finland, based on the Polytechnics Act 923/2014, every University of Applied Sciences can independently decide the curriculum, also the nursing programs. The permission to provide education is granted by the Ministry of Education and Culture. (Polytechnics Act 923/2014.)

What kind of competences and learning outcomes do nurses need and have to reach before qualification, and what instructions, standards or guidelines define these competences? It is important to define the competences before they can be evaluated. Table 1 below describes the common competences that are necessary for all students, including nursing students, to learn during the programs of all four partnering universities. The table combines information from different guidelines that are also introduced by name or abbreviations. Some of the information is direct quoting indicated with double quotation marks. Some points have been shortened and/or slightly adapted to keep the information concise. The table also introduces the guidelines for the curriculum development.

TABLE 1. Common competences

EUROPE		USA
Mamk & Kyamk	**UWS**	**WU**
The European Qualification Framework (EQF), 8 levels. The bachelor level equals level 6: "Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles." "Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialized field of work or study." Competences: (Students can) "manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups." National Qualifications Framework (NQF): • Learning competence • Ethical competence • Working community competence • Innovation competence • Internationalization competence	The Scottish Credit and Qualifications Framework (SCQF), 12 levels. Every level has five characteristics: • knowledge and understanding (mainly subject based); • practice (applied knowledge, skills and understanding); • generic cognitive skills (e.g. evaluation, critical analysis); • communication, ICT and numeracy skills; and • autonomy, accountability and working with others. Each characteristic has detailed description on each level (see SCQF 2012). EQF level 6 = SCQF levels 9 and 10; Pre-registration nursing programs = levels 8 and 9 (NMC 2012).	The Higher Learning Commission (HLC), Criteria for Accreditation. The relevant criterion is Criterion 3 for Teaching and learning and its Section 3B for Quality, resources and support: "It (Program of general education) imparts broad knowledge and intellectual concepts to students and develops skills and attitudes that the institution believes every college-educated person should possess." Washburn University Catalogue: common learning outcomes for all programs: • Communication • Quantitative and Scientific Reasoning and Literacy • Information Literacy and Technology • Critical and Creative Thinking • Global Citizenship, Ethics and Diversity. The purpose is to ensure that students are equipped with knowledge and skills necessary to engage with the rapidly-changing world.

There are many similarities, especially in the knowledge and skills required, but also many differences in these competences. In Europe the European Qualification Framework (EQF) gives recommendations for the common competences that all students should reach (European Commission 2015a.) The National Qualifications Frameworks (NQF) are lead from the EQF. However, the Finnish NQF by ARENE ry (2010) and the Scottish SCQF by the European Commission (2015b) differ quite a lot from each other, the SCQF being more detailed than the Finnish NQF. ARENE ry (2010) describes in their document two program levels that are the bachelor (level 6) and master (level 7) levels. In Kansas common competences can be seen in the recommendations for the criteria of accreditation (Higher Learning Commission 2015). They also appear in the criteria of learning outcomes at university level (Washburn University Catalog 2014-2015).

Moving on to the profession-specific competences the relevant recommendations are again introduced with a table. Table 2 collects together and describes the profession-specific competences that are recommended in the nursing programs of the four partner universities.

TABLE 2. Profession-specific competences

EUROPE		USA
Mamk & Kyamk	**UWS**	**WU**
EU Directive 2013/55/EU gives instructions for curriculum development. The purpose is that nursing programs can be compared in different EU countries. Article 31: 8 main core competences that are required from general nurses: Competence for 1) diagnosing, planning, organizing and implementing nursing care using current theoretical and clinical knowledge 2) team working 3) health promotion 4) initiating life-preserving immediate measures 5) patient education / counseling 6) quality assurance 7) communicating and co-operating 8) analysing the care quality to improve the quality of professional practice EU Directive 2005/36/EC gives instructions for what nursing programs have to include. Competences defined in the project of The Future of Nurse Education nursing education (180 ECTS): • Customer orientation • Ethics and professionalism of nursing • Management and entrepreneurship • Social and health care operating environment • Clinical nursing • Empirically justified activities and decision-making • Instruction and education competence • Promoting health and operative capability • Quality and safety of social and health care service These definitions also include also the NQF competences.	EU Directive 2013/55/EU gives instructions for curriculum development. The purpose is that nursing programs can be compared in different EU countries. Article 31: 8 main core competences that are required from general nurses: Competence for 1) diagnosing, planning, organizing and implementing nursing care using current theoretical and clinical knowledge 2) team working 3) health promotion 4) initiating life-preserving immediate measures 5) patient education / counseling 6) quality assurance 7) communicating and co-operating 8) analysing the care quality to improve the quality of professional practice EU Directive 2005/36/EC gives instructions for what nursing programs have to include. NMC (Nursing & Midwifery Council) gives standards for pre-registered nursing education. Four sets of competences that every student must acquire by the end of the program: • Professional values • Communication and interpersonal skills • Nursing practice and decision making • Leadership, management and team working Every set of competences has detailed descriptions that are required from all nursing programs (adult nursing, mental health nursing, learning disabilities nursing, children's nursing). Standards also include the Essential skills clusters that should be reflected in learning outcomes at different points in the program. The skills are: • Care, compassion and communication • Organizational aspects of care • Infection prevention and control • Nutrition and fluid management • Medicines management NMC Standards includes Directive 2005/36/EC recommendations.	Kansas Nurse Practice Act gives requirements for the curriculum (pages 20–21). The American Association of Colleges of Nursing (AACN): Essentials of Baccalaureate education: Essentials that all nurse students must achieve: • Leadership (Leadership for quality care and patient safety) • Clinical reasoning (Scholarship for evidence-based practice) • Skills (Information management and patient care technology) • Policy (Health care policy, finance and regulatory environments) • Communication (Interprofessional communication and collaboration) • Community and health promotion (Clinical prevention and population health) • Values and ethics (Professional values) • Baccalaureate generalist practice Commission on Collegiate Nursing Education (CCNE) is an accreditation body in the field of nursing. CCNE Standards include AACN Essentials. The Quality and Safety Education for Nurses (QSEN) project defines the competences for nursing and knowledge, skills, and attitudes to be developed in nursing education. Competences are: • Patients-Centered care • Teamwork and collaboration • Evidence-based practice • Quality improvement • Safety • Informatics AACN Essentials include these definitions.

In Europe, Directive 55, Article 31, gives the core knowledge and skills requirements that general nurse students have to learn during education. According to the Official Journal of the European Union (2013) they are:

1) "comprehensive knowledge of the sciences on which general nursing is based, including sufficient understanding of the structure, physiological functions and behaviour of healthy and sick persons, and of the relationship between the state of health and the physical and social environment of the human being",

2) "knowledge of the nature and ethics of the profession and of the general principles of health and nursing",

3) "adequate clinical experience; such experience, which should be selected for its training value, should be gained under the supervision of qualified nursing staff and in places where the number of qualified staff and equipment are appropriate for the nursing care of the patient",

4) "the ability to participate in the practical training of health personnel and experience of working with such personnel", and

5) "experience of working together with members of other personnel in the health sector".

In addition, Directive 55 describes the competence requirements that general nurses have to reach during the training regardless of the institution proving the nursing program (see Table 2). The directive also requires that the general nurse programs have to last at least three years and consist at least 4 600 hours of theoretical and clinical training. (Official Journal of the European Union 2013.) Another Directive 36/2005 gives recommendations for the content of a nursing program curriculum, and it has to contain 1) theoretical instructions: nursing, basic sciences, social sciences, and 2) clinical instructions (Official Journal of the European Union 2005).

These instructions are the same for both the Finnish and Scottish nursing education. Scotland's Nursing and Midwifery Council gives standards for the pre-registered nursing education (Table 2). These recommendations also include the Directive 36 recommendations. In addition, NMC describes the essential skill cluster that newly qualified graduate nurses should demonstrate (NMC 2010b). The American Association of Colleges of Nursing, AACN, (2008) and The Quality and Safety Education for Nurses (2014) define the competences that are required from nurses in Kansas. The competence descriptions of all these institutions are clear and they can be seen in the curricula. Especially, the QSEN descriptions illustrate all the competences at the levels of knowledge, skills and attitudes (QSEN 2014). The eight essentials of AACN are described in the nursing program at four academic levels (Washburn University School of Nursing, 2011).

There was a project in Finland in 2013 that could be called The Future of Nurse Education (Sairaanhoitajakoulutuksen tulevaisuus –hanke 2013). Every Finnish university of applied sciences with a nursing program took part in this project that described the core competences required from general nurses covering 180 ECTS. These competences were listed in Table 2 above. Metropolia University of Applied Sciences and The Finnish Nurses Association run this project, and it based on the EU Directive 36 and other requirements in Finland. The competences became ready at the end of 2013, and the universities of applied sciences have started using them in their nursing program development.

Learning outcomes evaluation in nursing programs

One purpose of the EQLO project was to find out how learning outcomes were evaluated in the four different partner universities. Based on the documents and discussions the evaluation methods used in each university involve both similarities and differences. Table 3 shows the guidelines and recommendations that guide learning outcomes evaluation in all four universities.

TABLE 3. Learning outcomes evaluation

EUROPE		USA
Mamk & Kyamk	**UWS**	**WU**
Assessment Guidelines for UAS students account for the levels of **entry-level know-how and skills** and **graduation level know-how and skills**.	NMC Standards set assessment criteria that base on competencies.	AACN Essentials involve learning outcomes for each academic year.
• Information-based know-how	UWS regulations: Formative and summative assessment; Theory and practice assessment.	Standardized testing (ATI)
• Skill-based know-how		
• Teamwork/ management know-how		Before registration: National Council of Licensure Examination-RN (NCLEX-RN
• Readiness to take responsibility	Learning outcomes base on the SCQF levels.	RN

The main difference in the evaluation methods is at Washburn University which uses standardized tests during the education (ATI 2014). They also use the NCLEX-RN test (National Council of Licensure Examination-RN) that nursing students have to pass before they can be registered (NCSBN 2015). Otherwise, the course descriptions mention the methods for performing the assessment. In turn, Scotland's Module Descriptor includes the SCQF levels and all competence areas, also listed in Table 1, that are applied in the

program. This Module Descriptor describes how formative and summative assessment will be performed (tools). The learning outcomes are very clearly described at different levels and base on the SCQF competences. Mamk and Kyamk, in turn, have Assessment Guidelines for UAS Students that are used in course descriptions.

Discussion

It is necessary to define the competences and learning outcomes before they can be evaluated. The curriculum development in Finland is changing more to competence-based education and curriculum. This demands that all contents of the curriculum and courses must be rewritten: The perspective has to change from outcomes evaluation to know-how evaluation. It also demands from teachers that they have to develop new evaluation methods where students' know-how can be evaluated. According to Kullaslahti (2014) certain universities of applied sciences have abandoned the term curriculum, because they have wanted to change the viewpoint more to the description of students' know-how.

It is also necessary that the competences that are required from graduated nurses can be seen in the curricula. At the moment, the EQF, the NQF and the competence areas defined in the project of The Future of Nurse Education cannot be seen as well as in Scotland, for example. Jaana Kullaslahti and Irma Kunnari (2014) discuss the "line" of the curriculum where all the competences can be seen from the top, the EU level, to single courses and modules, including also the assessment methods that based on these competences. This is where we have to learn especially from the University of the West of Scotland where the SCQF competences and levels can be seen in a single course, and also in the assessment criteria framework (University of the West of Scotland 2014). However, this requires that the whole curriculum has to be examined again and reformulated so that the EQF, the NQF and the competences required from nurses are in line from the top down and can be seen in single courses. After that, the learning criteria, for know-how, can be defined and the methods for evaluating students' know-how selected. According to Max Sjöblom (2014), it takes at least two years to do this.

Also Washburn University had described well the QSEN learning outcomes as well as the learning outcomes at academic year levels. In addition, they used the national final test that graduated nurses must pass before registration (NCSBN 2015). This kind of testing could be useful in Finland, too, if the criteria will be based on the results of the project of The Future of Nurse Education. However, this requires that all these competences are described for the levels of knowledge, skills and attitudes, as in the QSEN competences. It is important that employers can trust that nurses graduating from different universities of applied sciences have the same knowledge, skills and competences.

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FOUR PROCESSES, ONE PRODUCT: WHY DIFFERENT PROGRAMMES OF STUDY SHOULD RESULT IN SIMILAR OUTCOMES?

Cristopher Collins

While training and educating people to be registered nurses is heavily governed, guided and monitored by legislation, research and experience, there is nevertheless much variation across the world in how this is achieved. There is no debate about the fact that these measures need to be in place, whichever country's higher educational programmes are examined, but it is more a question of how these systems are organised, not only *between* countries, but often between higher education institutions (HEIs) within the *same* country.

A collaborative project, involving four HEIs in three countries, looked at the process of producing registered nurse graduates. The aim of the project was to compare and contrast strategic, tactical and operational influences on the construction of nurse Training programmes and, in particular, on the learning outcomes that guide student performance and achievement between the four institutions. The institutions taking part were:
- Washburn University, Topeka, Kansas, USA (WU)
- Kymenlaakson University of Applied Sciences, Kotka and Kouvola, Finland (Kyamk)
- Mikkeli University of Applied Sciences, Mikkeli and Savonlinna, Finland (Mamk)
- University of the West of Scotland, Scotland (UWS)

The early stages of the project involved visits to all four campuses and scrutiny of documents and tools that inform and guide each programme of study. All information was entered into a benchmarking framework for each institution so that, by the end of this benchmarking phase, the same questions had been asked of all four universities and the responses recorded and presented in the same format. The amount of qualitative data this generated, in terms of programme construction, devising of learning outcomes at all levels, and the governance of the overall process, was unprecedented. While this data presented great opportunities for examination and discussion on the differences and commonalities between the institutions, another notion emerged that was more over-arching in its nature. This notion, and the aim of this article, is that, despite the occasionally stark differences, apparent between the programmes of study, legal systems, ethnic and cultural influences, each institution effectively produces the same product – registered general nurses who are more or less equipped to deliver evidence-based, person-centred care anywhere in the world.

This raises the question of how this can be the case, in the light of the many differences in history, geography, politics and ethnicity between the HEIs. As the Conclusion will show, the over-riding driving force in the shaping of nurses across the globe is possibly something that does not differ greatly from location to location.

THE EFFECT OF LEGISLATION UPON RESPECTIVE HEIS

Depending on the perspective adopted, the geopolitical identities of the participant institutions in this project might differ. Although there were four HEIs, all independent of one another, it could also be said that the group comprised two Finnish, one British and one American institution. Whereas those with a broader view, might see three European institutions and one American. While the Finnish institutions are more directly influenced by European law, UWS follows the same legislative framework, but it is adapted and filtered through the UK and Scottish governments and educational systems. WU, in the USA, works within a situation where the law might vary between states, but where all programmes of study must comply with state law and federal law.

So, while the legal system of any country is, in part, a product of its history, it was found, through benchmarking those pieces of legislation that influence the construction of nurse training programmes, that the outcomes were not so different from institution to institution. There might be different origins for the various pieces of legislation, and they might be enacted at different levels, but the effect upon the design, governance and monitoring of study programmes was not dissimilar between the HEIs.

In all three countries, the completion of a relevant course of study is not sufficient to allow someone to practice as a nurse. The law in each country requires a governing body to maintain a register of practising graduates. Registration with these quasi-autonomous agencies is a necessity, if someone is to work as a healthcare professional: Valvira in Finland (Valvira 2015), the Nursing and Midwifery Council in the UK (NMC 2015) and the State Nursing Boards in the USA (NCSBN 2015).

NURSING AS A VOCATION AND/OR A PROFESSION

Traditionally, and originally, nursing was a vocational occupation. Not only was the nurse usually female, but the lifestyle that went with the job was also very prescriptive, if not *pro*-scriptive. Long hours, poor working conditions and tight control over what nurses did with their free time and how they behaved, all seem far removed from today's image of the autonomous, problem-solving, team-leading professional that HEIs strive to produce. From the second half of the last century, nursing became more of a career option for many people. The gender mix also changed and individual nurses had more control and decision-making power over the kind of environment in which they chose to work, or the discipline in which they could specialise. (Borsay & Hunter 2012.)

Now that nursing qualifications are almost completely delivered at degree level, certain aspects of the nurse have evolved, while others have appeared for the first time. The traditional view of the 'doctor's handmaiden' has diminished with the advent of Nurse Prescribers, Nurse-led clinics and services, and Advanced Nurse Practitioners. The HEIs have been one of the more influential causative agents in this drift through the instillation of graduate attributes in their student nurses, and the creation of post-graduate courses of study that qualify registered nurses to specialise.

GRADUATE ATTRIBUTES

Graduate attributes are the focus of many recent publications and, indeed, most HEIs produce their own Graduate Attribute Frameworks. The ideas that are common to all of these frameworks are, generally:

- Enquiry and Lifelong Learning: This involves the development of a core knowledge base in nursing supported by access to, and use of, a current evidence-base. It also implies engagement with the research process in order to maintain the currency of that evidence-base. The idea here is to foster a lifelong attitude of enquiry that results in independent thinking and innovation.

- Aspiration and Personal Development: Graduates should be able to demonstrate ability with excellence and confidence. They should also be self-aware and take personal responsibility for self-development and acknowledgement of limitations.

- Outlook and Engagement: Graduates should develop an international perspective and will draw on their knowledge and experience to engage effectively with any environment in life.

Based upon these notions, graduate nurses will be in a position to create new knowledge through the processes of research and enquiry and will be equipped to meet new challenges in the spirit of openness and intellectual curiosity. The greatest tool at their disposal, if they are to achieve this, is communication. So, adding effective communication skills to this mix produces a graduate who can lead effectively and affect change efficiently. (Employability Initiative in Edinburgh 2015.)

In considering graduate attributes, it could be argued that they, at least in part, might be the reason that four different programmes of study result in approximately the same product. This is borne out by attention to these attributes in the documents that guide the construction of all four programmes. At Kyamk the curriculum document for nursing studies lists Innovation competence and Internationalisation competence among its programme outcomes (The Degree Programme in Nursing 2015). Mamk discusses the same issues (Auvinen et al. 2010). WU list among their major learning outcomes such objectives as effective communication, scientific reasoning, critical thinking and global citizenship (General education 2015), while UWS identifies critical appraisal and lifelong learning as two enduring aspects of graduateness.

Building curricula that foster these attributes in learners goes a long way to equipping nurses with similar career and life goals. Irrespective of ethnicity, religion or political persuasion, these graduate attributes will result in behaviour that develops professional and structured approaches to problem-solving, needs assessment and identification, and the addressing of gaps in the knowledge- or evidence-base. It should be no surprise, therefore, that nurses who study and graduate under very different systems and circumstances, might emerge with the same, or similar, mindset when it comes to addressing patient, client or service-user needs.

COMPASSION

Graduate attributes are not the only factor here, however. While there might have been a perceived swing away from the completely vocational and subservient image of the nurse to the clinically-minded professional entity produced by the universities, the pendulum has swung back a bit with the recent increasing focus upon ideas of compassion and dignity. So, while student nurses graduate with the developed skills of critical thinking and leadership qualities, perhaps the reminder is needed that the object of their practice is addressing peoples' physical, mental and spiritual needs. That is, that the humanity within all individual nurses is arguably the most important attribute they have to offer. (Dewar 2013.)

RECOGNITION OF PRIOR LEARNING

Recruitment onto programmes is a huge part of the business of any university and is based, in large part, upon capacity and funding. While it is encouraging to have many young students enter nursing, the question is often posed regarding the role of life experience, or lack thereof, in such a career. An idea that goes some way to addressing this issue is Recognition of Prior Learning (RPL). This is an area where all four participant HEIs are very active and their respective RPL systems are very well-developed. (Transfer Guides and General Education (GenEd) Guides 2015.)

RPL allows individuals who do not necessarily have the immediate entry qualifications to commence a study programme in nursing, to transfer any prior learning or experience into the application process. RPL does not only recognise previous study. It also acknowledges experience or competences that have been gained in non-academic ways. Typically, this route attracts people of a variety of ages, but usually significantly older than school-leaving age. The positives to be gained from this are many, not least the varied life-experiences these applicants add to the mix. Coupling the development of graduate attributes to an active RPL system strengthens the quality of the final product even further: professional practitioners who are attuned to viewing their charges holistically.

"THE UNIQUE FUNCTION OF THE NURSE…"

One of the earliest and most comprehensive definitions of nursing was devised by Virginia Henderson who, incidentally, was born not 70 miles from Washburn University, one of the four partners in this collaborative project. Henderson's definition has been updated and rewritten by many writers since it was first published in 1974, but its elements remain pertinent to the practice

of holistic nursing to this day. *"The unique function of the nurse"*, stated Henderson, *"is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge"* (Nite & Hammer 1997). While this definition addresses the physical, mental and spiritual state of the recipient of nursing care, it does not say much about graduateness or its attributes. It does, however, imply a lot about individuality, compassion and dignity; ideas that all nurses should embrace.

While it might not be immediately apparent how Henderson's definition is relevant to this project, it is true to say that many nurses identify closely with it. It also expresses the more essential aspects of what many people view as the nurse's role. The elevation of nurse training to degree level has had its critics. As a response to public opinion, that the training of nurses at universities in the UK affected the quality of essential nursing care, the Willis report of 2012 found that the increase in graduate nurses drove the standards and quality of care upwards. The balance then has to be drawn between the rounded and capable graduate and the vocational-type compassionate care-giver. Many people see these as either two different pathways or opposite ends of a spectrum. As alluded to in the Introduction, however, all four partners in this project, despite building very different programmes under very different political and historical conditions, have somehow ended up supplying their respective health services with very similar products – academically able, compassionate and professional registered nurses.

THE UNIVERSALITY OF NEED

It could be argued, therefore, that the root driving force for the training of this calibre of nurses, at least in relatively affluent countries, is the same – the universality of human need. From Marx onwards, writers have expressed the belief that humans are creatures of need, and that no one's life is without suffering and occasional dependence upon others (Heller 1976). Therefore, it is not a huge leap to accept that human need might be very broadly similar across the globe; that is, that human need, wherever in the world it arises, manifests itself in the same general universal way, with some local cultural or ethnic variations. It might then be concluded that, no matter where in the world people need care, nurses graduating from any validated nurse training programme might be more or less equipped to assess these needs, plan care to address them, implement appropriate evidence-based care, and evaluate that care based upon timely re-assessment. In theory, this basic process of nursing is at the disposal of any nurse, irrespective of *alma mater* or any other variable. Therefore, it should be no surprise that four such different HEIs produce such similar graduate nurses.

CONCLUSION

At the outset of this project, the task before the team was daunting. Faced with the volume of literature offered by each of the four HEIs – national and international legislative documents, university strategic and operational documents, national guidelines and local government directives – it was difficult to envisage how to map these materials in ways that would allow valid comparing and contrasting of systems and methodologies. As the sharing and examination of materials proceeded, however, it slowly emerged that, despite different languages, histories, political systems and funding sources, all four HEIs effectively equip their student nurses with the same balance of graduate attributes and capacity for compassionate care-giving.

Underlying these aspects of nurse training is the universality of human need. Wherever there are people in the world, most, if not all at some point in their lives, will become ill or dependent. They develop the same broad needs, and vary only at the individual level. There might be local cultural differences in how this is expressed or addressed, but broadly the structured, organisational, professional response is the same – to recruit, develop, educate and foster skills, knowledge and attributes in nurses that will equip them to meet the needs of those ill or dependent people, wherever in the world they choose to work.

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RECOGNITION OF PRIOR LEARNING: A WAY TO QUICKER GRADUATION

Seija Aalto

Lifelong learning has been strongly under discussion in Europe during the past ten years. The Bologna process stresses the possibility to continue studies in a flexible way from one level to another through one's entire lifetime (Bologna Seminar Recognition of Prior Learning 2008). And, various projects for improving the possibilities for prior learning have been going on since 2009 for example in Finland (Halttunen & Pyykkö 2010). Almost all Finnish universities of applied sciences have taken part in these projects in one way or another. This article first briefly discusses what prior learning is and what benefits can be achieved through the recognition of prior learning (RPL). After that, it introduces how the recognition of prior learning is carried out in the four partnering universities of the EQLO project.

PRIOR LEARNING AND ITS BENEFITS

Prior Learning is the knowledge and competences that a person has achieved through previous education or work experience before his or her current education. The recognition of prior learning is a way to recognize someone's skills or knowledge, regardless of where and how these were learned. The recognition of prior learning (RPL) is known by many names in different countries. It is APL (Accreditation of Prior Learning), CCC (Crediting Current Competence), or APEL (Accrediting Prior Experiential Learning), and PLAR (Prior Learning Assessment and Recognition). For example, the SCQF, the Scottish Credit and Qualifications Framework (2013) defines RPL as follows: "RPL is the process for recognizing learning that has its source in experience and/ or previous formal, non-formal and informal learning contexts. This includes

knowledge and skills gained within school, college and university and outside formal learning situations, such as through life and work experiences."

In RPL the students' competences are compared and evaluated against the competences and learning outcomes that are written in the curricula, and a competence-based curriculum is needed to recognize prior learning. The design of educational programmes should enable students to build on a range of competences and knowledge gained through work-based and other experience which learners bring to the curricula. Students are not obliged to study subjects that they already know, if their prior learning is recognized. They are able to shorten their education and graduate earlier, if they have a lot of prior learning recognitions. As a result, students' motivation is good during their studies, when they do not need to restudy subjects that they already master. They are also able to focus on studies that require more practice.

There are benefits for the society, too, when the students' prior learning is useful and recognized. The students are able to graduate earlier, they do not spend too long time studying, and they are able to start working earlier. It also promotes lifelong learning, when there is no need to restudy the same subjects. The benefits for universities are that students graduate earlier, the study processes become more efficient and the results are in that way better. Universities have more motivated and satisfied students when they feel that their competences and knowledge is recognized.

THE RECOGNITION OF PRIOR LEARNING IN FINLAND, SCOTLAND AND KANSAS

The sections below briefly introduce how prior learning is recognized in the four universities that cooperated in the EQLO project. These institutions involved two universities of applied sciences from Finland, ie Mikkeli University of Applied Sciences (Mamk) and Kymenlaakso University of Applied Sciences (Kyamk). The other two universities were the University of the West of Scotland (UWS), and Washburn University (WU) from Kansas, the USA. Starting from Finland the information below aims to cover the most relevant details of RPL in each one of these universities in general, but there also observations on the practices of nursing studies.

Finland

At Finnish universities of applied sciences it is possible to have one's prior learning recognized and included in one's UAS degree studies. Prior learning may account for a single course or a whole study module. The general principle is to fully recognize and accredit prior learning as part of a degree or other studies. Prior learning is a part of a personal study plan that is made for all students. Prior learning could have been acquired outside the institutions of

higher education, such as at work or through education in leisure time. The students usually apply for the RPL in the beginning of their studies.

Kyamk and Mamk have similar RPL practices, and according to Kyamk's degree regulation prior learning can be accredited by three different means: **substitution**, **inclusion**, or through the **demonstration of competence**. If particular studies were completed more than five to ten years prior to the current studies, they cannot be accredited through substitution or inclusion. **Substitution** is a form of RPL in which some of the studies in the curriculum of a degree programme are substituted by studies with equivalent content completed elsewhere. Also compulsory work placements can be substituted with appropriate prior work experience. The studies completed at another university of applied sciences in the same degree programme are substituted in full extent.

Inclusion is a form of RPL in which studies completed elsewhere are included in the current degree studies. The content of the included and replaced studies does not have to be completely identical. (Kymenlaakso University of Applied Sciences 2013.)

If, prior to his/her studies at a university of applied sciences, the student has acquired competence that meets the degree criteria and objectives, he/she is entitled to demonstrate this competence in a competence test. The competence test is determined by the heads of degree programmes or departments and may include e.g. an interview, an examination or assignments. RPL is used widely in nursing education. Especially, the competence tests are used in practical nursing subjects.

Scotland

The University of the West of Scotland (UWS) coordinates prior learning recognition centrally within the Lifelong Learning Academy. The Lifelong Learning Academy supports flexible and part-time studies and advanced entry to the UWS programmes. The RPL claims are supported by an Education Guidance Adviser and a subject specialist who provides guidance on constructing learning outcomes. RPL is carried out by a portfolio, and the adviser gives guidance on its preparation.

All the programmes at UWS have sets of learning outcomes in the curricula that are linked to the SCQF levels. The RPL claims involve the development of the learner based on the defined learning outcomes that are in line with the programme level learning outcomes and SCQF level descriptions. The RPL claims involve a piece of written work of 3,000 to 5,000 words for any size of a claim, which should also include a portfolio providing evidence for the knowledge and skills acquired. The claims are double-marked and open to

external examination. The results are approved through subject panels with the grades of pass or fail only. RPL reflects the UWS assessment processes for achieving learning outcomes. RPL applicants are also supported in the process of reflection and gathering evidence through a module called Making Your Experience Count. (Whittaker & Brown 2012.) RPL is rarely used in nursing education at UWS, because indicating the learning outcomes of nursing subjects with a written portfolio is challenging. In addition, competence tests are not used, and non-formal knowledge and competences are not recognized.

Kansas

The Washburn University in Kansas recognizes studies that are completed in a community college or at another four-year university. There are admission counselors who work with the process and help students with questions about transferring credits, and give referrals to departmental advisors. There is a transfer guide to help the students to determine how credits will be accredited at Washburn University. The transfer guide is not comprehensive. It only lists courses that are frequently transferred to Washburn University, and also courses not included in the guide might still be accredited by Washburn. International students follow their own guidelines. (Transfer guides and general education guides 2015.)

Each program at Washburn University has clearly defined written policies concerning credits for previous studies, for transferring credits, and for the readmission of students. The possibilities to recognize prior learning in nursing education through this transfer credit system are limited at Washburn. In addition, the recognition of the practical and non-formal knowledge is not used.

To conclude this discussion on RPL within the EQLO project, the recognition of prior learning is very important when we talk about lifelong learning. RPL is used in different ways at universities in Europe and in the USA. Formal education is quite easy to recognize, and it is accredited widely. For example, the levels of the European Qualification Framework (EQF) give guidelines for European universities for what kind of studies they are able to accept. However, the challenges start when recognizing knowledge and skills acquired through non-formal education.

Based on the comparison on the RPL practices of the four partnering universities RPL is used more in Finland than in Scotland and Kansas. Also, all the varieties of prior learning – acquired both through formal or non-formal ways – can be recognized in Finland. Different methods are used to identify and give evidence for non-formal competences, including competence tests, interviews, examinations, assignments etc. It is worth developing these methods further, as RPL gives better possibilities for lifelong learning. It also promotes students' motivation during their studies, when they do not need to restudy subjects and they are able to graduate earlier.

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ASSESSMENT OF CLASSROOM LEARNING: A COMPARISON OF NURSING EDUCATION BETWEEN FINLAND, SCOTLAND AND THE USA

Jane Carpenter and Debra Isaacson

Large lecture halls packed with students lends itself to inactive teaching strategies such as Power point lectures (Cullen, Harris, & Hill 2012). Nursing curricula in particular tend to be content laden which results in superficial coverage and lack of student engagement (Benner et al. 2010). Additionally, evidence in the fields of teaching/learning supports the need for active engagement of the learner and for focusing on the key elements central to the discipline (Bain, 2004; Bransford, Brown, & Cocking 2000; Weimer 2002).

Nursing schools globally conduct classroom teaching and the assessment of learning in a variety of ways. Some of these assessments may be done while in the classroom and other assessments are made utilizing assignments completed outside the class with a deadline. These assessments are created to provide the nursing program and the student an indication of their level of understanding of the material. It also provides information on the individual's ability to arrive at a solution and whether or not they are meeting the minimum standards of the profession.

Oermann, Saewert, Charasika, & Yarbrough (2009, 274) stress that "assessment is the process of collecting information about a student's learning and clinical performance over time". The process of assessment provides individual data along with program information. Is the curriculum adequately preparing

the student? Assessment can be specific to an individual, a course within the program or the overall program. As a program determines assessment methods, it is critical to determine how the information will be utilized.

A grant by the Finnish Higher Education Council allowed faculty members from each of four universities, Kymenlaakso University of Applied Sciences (Kyamk), Mikkeli University of Applied Sciences (Mamk), University of the West of Scotland (UWS) and Washburn University, Kansas, USA (WU) to travel and visit each site to compare quality education practices. As part of the Enhancing Quality Learning Outcomes (EQLO) project the various faculty met to discuss the benchmarking of student competencies and to examine similarities and differences between the settings. While differences exist we all have regulatory agencies to ensure that graduates are providing safe and competent care to the public. The assessment of learning along the way is critical to ensure that the learner is safe and able to provide quality care. This article focuses on the learning and assessment practices for classroom learning, highlighting the background and the specifics of required assessments in the USA, with an overview of classroom assessments on each of the campuses.

OVERVIEW OF LEARNING AND ASSESSMENT

This section will discuss the traditional classroom setting, the assessment of learning through testing and simulation, and active learning strategies such as the flipped classroom. When discussing the assessment of classroom learning it is essential to keep in mind the overall purpose of assessment which the UWS Assessment Handbook (2011,1) outlines as follows: "Assessing the level of knowledge, understanding or skills achieved; assessing readiness to proceed to further learning; grading performance for award purpose". Assessment provides direction for the learner, the faculty member and the program. Of importance in the process is that the learner understands how they will be assessed and what level of achievement is expected. To make the assessment process of value to the learner, feedback must be provided in a timely fashion and direction given on how to achieve the standard (UWS Assessment Handbook 2011). The assessment of classroom learning comes from a variety of sources: self, peers, faculty and outside sources.

Nursing education in the United States is in the process of transition to more active learning strategies (Billings & Halstead 2009). Active learning requires the student to be engaged in the process. It moves the attention from the faculty member to that of the student. The faculty member is helping the students to actively seek and utilize information to arrive at conclusions or solutions (Berrett 2012; Hawks 2014; Roehl, Reddy & Shannon 2013). This type of learning is often achieved through student reflection, individual or group case studies, simulation (virtual or live), the development of games and role playing, a method that has been utilized for many years (Tedesco-

Schneck 2013). The goal of these activities is to immerse the student in their learning. As these situations evolve, the student must make decisions or take actions with the goal of finding a solution.

Active Learning

Active learning assists the student in the development of critical thinking skills in a safe environment. Many times these methods may be used along with the lecture method of instruction, but in some situations classroom engagement activities may be the sole method of instruction. A faculty who utilize a flipped classroom often begin with a mini-lecture which the student listens to prior to coming to class, a reading assignment, and possibly a quiz. The quiz can be used to determine a student's beginning level of understanding of the content. In some cases the quiz may be given at the end of class to determine improvement in learning. This provides a formative assessment. This also allows the instructor to determine areas where students may lack understanding and this information can then be reinforced. Students in the flipped classroom engage in groups to work through a clinical scenario or set of questions or other learning activities (Berrett 2012; Fulton 2014; Hawks 2014; Roehl, Reddy & Shannon 2013). As the students work through the scenario or questions, they use critical thinking skills to come to a conclusion. Missildine, Fountain, Summers & Gosselin (2013) conducted a study using different methods of classroom instruction. The authors determined that in flipping the classroom, when strategies often used for homework were implemented instead in the classroom, student scores were increased compared to a traditional classroom.

The use of simulation also provides another mechanism to assess classroom learning. This teaching strategy provides a formative assessment on students' understanding of content learned within the classroom. Simulation is a way to bring the classroom to life and helps the student integrate concepts learned within the classroom. Principles can be reinforced through the use of a scenario while a student uses critical thinking strategies to work through the scenario (Mills et al 2014; Weaver 2011; Woodward 2013). Students must react to the situation as it occurs using the knowledge they have gained (Mills et al. 2014). The use of simulation is more frequently used as a formative assessment, but in some situations may be used as a summative assessment. For example, a student might have to successfully complete a simulation prior to starting a capstone experience.

The Objective Structured Clinical Examination (OSCE) is another way to use simulation to assess student learning. The format may be used as a formative or summative assessment. The OSCE gives the faculty member an indication of whether or not the student has been able to shift information learned in class into the care of a patient (McWilliam & Botwinski 2010).

The use of simulation will continue to grow based on the recent research study conducted by the National Council State Board of nursing (Hayden, Smiley, Alexander, Kardong-Edgren & Jeffries 2014). This research study used simulation at 10 different nursing programs and examined the impact on the NCLEX-RN test results and performance upon entering the workforce, when no more than 10% of clinical hours were used for simulation (control), 25% of clinical hours were used for simulation and 50% of clinical hours were used for simulation. The researchers found no statistically significant difference in the groups when assessing the NCLEX performance and nursing abilities six months into their practice. (Hayden et al. 2014.)

Assessment

A commonly used measure to assess classroom learning within the United States is faculty developed tests. Tests are constructed related to content being taught and given at intervals throughout the semester. Many faculties also administer a final examination that may, or may not, be a comprehensive examination of all the material covered in the course during the semester. The faculty may write their own questions or may use test banks developed by the authors of a textbook used for the course. The majority of the test questions are multiple-choice instead of essay questions. The examinations cover specific content related to that specific course. Using Bloom's taxonomy these questions can be written at the knowledge, comprehension level, but in nursing schools the questions are predominantly written at the application or analysis level as the NCLEX-RN examination tests at the higher level of difficulty (Forehand 2005). Test developed by faculty members often do not have any supporting statistical analysis. Questions are used on a small sample and may not have content validity (Tanner 2011).

NCLEX-RN Examination

While a school of nursing and its programs can graduate students who are ready to enter the workforce, in order to be eligible to practice in the United States the graduates must successfully pass a licensure examination. The purpose of the examination is to ensure that the graduate is safe to practice nursing (NCSBN website). This exam, administered by the National Council State Boards of Nursing (NCSBN), is referred to as the National Council Licensure Examination for Registered Nurses (NCSBN 2014). Schools are evaluated based on the performance of the graduates passing or failing the NCLEX-RN. A failed exam may be repeated at a later date by the same student. However, this puts undue financial burdens on the student, and damages the reputation of the educational institution.

In order to prepare students for this licensure exam, the NCLEX test blueprint is available to serve as a guide for schools (NCLEX-RN test blueprint 2013). The test is broken down into client need categories with subcategories. The 4 major client need categories with subcategories can be seen in Table 1.

TABLE 1. The NCLEX-RN examination categories (NCLEX-RN test blueprint 2013)

1: Safe and Effective Care Environment
- Management of Care, 17–23%
- Safety & Infection Control 9–15%

2: Health Promotion & Maintenance 6 - 12%

3: Psychosocial Needs 6 - 12%

4: Physiologic Integrity
- Basic Care and Comfort 6–12%
- Pharmocological & Parenteral Therapies 12– 18%
- Reduction of Risk Potential 9–15%
- Physiologic Adaptation 11–17%

As the table shows each category is assigned a percentage range, meaning that a student testing will receive a certain percentage of questions related to that client need category.

Background and History of NCLEX

The NCSBN primary function is to make a decision on the newly graduate nursing student's competency. It does this by determining whether the graduate is able to answer questions above the minimum competency baseline. In order to be sure that the NCLEX-RN exam continues to be reflective current practice an analysis of nursing care within the United States is conducted on an every three year cycle (Carpenter 2010; NCSBN Research Brief 2012). The examination and passing standard is changed to reflect the complexity of care currently being provided by nurses. The licensure examination was previously a norm-referenced test. A change in format now utilizes a criterion-referenced test. The test is computed using the Rausch model. Over the years the test has gone from a logit of -0.42 in 1998 to a logit of -0.16 as of 2010 and in 2013 to a logit of 0.00 (NCSBN Research Brief 2013; NCSBN Passing Standard FAQ 2015).

Traditionally, when the NCSBN has raised the passing standard a drop in the national pass rate has occurred. According to the Multi-year pass rates of the Kansas State Board of Nursing the national pass rate in 2010 was 87.41%, and in 2013 the national rate decreased to 83.04%, indicating a 4.37% decrease in the individuals passing on the first attempt. While 4% may not seem significant, a further look at the data shows that during the first quarter of 2013 the pass rate was in the upper 88–91% range and dropped to the 80% range for the last three quarters of the year for an ending average of 83.04%. Based on the 2013 Table of pass rates of the NCSBN the drop in pass rate was even more significant. For the year 2014, the national pass rate was 81.78% a further decrease of 1.26%. (Kansas Board of Nursing 2014; NCSBN 2013; 2014.)

In a review of the data related to NCLEX-RN passing statistics it should be noted that of the testers initially failing the exam, approximately only 50% of those individuals who must retake the exam are successful. In 2014 the pass rate for repeaters was 46.36% (NCSBN 2014). A student who fails the NCLEX-RN is eligible to retake the examination. The nurse practice act for the state in which they are trying to obtain a license dictates the time period in which a student must wait to retest. According to the NCSBN website this typically ranges from 45–90 days. When examining the statistics that only one-half of the students failing the examination are successful on their second attempt, the assessment of the students' readiness to test, and ensuring they have the mastery of classroom information, are critical to students' success.

In 1994 the NCSBN shifted the design of the licensure examination (NCSBN 2014). The new format moved to computer adaptive testing (CAT) as a means to determine the examinee's minimum level of competence. When answering a question correctly, the next question the tester views becomes more difficult. When the question is answered incorrectly, the next question is at a lower level of difficulty. The benefit to the adaptive testing is that the individual has a test specific to his or her capability. Based on an examinee's answer to a question, the computer computes an estimate of the individual's ability while evaluating the content area needed according to the test blueprint and picks the next question. Each graduate testing must answer a minimum of 75 questions and could answer up to a maximum of 265 questions. The computer must determine the student's level of competence at the 75 question mark. When the computer is satisfied with the individual's ability, the exam will shut off. This is also true when the student is below the minimum competency level. When the computer is not clear on the individual's level of competency, it will continue to ask questions until a decision can be made (Carpenter 2010; NCSBN website FAQs).

The NCLEX-RN test plan is developed based on a practice analysis completed by a survey of newly licensed nurses regarding their current practice. This survey is sent to 12,000 newly licensed nurses and does not discriminate whether the nurse passed the exam on the first attempt or after repeated attempts (NCSBN website FAQs). Educators and healthcare administrators are uneasy with the fact that this high-stakes examination is developed using such a small number of participants. The practice analysis utilized newly licensed RNs in 2011. This data was then reflected in the changes to the test blueprint for 2013 (NCSBN 2012).

A tremendous focus of the NCLEX examination has been the ability of the student to prioritize care for patients: Who should I see first? In addition, the examination accounts for the appropriate delegation of care and appropriate assignments. For example, a question might ask the student out of 4 different types of patients who the nurse would choose to assess first. Here the students must use their critical thinking skills to determine which patient has the highest priority. On a delegation question the student is asked to decide which tasks or activities could be delegated to a Licensed Practical Nurse (LPN) or an Unlicensed Assistive Personal (UAP). Here the student must be able to use delegation principles to make decisions. Also within this category, the assignment questions look at the student's ability to make appropriate assignments to other staff on the unit. For example, which are the best patients to assign to the new graduate nurse or the nurse who is floating to your unit or may not be familiar with your unit? (Hargrove-Huttel & Colgrove 2014) These types of questions are at the application and analysis level of Bloom's taxonomy (Forehand 2005).

The NCLEX-RN examination has introduced the use of alternate format questions such as Fill-in-the-blank, Hot spot, Select all that apply or Multiple response, Audio option, Graphic options, or Ordered response or Drag & drop (NCSBN website FAQs). The changes in technology have given the NCSBN another format to determine a student's level of competence. These new questions are challenging educators in the United States to move away from the traditional use of the multiple-choice question so as to ensure students are prepared for the NCLEX-RN examination.

Assessment Products

As a means to help nursing programs in the United States to have better mechanisms to determine a student's content knowledge other than through a faculty made test, several assessment companies have emerged. These companies, besides providing content specific assessments with psychometric data,

may also assist in the assessment of readiness to sit for the NCLEX-RN examination. The primary purpose of these companies has been to provide materials or assessments to determine a student's level of knowledge. In addition to testing, supplementary education support material is also usually available.

The drawback in the use of these companies is the fee associated with their use. The cost of these programs is shifted on to the student. Assessment Technology Institute (ATI) and Health Education Services Incorporated (HESI), a division of Elsevier, are two of the most commonly used assessment programs in the United States. Both companies have developed assessments that generate a probability of a student passing the NCLEX-RN examination based on a student's performance on their assessment (ATI website; HESI website). Individual schools can make decisions on how they utilize this information by asking questions such as: Is a student able to progress? Is additional work required? Is a student eligible to sit for the NCLEX? The data generated from the assessment testing can also be utilized to make curricular changes. ATI provides schools with the options to use content mastery testing, skills modules, dosage calculation modules, pharmacology made easy modules, and learning systems (additional test questions). A school is able to choose which options they want for their group of students (ATI website).

HESI, a subsidiary of Elsevier, offers case studies, practice tests and a live review course as well as a comprehensive review book. Again, these services are available for a fee and can be charged to the student (evolve.elsevier.co/hesi). Extra products for help in developing student understanding are available through Elsevier's website at www.elsevier.com. When an individual's knowledge level related to a content area is determined, remediation can be used to increase that student's knowledge base. As the student's knowledge is increased in the individual content areas, this should translate into better performance on an end of the program assessment. Each nursing program using one of these companies must decide which products are of value to the students in their programs and how to incorporate them throughout their curriculum. Of key importance is to determine how the data collected will be utilized.

ASSESSMENT OF CLASSROOM LEARNING

After introducing learning and assessment in nursing education in general and the US assessment practices, the following sections move on to discuss assessment in the four higher education institutions of the EQLO project. The sections concentrate on the assessment of classroom learning, and the discussion starts with Washburn University (WU). The practices of the Finnish Universities of Applied Sciences in Kymenlaakso (Kyamk) and Mikkeli (Mamk) are then outlined in one common section before turning to the University of the West of Scotland (UWS).

Washburn University

At WU, there are no mandates for the faculty to evaluate student classroom learning in a specific way. The Faculty are tasked to evaluate student learning based on understanding of stated course outcomes. Assessments include multiple choice exams, essay exams, simulation, return demonstration, term papers, and group projects. Because of the significance of the above mentioned NCLEX-RN exam, the faculty are encouraged to utilize the multiple choice format (including alternate format questions) for much of their classroom assessment. Students receive letter grades for individual assignments and exams. The final grade a student will earn for a course is a culmination of their scores throughout the semester. Grades provide feedback to students as well as motivation to earn good grades. See Table 2 for a sample grading scale. A grade of 'D' is a failing grade in the nursing school.

TABLE 2. Sample course grading scale

Overall Percentage	Course Grade
91%–100%	A
83%–90.99%	B
75%–82.99%	C
74.99% and below	D

In addition, WU utilizes several online products mentioned earlier. The ATI testing product is used in every semester in order to familiarize the students with online testing as well as to provide identification and remediation for specific content area knowledge deficiencies. Courses at WU also use the Elsevier products for quizzing and providing resources for study to students.

The School of Nursing at Washburn University reports on an annual basis to the University Assessment Committee. During the past three years the University has streamlined their reporting process so that all units on campus are now using the same format. Each area creates an assessment plan for their individual programs and then submits an annual assessment report with data at the end of the academic year.

Finland: Mamk and Kyamk

Nursing education at Universities of Applied Sciences in Finland is governed by the Finnish Polytechnics Act (Polytechnics Act 351/2003). A nursing program's curriculum is based on the national (NQF) and European (EQF) qualifications framework. The assessment of classroom learning is based on the criteria established in the course and module descriptions. The categories of learning include knowledge-based learning, skills-based learning, and teamwork skills/management skills/readiness to take responsibility. Assignments are marked on a scale of 1 to 5, with a failing mark of zero. While there are some minor variations between Mamk and Kyamk, the core studies are congruent and methods of assessment are similar. Each program has clear guidelines for educational requirements from admission to graduation. Students register for courses within modules and have specific guidelines for the timeframe the modules should be completed by. Most of the classroom learning is in a face-to-face format with the goal being a dynamic and interactive learning environment (Vänttinen & Kilpiänen 2014).

Both of the Universities of Applied Sciences are subject to internal and external audits to ensure the government and public that they are providing quality education. The Finnish Higher Education Evaluation Council (FIN-HEEC) is an independent council with elected members who conduct the external audits (www.kka.fi). Both Mamk and Kyamk have passed this audit and found to be quality programs.

Lecturers assign both formative and summative course assignments to lead to successful student progression through the modules. Lecturers choose which type of assessment to use for each course, whether written exam (usually short answers or essays) or other types such as demonstrations, role play, or verbal presentations. Students all complete a Bachelor's thesis at the end of their studies. They are guided through this project with the assistance of an assigned teacher. There are specific guidelines for the successful completion of the Bachelor's thesis and maturity tests at the end of the studies. These are hand-written, at minimum of 4 pages addressing specific content from their thesis project.

University of the West of Scotland

The assessment handbook used by the University of the West of Scotland is a very clear document that drives the University's assessment process. It serves as a guide to the faculty, administration and students. Additionally, examples of formative and summative assessments are given in the document. Appendix

3 of the UWS handbook provides examples of classroom assessment methods some of which include case studies, journals, OSCEs, portfolios, posters, presentations, examinations, and these are just a few assessment strategies listed. The handbook also provides direction related to summative and formative assessment; for a new educator this document becomes an invaluable tool in module development. The assessment handbook draws attention to the key element of the process, the learner. The feedback provided to a learner is essential (UWS Assessment Handbook 2011). The handbook also clearly describes the grading scale, examination period, the marking of examination with two markers, and the process is anonymous (University of the West of Scotland 2014).

The assessment of learning is discussed in multiple documents with the sole purpose of providing clear direction on the process and to guarantee high standards are preserved. The process of quality assurance is paramount to ensuring that programs and modules within the program uphold these standards. University programs use subject development groups (SDG) to supervise quality of content and module development. These groups also make certain that the Scottish Qualification Credit Framework is maintained (UWS Regulatory Framework, Regulation 7 assessment, University of the West of Scotland 2014).

Teaching strategies utilized in Scotland are similar to those used in both Finland and the United States. These strategies use the University's Learning, Teaching & Assessment Strategy (LTAS) as their point of reference (UWS Programme Design & Development Plan 2012). Four main domains for the nursing programs have been identified: Professional values, Communication & Inter-professional skills, Nursing practice & decision making and Leadership, Management & Teamwork. Modules have developed general competencies to help in assessing student learning within these domains (NMC 2010 Standards for Pre-Registration Nursing education).

These domains are similar to the Quality & Safety in Education for Nurses (QSEN 2015) utilized in the United States and also correspond with many of the outcomes identified by the American Association of Colleges of Nursing (AACN) in the Essentials of Baccalaureate Nursing document (AACN website). All students also received training related to Medicine Management and Numeracy (Authentic World™ safeMedicate), Cleanliness Champions, Lab Tutor™ (Interactive Sciences and Patient Clinical Cases). In addition, students will receive advanced resuscitation interventions (Immediate Life Support Course, Resuscitation Council UK), the 10 Essential Shared Capabilities, Dementia Management, Spiritual Care (Spiritual Care Matters) Action Learning, Unfolding Case Scenarios and accredited and adapted approaches to Aggression Management and Suicide Prevention (UWS Programme Design & Development Plan 2012, 30).

SUMMARY

With the complexity of changes in healthcare, programs in higher education institutions must continually adapt and maintain flexibility. The overall implementation of creating a vital program based on current nursing accreditation standards while using evidenced-based teaching practices to prepare graduates to practice nursing in complex health care environments is well underway. The process these four nursing programs went through and the lessons learned may be helpful to other nursing programs globally.

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LEARNING IN PRACTICE

Maria Pollard

Learning, teaching and assessment in practice are fundamental components of all pre-registration nursing programmes enabling students to contextualise theoretical knowledge to apply it to clinical situations (Eraut 2000). It is therefore essential that practice learning environments (placements) meet the standards required to ensure that students can achieve the competences to become effective and questioning practitioners. This paper will discuss the similarities and differences in the requirements of pre-registration nursing programmes in the universities (Kymenlaakso University of Applied Sciences, Mikkeli University of Applied Sciences, Washburn University, University of the West of Scotland) involved in this benchmarking project, to facilitate appropriate practice learning environments.

The aim of the pre-registration programmes is to produce practitioners who are fit for employment at the point of registration. It would be impossible for students to experience all clinical situations during the period of education. Therefore, it is important that students acquire appropriate opportunities to develop graduate attributes (see Table 1) so that they are equipped with the skills to deal with unexpected events. Practitioners are faced with increasingly complex situations and employers expect new registrants to have the cognitive ability to cope with challenging situations, make evidence-based decisions and take appropriate action.

TABLE 1. Graduate Attributes

Graduate Attributes:
·   Subject Knowledge
·   Research, Scholarship and Enquiry
·   Cognitive Ability
·   Communication
·   Working with Others
·   Personal Competencies
·   Global Citizenship, Ethical and Social Awareness
·   Life Long Learning

CBI and Universities UK (2009, 8) define employability skills as '*a set of attributes, skills and knowledge that all labour market participants should possess to ensure they have the capability of being effective in the workplace – to the benefit of themselves, their employer and the wider economy*'. Practice-based learning provides the opportunity for students to achieve these skills by providing students with real-life experiences in which they can apply theory to clinical practice and can problem-solve, either as an individual or as a part of an inter-professional team, in real-life time. It is in placement that students also acquire the characteristics and values of the profession.

In order to prepare students for clinical practice and to ensure a smooth and safe transition from theory to application, all the programmes used similar learning and teaching strategies which include experiential learning, simulation, technology, narrative/ scenarios, problem-based learning and reflection. These active learning strategies enhance self-efficacy and enable students to develop the knowledge and skills to work effectively as part of a team, become critical thinkers and competent in the use of information technology (Crookes et al. 2013). Simulation and High Fidelity Simulators were used across the universities to enhance these skills and prepare students for the challenges in practice. In addition, simulation is included in response to the patient safety agenda and in some cases to compensate for a lack of clinical placements and hands-on experience. However, despite its advantages there are limitations in the use of simulation as it cannot provide a 'true' representation of patient interaction, but it does offer the opportunity for the student to practice a range of skills sets in a safe environment. In the United Kingdom (UK) the NMC (2010) have embraced simulation and although they recommend that at the first progression point (usually end of year 1) competences should be met in practice, simulation may be used where appropriate as long as it does not exceed 300 of the 2,300 hours of practice required for clinical training.

Quality Assurance

Each of the countries' regulatory bodies stipulate the minimum requirements for ensuring the quality of practice learning environments; some have greater detail and requirements for the programme approval than others. The University of the West of Scotland (UWS) pre-registration programme is monitored annually to ensure it meets the NMC Standards to Support Learning and Assessment in Practice (2008) and Pre-registration Nursing Education (2010). These standards were further strengthened in 2013 with the introduction of the Quality Assurance Framework (NMC 2013). This document clearly sets out the role of the NMC to protect the public through the quality assurance of education and to set the requirements needed to meet the above standards. The NMC (2013) highlights that although programmes are delivered in part-

nership between universities and practice settings, universities are accountable for managing quality and controlling risk. Part 3 of the same document details the requirements for safe and effective practice learning including the following:

- Placement audit undertaken every two years: This includes accurate profiles, maximum capacity for all types of learners, the numbers of mentors and the confirmation of appropriate resources, and induction where there is any concern about the suitability of the placement that action plans are formulated and monitored.
- Sufficient resources: This includes sufficient numbers of appropriately qualified mentors, mentors maintaining their mentor status on the register, supernumerary status of students and feedback/evaluation mechanisms.
- Effective partnerships to support learning: This involves that students, placements and mentors are well prepared, that learning resources support evidence-based practice and that university staff maintain links with placements.
- Identify and communicate risk: process for escalating cause for concern, appropriate governance and risk policies and processes, students are sufficiently supported and safely reallocated if removal from placement is necessary and action plans implemented for re-audit.
- Although many of these issues are addressed in the curricula of the other universities the professional regulatory bodies are not as prescriptive in their requirements. Kymenlaakso University of Applied Sciences describes audit as ensuring that 'what should be done is done' and reflect the responsibilities of all the stakeholders and the quality recommendations of the Ministry of Social Affairs and Health.

Clinical environment

All universities involved in this benchmarking project have practice learning in a variety of settings such as hospitals, community settings, care homes and other areas where nursing care is provided. To ensure that students get the right experience at the right point in the programme it is essential that there is regulation in place to ensure quality.

In Finland emphasis is on environments where students will gain experience in social welfare as well as the health service. Although Scotland is moving to a model of integration of health and social care services, there are still challenges around the mentorship of students in relation to NMC (2008; 2010) mentorship standards and in providing placements in social care service areas where students can be supervised and assessed by non-nursing mentors. The focus of placements in Washburn University is also on health care.

Practice learning can be complex as students are introduced to new practice as well as being socialised into the community of practice (Lave and Wenger 1991). Effective relationships between university staff and clinical staff are key to achieving a good clinical learning environment (Bisholt et al. 2014) and a partnership approach is required to ensure a good pedagogical atmosphere. This includes a variety of meaningful experiences to meet learning outcomes as well as responding to students' educational level and providing feedback. For each of the programmes the relevant regulatory bodies stipulate the minimum requirements for hours in practice (see Table 2) and all curricula exceed the minimum requirements.

TABLE 2. Summary of Hours in Practice and Academic Credit

	Hours in Practice	ECTS or equivalent
Kymenlaakso University	2,300	75 ECTS
Mikkeli University	2,300	75 ECTS
University of the West of Scotland	2,300	90 ECTS (180 SCQF)
Washburn University	1,350	34 credit hours

In all programmes it was highlighted that the role of the lecturers in clinical teaching had decreased over the years but was consistent in supporting students in practice and promoting partnerships with practice. The presence of lecturers in the placement is valued by students and clinical staff even if there are no problems (Williamson 2010). It was agreed that the lecturers' role had increasingly developed to support mentors on pedagogical issues such as reflection, feedback, teaching and assessment either through the delivery of modules or on an ad hoc basis. In Scotland the introduction of the Practice Education Facilitator role in 2004 strengthened this support for mentors and reinforced the standards for learning and assessment in practice (NMC 2008).

All of the universities emphasise the importance of hearing the student voice and the need to evaluate the students' experience in clinical practice. The findings from these evaluations not only inform future practice, but are also used in reporting to regulatory bodies.

Supervision in practice

The title given to registered practitioners supporting students in practice varied across the universities (supervisors, preceptors and mentors), but the role was similar; to guide, support, teach and assess students in practice. Good interpersonal skills, welcoming environment, support and feedback are fun-

damental to clinical learning as they create and maintain a positive learning environment which in turn leads to a better student experience and reduces attrition (Jokelainen 2011). Shakespeare and Web and (2008) describe the qualities of mentors as empathy, enthusiasm, experience and good communication skills. In the UK it was custom and practice that mentorship of pre-registration students was the expected role of all registered nurses. However, more recently attention is being paid to the quality of mentorship by exploring recruitment and selection of people with the expected experience and qualities (NHS 2013).

Currently, preparation requirements across the different countries differ. In Scotland mentorship preparation is regulated by the NMC (2008). This regulation includes approved preparation programmes and maintaining mentorship status through annual updates and triennial review (providing evidence of mentoring two students in three years) recorded on a mentor database. In Finland and Kansas there are no formal requirements.

Effective mentorship requires close relationships between practice and educational settings (Casey 2011). Jokelainen et al (2011) identified 'supportive reciprocal cooperation with involved stakeholders' as key to good practice in learning environments. Barriers to successful mentorship include organisational constraints, workload, lack of protected time, staff shortages, negative experiences and inadequate preparation for the role (O'Driscoll 2010).

Conclusion

All four universities have similar regulatory practice learning requirements and expectations of placements to ensure quality. In particular Kymenlaakso University of Applied Sciences, Mikkeli University of Applied Science and the University of the West of Scotland have closer similarities due to the shared EU directive (2005), whilst Washburn University is regulated by the AACN (2008). Learning outcomes are broadly developed around knowledge, skill and attitude and the inclusion of socialisation in to the profession.

All universities have strong partnerships with clinical placements enhancing the experience for the student. There is agreement that the role of the mentor should be clearly defined in line with the regulatory and curricula requirements. Mentors require appropriate preparation and support to ensure they understand the curriculum and the needs of the students at each stage of the programme to achieve the required learning, as well as the ability to provide appropriate learning opportunities.

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EVALUATING CLINICAL PLACEMENTS OF STUDENT NURSES IN FINLAND, SCOTLAND AND THE UNITED STATES: A REVIEW OF EVALUATION METHODS

Anna-Maija Uusoksa, Debra Isaacson

Nursing is a discipline that requires nursing students to demonstrate a minimum standard of competence to gain registration. One way nursing students demonstrate their competence is in the clinical education environment (Baxter 2006; Nash 2007). Clinical placements provide nursing students with the opportunity to link theory to practice, to familiarize themselves with the practice environment and to provide students with real world opportunities to develop their knowledge, attitudes and skills. However, the important cornerstone for successful clinical placements is high-quality clinical evaluation of nursing students. This concept can be traced back to Florence Nightingale who instructed that student nurses should be trained under the direct supervision of experienced nurses who were "trained to train" (Myrick 1998, 589).

Clinical teaching and learning in the educational systems of nursing have been examined from different perspectives during the last two decades. However, the studies have not produced a consistent pedagogy of clinical evaluation. There are many issues in clinical evaluation, because there is no universal student of nursing or faculty. Therefore, achieving uniformity is difficult, although in recent years nursing education in the European Union (EU) coun-

tries has changed due to the need for a uniform structure of higher education among European nations to ensure the quality of education, including nursing education (Jokelainen 2013; Nursing and Midwifery Council 2010).

For example, there is not a valid research instrument available to study clinical learning environments and supervision in Finland. Some empirical studies have been done, but the data collection tools used in these studies were only developed for specific studies with little generalizability of methodology and results. Also, in the international nursing literature, there is only a limited number of tools available to evaluate the quality of nurse education system in clinical practice (Marriott 1991; Fisher & Parkinson 1998; Roberts et al. 2001).

The placement and evaluation of students of any learning discipline during practical experiences is challenging. In nursing, clinical evaluation is an especially critical process, because there is a third party involved, i.e. the patient. Evaluation is an ongoing phenomenon, occurring almost minute by minute, undertaken by students, faculty, preceptor nurses and patients. Occasionally, a patient's life depends on the accuracy of evaluation. Therefore, it is necessary to critically review and evaluate the students' clinical placement and evaluation and to compare the systems used in the four partnering universities in Finland, Scotland and the United states (Kymenlaakso University of Applied Sciences (Kyamk), Mikkeli University of Applied Sciences (Mamk), Washburn University United States (WU) and the University of the West of Scotland (UWS)).

The purpose of this article is to look at the similarities and differences in the clinical evaluation systems used in each partner institution and to assess these clinical evaluation systems. We have briefly reviewed the clinical evaluation methods used by each institution in their undergraduate nursing training programs to compare and contrast the evaluation systems, to share important information and to tap into the potential of improvement in the clinical evaluation system of our undergraduate nursing students. The information in this article bases on the information provided by the partners, and we do hope that all partnering institutions will find the review useful and helpful. This comparative analysis could help us in adopting a better system of clinical evaluation and in harmonizing the quality of clinical nursing education. It could also bring about a revolution in the curriculum and in the clinical practice of nursing students among these cooperating universities.

Before moving on to introduce the results of our review a few comments must be made on the quantitative measurement tools of the clinical learning environments. There is a significant relationship between students' perceptions of

the learning environment and their satisfaction and success (Van Hell et al. 2009). Dunn & Hansford's (1997) study of nursing students demonstrated that the relationship between student satisfaction and a positive learning environment was bidirectional. As a result, several measurement tools have been developed across health disciplines. Two commonly cited examples include the Clinical Learning Environment Inventory (CLEI) by Chan (2002) and the Clinical Learning Environment Supervision and Nurse Teacher evaluation scale (CLES+T introduced by Saarikoski & Leino-Kilpi (2002).

A fundamental aim of the clinical learning environment is to bridge academic and workplace learning. Students in one study identified reducing the gap between theory and practice as the most positive aspect of the placement experience (Ralph et al. 2009). The nature of the opportunities for learning is repeatedly raised by students as a key factor influencing satisfaction with the clinical learning environment. Smedley and Morey (2010) found that together with personalization, student involvement – the extent to which students participate actively and attentively in hospital ward activities – was the most important aspect of students' preferred clinical learning environment. The importance of active participation has been reported in several countries across disciplines.

STUDENTS' CLINICAL PLACEMENT AND EVALUATION SYSTEMS AT KYAMK AND MAMK

The Finnish universities of applied sciences, Kyamk and Mamk, make use of the guidelines called Assessment of Practical Studies (APS) as an evaluation tool to assess students on clinical placements. This tool focused on various stages of clinical learning and used for the continuous assessment of students and record keeping to ensure progressive and quality clinical skill acquisition. The nursing studies at Kyamk and Mamk last for 3.5 years and students have 112.5 weeks of practical placements from a wide variety of clinical areas including Accident and Emergency, Acute Care unit, Geriatric care and Mental health nursing and should have accumulated satisfactory knowledge and experience across these areas to earn a total of 75 ECTS by the end of their study program (3.5 years). Kyamk's and Mamk's clinical evaluation program can be divided into two different phases: the **preliminary phase** and the **assessment phase**.

PRELIMINARY PHASE: This is the planning phase of the clinical placement program for the students. This phase ensures that students are equipped with all background knowledge and objectives of the clinical placement. It prepares students for the clinical placement environment, gives background information and sets learning objectives. This phase involves two stages titled Background studies and General objectives for clinical placement.

Background studies prior to the clinical placement: The university ensures that the students have sound prior theoretical knowledge of the area of the proposed clinical placement through classroom studies and practical simulation sessions at the department of health and social care. Students are critically assessed by their lecturers to ensure that they understand what they are doing. Enough time is given for students to practice through simulations without any interruption. Students are not allowed to start the placement before they have satisfactorily performed simulations with the approval of their teacher in the area of the proposed clinical placement. This process is to instill clinical confidence in students and to ensure that they have quality prior knowledge of clinical procedure practices.

General objectives for clinical placement: This is usually the planning stage of clinical placements for the students. It involves the selection of the ward by the students and their personal faculty tutor together to set and determine the general and personal objectives of the placement. It also includes defining the duration of the placement as well as the name and background of the clinical instructor. Each student is assigned a clinical mentor – a preceptor nurse – who possesses clinical expertise in the clinical field of study where the student is completing his or her practice.

ASSESSMENT PHASE: The students in clinical placement are supervised by a mentor who is a registered nurse with experience and expertise in the clinical area where the students are placed. The university makes use of the Assessment for Practical Studies tool (APS).The mentor evaluates students' performances with an assessment form (a copy attached as Appendix 1). Student performances are assessed on the fundamentals of **clinical knowledge**, **human encounter** (Attitude), and **implementation of care** (skills). The grading system is either Failed (not achieved) or Accepted (achieved) with balanced feedback to students regarding all the aspects of their performance and all the important aspects of clinical evaluation. Assessment is carried out daily by the clinical mentor to ensure that the clinical goals of the placement are achieved. In addition, there are visits by the students' personal tutors from the university to ensure conformity with best clinical practice standards and to double-check that students are doing the right things during their clinical placement experience. The tutor also discusses the students' performance both with students and their mentors and further assesses the quality of clinical education and the skills acquired by the student during their clinical placement.

Students within this system are also involved through self-evaluation on their performance during the clinical practice. This is good as it creates a good platform for clinical discussion between students and their mentor at the end of the clinical placement. It also instills a sense of responsibility in the students and gives them an opportunity to influence their word-based learning.

STUDENTS' CLINICAL PLACEMENT AND EVALUATION SYSTEM AT THE UNIVERSITY OF THE WEST OF SCOTLAND UNITED KINGDOM

The university makes use of an evaluation tool called Ongoing Assessment Record (OAR) to assess students on practice on the Practice Learning Experience (PLE). This tool is used for the continuous assessment of students and the records are shared with relevant healthcare professionals and education providers contributing to the continuous assessment of professional placements.

Students at UWS have 9 placements – 3 for each year of their programme. All of these placements are accredited (20 CATS points = 10 ECTS) apart from the first one, which is introductory, and although assessed, it carries no academic credit. Each placement lasts for 7 weeks apart from the first one (4 weeks) and the last one (12 weeks). By the end of their programme each student should have experience of a wide variety of areas – Hospital in-patient, Primary Care setting, Homecare, Out-patient day cases – and should have accumulated knowledge and experience of many – diseases.

<u>**ASSESSMENT PHASE:**</u> Clinical knowledge and skills acquisition is assessed within the PLEs by using a criterion–referenced rating scale with the grades of pass/fail, which assesses clinical competence based on the NMC Standards for Pre-Registration Nurse Education (NMC 2010).

The learning outcomes from each practice-based module are demonstrated through achieving a pass in both components of the module assessment: i.e. the grade of pass in the clinical assessment **and** a grade of 40% or above for the academic assessment based on practice. The students are supervised during placement by a mentor who is a registered nurse of the area where the student is placed. Mentorship is a post-registration role, and it is monitored and updated by Practice Education Facilitators who are themselves registered nurses. The student assessment is in two parts. Midway through the placement students receive an Interim Assessment where their progress is documented and any difficulties, challenges, or achievements are identified and discussed. If students are going to fail a placement, it should really be made known to them by this point, and an action plan should be drawn up to help them to achieve their learning outcomes. In the final week of the placement the Final Assessment should take place where the students are graded and their paperwork (OAR = Ongoing Achievement Record) is completed. Mentors must spend at least 40% of the total PLE time with the students to make accurate judgment about their overall performance (NMC 2011).

This assessment and the continuous supervision are usually performed by a single mentor, but it is also common for a student to be co-mentored by two or more registered nurses. The important issue then is that all of the mentors communicate and share their impressions and judgments before anything is recorded. If a student fails a placement, it is treated like any other assignment and they are allowed two further attempts. Obviously, this will mean that the rest of their program is paused until they pass the current placement. Also, students establish and maintain through online learning environment Moodle a personal and professional e-portfolio to reflect on and to record individual learning experiences and to relate theory to practice. This is very similar to other partner institutions which also have reflective clinical assignments (Washburn) and student self - assessment system (Mamk and Kyamk).

The PLE also involves liaison lecturers who arrange the clinical placements of the all the students and support them during their PLE. The liaison lecturers work between the hospital and the university and they visit the students during their work-based learning. The number of their visits depends on the length of the placement and the students' need of support. These liaison lecturers also develop the guidance provided during the placements and collect the students' own evaluations of their clinical placements. Mamk and Kyamk also have a similar system of placement support, though not with a liaison or practice education facilitator.

Students' progress in each PLE is assessed using the Bondy Taxonomy (1983). This is a criterion-referenced rating scale which indicates the degree of accomplishment with which the student has performed the skill/behaviour and/or the degree of competence with which the student has developed the skill/behaviour. Bondy is a four-point rating scale through which the student progresses (a copy attached as Appendix 2). This is slightly different from Kyamk's and Mamk's rating system which is a five-point rating system. The grading is either Failed (not achieved) or Accepted (achieved) with balanced feedback to the students regarding all the aspect of their performance and all the important aspects of clinical evaluation.

STUDENTS' CLINICAL PLACEMENT AND EVALUATION SYSTEM AT WASHBURN UNIVERSITY

At Washburn University (WU) in the United States students are placed in clinical assignments that correspond to the didactic course they are enrolled in. For example, students taking an adult medical/surgical course are placed on a medical or surgical unit at the same time. The student attends classes two or three days per week on campus and spends one or two days per week in clinical work. Clinical hours depend on the hours identified through the

curriculum. A typical medical-surgical clinical placement is 90 hours in a semester. Students are assigned into a clinical group of 6–8 students with one faculty member. The faculty member attends the clinical hours with the students and assigns students to patients in collaboration with the nursing manager on the unit.

Students are not assigned a 'nurse', rather they are given a patient assignment. This patient would also have an assigned staff nurse for the day, and the student will work closely with that nurse providing total care, but the faculty member is also present on the floor providing direction and giving feedback. This requires one faculty member for every 8 students in clinical. For a class of 75 students there are typically 2 full time faculties, who teach both the didactic content and have a clinical group, and 7–8 adjunct *(part-time)* faculty. Many times the adjunct faculty is also graduate nursing students.

ASSESSMENT PHASE: Students at WU are required to write a reflection that corresponds to the course outcomes at the end of each week. This is one way they are able to identify, if they are meeting the course outcomes, or if they need further application of content in a future clinical placement. Each clinical course has course outcomes that are used to develop what is called a Clinical Performance Evaluation (CPE) tool (a copy attached as Appendix 2). This CPE has specific behaviors of knowledge, skills, and attitudes that are measured each week (Barton et al. 2009).

The university makes use of the Clinical Performance Evaluation (CPE) which measures the performance based on clinical outcomes. The CPE is centered on nursing **knowledge**, **skills**, and **attitude**. This is very similar to the OARS tool (UWS) and APS tool (Kyamk and Mamk) used by the partnering institutions. Similarly, like in the other institutions, the clinical component of the assessment is either pass or fail. The CPE is used to evaluate students' progress in clinical evaluation similarly to OAR used by the University of the West of Scotland. Likewise, there are total of 9 reflective assignments designed to assist students with understanding the relationship between the course outcomes and clinical practice.

The actual implementation of care is assessed in clinical work in real-time with immediate verbal feedback by either or both the staff nurse and faculty member. Additionally, feedback from the patient is sometimes solicited by the faculty member. For nursing skills such as medication administration, the faculty member observes the students prepare and administer the medication. Students are not allowed to administer medication independently. Faculty members will ask pertinent questions about the medications to ascertain student understanding.

Some of the advantages of faculty members being present in clinical settings with the students include a consistent approach to teaching and learning principles, the ability to integrate classroom learning during the placement, and identifying unsafe student nurse behaviors. One of the main disadvantages includes a nursing faculty member having eight students, thereby potentially being needed by all students at the same time. It is inconceivable to be able to supervise eight students at exactly the same time, and therefore, staggering in medication administration, or in nursing procedures sometimes occurs. Another disadvantage to this method includes faculty members not being up to date with the changes in nursing procedures in a timely manner. The faculty member is not an employee of the hospital and does not always receive the updates in the processes or procedures.

SIMILARITIES, STRENGHTS AND WEAKNESSES – A COMPARATIVE ANALYSIS AND SYSTEM REVIEW

When moving on to consider the similarities, strengths and weaknesses in the evaluation of clinical placements in the four partnering universities, the sections below introduce four relevant points worth highlighting. These include the use of simulation, clinical mentoring, the modes of supervision and the length of the placements. The discussion below only concentrates on mentioning features that appeared the most relevant for future development.

The use of simulation

All four universities use simulation as a pre-cursor to clinical placements and as a form of student evaluation. This style of teaching and learning is highly interactive, allowing multiple learning objectives in a realistic simulated environment while mirroring the clinical setting (Murray, Grant, Howarth & Leigh 2008; Valler-Jones, Meechan & Jones 2011). Although simulation does not replace the need for learning in the clinical practice setting, it allows the students to develop their assessment, critical thinking and decision-making skills in a safe and supportive environment (Medley & Horne 2005; Valler-Jones et al. 2011). This also allows for the assessment and evaluation of the student performance, whereby if the student demonstrates a mistake, inaccurate patient assessment or slow clinical decision-making, patient health is not affected and the student has the opportunity to learn from the experience. The primary aim of simulation is to improve patient safety and to help the student nurses to achieve competence, linking their theoretical knowledge with clinical practice (Ricketts 2011).

Clinical Mentoring

Also, all the universities use clinical mentoring as a method of clinical learning and evaluation of their students. Clinical mentors are practitioners who facilitate learning, supervise and assess students in the clinical setting and have set standards to support learning in practice (Nursing and Midwifery Council 2008). Clinical research supported the need for the undergraduate student nurses' need to be supported by experienced and competent mentors (NICE 2009).This helps students to become knowledgeable, skilled and fit for practice and to be able to provide high-quality patient care. However, the method of monitoring and supervising the activities of clinical mentors through the use of practice education facilitators – the system used by the University of the West of Scotland – could be adopted by other partnering universities to create a uniform platform for quality education control.

In addition, research has shown problems with the level of support student nurses receive from clinical staff who are acting as their mentors. According to Pellatt (2006) fostering a relationship that is conducive to learning requires effort on the part of the mentor, and Bennett (2003) suggests that mentors need to take the time to get to know their students. Castledine (2002) found that clinical placements are often unwelcoming and unattractive to new students. Student experience varies considerably: in some areas staff are adequately prepared and welcoming and in others students experience a poor working environment. O'Driscoll et al (2010) highlighted that although most mentors are aware of their role in working with student nurses, there are several barriers preventing them from giving the required support, such as organizational constraints, increased workload and perceived negative experiences. Such constraints can lead to mentors having to prioritize patient care over student learning.

The modes of supervision

The modes of supervision were partly similar in the four universities, but there were also clear differences. In the Washburn university evaluation system a lecturer is always with student on clinical placement. However, this is quite different from the system used by Kyamk and Mamk and the University of the West of Scotland where the number of lecturers' visits in the clinical setting depend on the length of the placement. There has been a general increase in the use of non-traditional modes of supervision and in the research used to evaluate their effectiveness (Hoe-Harwood et al. 2009). The findings from numerous research studies undertaken to investigate group supervision have been mixed. Some students rated group supervision less favorably than individual supervision (Zeira & Schiff 2010; Sheepway et al. 2011). And, other

studies report cluster models of eight students in one shift with one supervisor to increase learning, satisfaction, and placement capacity (Bourgeous et al. 2011).

However, peer supervision appears more promising. In its simplest form, peer supervision involves two students paired together throughout the placement. This approach facilitates learning by easing the transition from the classroom to the clinical learning environment (Ruth-Sahd 2011). Du Plessis (2004) evaluated a system of peer supervision where fourth-year nursing students provided first-year nursing students with learning opportunities, and at the same time gained skill and experience in the process of assessing another student's practice. Evaluations of this model found that students experienced peer supervision and guidance positively, saying that it made their first clinical experience more rewarding and less threatening. They generally felt that the supervision integrated theory and practice offered an effective support system, increased their ability to acquire new skills, and increased their self-confidence (du Plessis, 2004).

Another peer supervision model proposed that two students are paired with one supervisor. The students changed peer partners and supervisors every three weeks during a nine week placement (Roberts et al. 2009). Evaluations of this method demonstrated the potential to achieve efficiencies in the supervisors' involvement by coordinating the skill development activities of students as a group, and to promote peer-assisted learning. In combination with the mode of supervision, some research has evaluated the effectiveness of different learning alternatives.

The length of placement

The length of clinical placement of undergraduate student nurses is different from one school to another. Kyamk and Mamk students experience a total of 112.5 weeks of clinical placement in 3.5 years of training while UWS students have a total 9 comprehensive clinical placement with the longest period of twelve weeks in the 3 years of nursing training. WU students receive 750 total hours in clinical work over two years (4 semesters). Innovations in the length of placements are well-documented, and longer placements in particular have been evaluated as more effective (Hirsh et al 2007; Norris et al. 2009; Kevin et al. 2010; Hudson et al. 2011; Sheepway et al. 2011).

For example, weekly clinical placements have been proposed where students attend their clinical placement for two to three days a week, and spend the remaining days attending lectures, tutorials and skill laboratories. This approach was found to narrow the gap between theory and practice and gave

students continuity and consistency in clinical practice (Kevin et al 2010). A 12-month community-based clinical placement in a rural or remote setting increased GP supervisors' morale and improved the quality of the students' clinical experience (Hudson et al. 2011). Smedts and Lowe (2008) investigated the effects of the duration of clinical training placements. Their results showed that clinical placements where students spent more than 20 weeks were more efficient and increased the likelihood of students gaining better practical skills. Similar results have been found in other studies which show that longer placements increased students' patient responsibility, driven learning process and a strong and positive perception of educational continuity (Mihalynuk 2008). Students from Harvard Medical School evaluated their experience in a longitudinal integrated clinical placement lasting six to eight months (Ogur 2009). They reported that the placement structure created a dynamic learning environment that helped them to more broadly learn about their patients' diseases, experiences of illness, and enhanced their self-reflection.

FINDINGS, SUMMARY AND RECOMMENDATIONS

This last section summarizes the most relevant findings as a list. This list is followed by a brief discussion on some key aspects that could be recommended.

- All the partnering universities make use of pre-cursor simulations in teaching students clinical nursing.
- All of the partnering universities make use of trained and experienced clinical mentors to assess and evaluate their students.
- All the universities have specialized clinical evaluation tools which base on the fundamental concepts of **Knowledge, Skills** and **Attitude**. However, the designs of these clinical assessment tools are quite different**.**
- The length of students' clinical placements in various partnering universities is quite different, although students gain experience various in areas of nursing science and practice.
- The grading and assessment systems are similar, but should be based on established evaluation theory that has been proven.
- The evaluation of students' clinical placement is progressive in nature: a student has to pass one stage before they can be allowed to proceed to the next stage.
- The Interim Assessment method used by UWS and the Ongoing Daily Assessment used by Kyamk and Mamk can be further assessed and could be adopted by partners, if found applicable within their teaching and practice settings.
- All the partnering universities give students similar academic platform for clinical experience reflection and self-assessments (9 clinical reflective assignments at WU, student self-assessment at Mamk and Kyamk and e-portfolio at UWS).

- There should be a well-structured and robust criteria for selecting clinical mentors to ensure that they are good clinical role models.
- The total number of academic credits earned from clinical placement experience are slightly different.
- The lengths of clinical placements and training are quite different.

Based on the comparison made especially the following aspects of clinical placements could be developed: experiential learning, culture of quality, effective supervision and communication and collaboration. Starting with the culture of quality, all the partnering universities should embrace the excellent culture of quality in evaluation of students on placements and in the monitoring of clinical mentors. For instance, the method of monitoring and supervising the activities of clinical mentors through the use of practice education facilitators – the system used by the University of the West of Scotland – could be adopted by other partnering universities to create a uniform platform for quality education control.

Also the development of experiential learning could be recommended. Learning in quality clinical placements is what experiential learning theory called transforming theory into practice (Yardley et al. 2012). Students must be provided with opportunities to transfer classroom learning to the context where the results of this learning are put into practice. There is a lot of empirical research to show that the clinical learning environment predicts clinical learning outcomes (Dunn & Hansford 1997; Lofmark & Wikblad 2001; Andrews et al. 2006; Plack 2008). Simply, real learning comes from real environments, and they are a necessary component of clinical education (Brown et al. 2011; Yardley et al. 2012). This has been acknowledged in practice. For example, based on our comparison however, the clinical learning environment is starkly different from the controlled academic settings that students are familiar with. Skaalvik et al (2011) say that the learning environment includes everything surrounding the student in the placement setting.

When turning to effective supervision, clinical mentors are assigned with a dual role of ensuring patient safety while promoting students' professional development (Kilminster & Jolly 2000). This requires three primary functions commonly referred to in the literature as educational (formative), supportive (restorative) and managerial/ administrative (normative) (Kilminster & Jolly 2000). A clinical mentor attempts to meet these functions in an increasingly challenging service environment characterized by health workforce shortages and heightened patient demand. Therefore, partnering institutions should carefully check on the individuals to be appointed as clinical mentors, and if possible, make available certain motivation for clinical mentors.

The last key aspect to mention involves communication and collaboration. Early research has pointed out that good collaboration between stakeholders contributed to a positive clinical learning environment and in turn better learning outcomes (Dunn & Hansford 1997). More recent research indicates that a need for closer collaboration still exists (Kirke et al. 2007). This section introduces some aspects of communication between the student, placement site and the academic institution as an antecedent to adequate preparation for the placement experience.

Placement preparation is one of the most challenging tasks for universities (Redding & Graham 2006). Students often say that how well the placement was organized had influenced their experience of the placement (Leners et al. 2006; Morris 2007; Gallagher et al. 2012). This often depended on the communication between the university and the placement site (Papp et al. 2003). In a study of paramedic students McCall et al (2009) found that students became frustrated when supervising staff were unaware of their impending arrival, the students' role, and their learning requirements. Levett-Jones et al (2006) said that clinicians were concerned about the poor communication between them and universities. It was characterized by limited knowledge of what students had learned.

The transition from a student to a practitioner is difficult as the values and practices preached in university courses are challenged by the realities of practice and workplace processes, procedures and requirements (Newton et al. 2009). As degree completion rates continue to be significantly less than commencing numbers and do not meet the future demands of the health workforce, a focus on improving quality in the clinical placement evaluation is critical to contemporary health care (James & Chapman 2009).

This review has identified the clinical evaluation methods of the four partnering universities and similarities in these evaluation methods identifying the weakness of these methods and encouraging the adoption in the areas of strength to provide quality clinical education for the student. The review highlighted additional issues that merit consideration: communication and collaboration, the lengths of placement, effective supervision and the mode of supervision. To conclude we would like to convey a special thank-you to the student David Oni from the University of West of Scotland for his contributions.

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APPENDIX 1: KYAMK ASSESSMENT TOOL FOR PRACTICAL STUDIES

ASSESSMENT FORM FOR PRACTICAL STUDIES

Health Care

STUDENT: _____ GROUP:
Clinical Facility: _____Unit/Ward/Dept:
Duration of Placement: ___ / ___ / _____ - ___ / ___ / _____ ,
weeks:_____ , days:_____

Course of which this placement is part:

_____

_____

_____

Studies prior to the placement:

_____

_____

_____

The general objectives of the placement:

_____

_____

_____

Student's objectives:

_____

_____

_____

THE OBJECT OF ASSESSMENT:	CRITERIA FOR FAIL: Typical of student's action	APPROVED: can be seen in student's action: S (satisf.) = sometimes G (good) = often E (excellent) = nearly always	Assessment (Fail/ Satisfactory/ Good/ Excellent)	STUDENT'S SELF-ASSESS-MENT:
SELF-KNOWLEDGE				
	Does not reflect on his/her action nor on the feedback	Analyses openly his/her actions and feedback		
	Unable to recognize his/her limitations, needs of improvement and strengths	Able to identify his/her resources, development, and strengths		
HUMAN ENCOUNTERS				
*Interaction with clients and colleagues	Avoids contact with clients (patients)/ unable to distinguish between care relationship and his/her own needs/acts rudely/ has an arrogant attitude towards colleagues and fellow students	Acts naturally and has a friendly and respectful attitude towards the clients and colleagues / has a collegial approach in his/her actions		

IMPLEMENTATION OF CARE				
*Partnership with the client/patient *Theoretical mastery of one's work and ability to apply the theory *Technical skills *Ability to adjust to new situations and problems *Counselling and instruction skills	Does not listen to the client or take his/her views into account / unable to manage an interview Unable to manage duties of his/her level. Compromises client's safety with unskilled work or negligence. Apprehensive of machines which leads to difficulty in the implementation of care. Violates confidentiality or is unable to understand the significance of giving information. Unable to instruct the client or to identify a counselling situation.	Implementation of care is based on the client's needs, on respect of his/her views and right of his/her of self-determination / has the essential information on the client. Is able to apply his/her knowledge and motivate his/her actions, shows high sense of responsibility and, when in doubt, makes sure of the appropriateness of his/her actions, is able to use and take care of the ordinary nursing appliances and machines. Reports all the essential information on the client with a matter-of-fact approach both orally and writing. Is able to link nursing care with counselling and instruction, has an interactive approach.		

THE OBJECT OF ASSESSMENT:	CRITERIA FOR FAIL: Typical of student's action	APPROVED: can be seen in student's action: S (satisf.) = Sometimes G (good) = Often E (excellent) = nearly always	Assessment (Fail/ Satisfactory/ Good/ Excellent)	STUDENT'S SELF-ASSESS-MENT:
COORDINATION OF HOLISTIC CARE				
* Capable of controlling entities and of holistic approach to nursing * Ability to make decisions * Capable of multidisciplinary cooperation	Unable to manage the care of a single client/unable to manage single, assigned tasks/ leaves tasks unfinished/unable to recognise the significance of one's actions	Is observant and is able to take the client's life situation into account in the planning and assessment of care/at the advanced stage of his/her studies begins to perceive the holistic care of several clients and operations of a ward		
	Unable to rank things in order of importance/ adheres to routines	Is able to rank things in order of importance/ shows flexibility in moving from one duty to another		
	Does not express his/her opinions and shows poor commitment to common decisions	Has courage to act on his/her own, is able to consult experts in order to promote the well-being of the client		

APPENDIX 2: WASHBURN UNIVERSITY CLINICAL ASSESSING TOOL (CLINICAL PERFORMANCE EVALUATION)

Student: _____ **Date:** _____

Clinical Instructor: _____ **Clinical Agency:** _____

I. <u>Clinical Outcomes</u>: At the completion of the course the student will be prepared to:

1. Practice leadership as a component of quality patient care in clinical practice.
2. Explain how evidence, clinical judgment, interprofessional perspectives and patient preferences are included in patient care.
3. Demonstrate skill in using patient care technologies, information systems, and communication devices.
4. Identify how local and global health policies affect the quality and safety of patient care delivered.
5. Use basic communication and collaborative skills to optimize patient outcomes.
6. Describe the role of the nurse as a health team member in the health promotion and prevention of disease or injury in the community setting.
7. Illustrates how the nurse incorporates professional values into ethical nursing practice and personal accountability.

II. <u>Pass/Fail Criteria</u>:

A. ***All*** outcomes must be consistently 'met' by the end of the clinical rotation to pass the clinical portion of this course.
B. The clinical instructor will notify the student of failure to consistently meet the required critical elements at midterm.
C. If clinical outcomes are not met at midpoint, the clinical instructor must record recommendations under comments for meeting the KSAs by the final evaluation and review them with the student to ensure understanding and agreement of the recommendations.
D. Clinical outcomes must be performed with minimal coaching or independently by the final evaluation.
E. Completed Clinical Performance Evaluation (CPE) will be signed by both instructor and student at mid-point and final evaluation.

III. <u>Universal Outcomes</u>: Universal Outcomes must be met in order to pass the course. Failure to meet any of the three Universal Outcomes will result in a grade of F for the course (NU 311). If an F is earned the Clinical Outcomes will not be considered.

UNIVERSAL OUTCOMES:	MET	NOT MET
Demonstrates honesty and integrity by submitting original work on assignments and accepting responsibility for own actions taken / omitted.		
Prioritizes patient safety as the primary consideration in all care.		
Maintains professional boundaries with patients, family, & staff. Maintains confidentiality at all times.		

Student Signature/Date_____

Faculty Signature/Date_____

Met		Unmet		Essential Concept: Leadership (QSEN Competencies: Quality Improvement and Safety)
Mid	**Final**	**Mid**	**Final**	**Clinical Outcome 1: Practice leadership as a component of quality patient care in clinical practice.**
				Knowledge: 1. Recognize that nursing and other health professions students are parts of systems of care and care processes that affect outcomes for patients and families. (QI) 2. Discuss effective strategies to reduce reliance on memory. (Safety) 3. Delineate general categories of errors and hazards in care. (Safety) 4. Describe factors that create a culture of safety (such as open communication strategies and organizational error reporting. (Safety)

				Skills:
				1. Use tools (such as flow charts, etc.) to make processes of care explicit. (QI)
				2. Demonstrate effective use of technology and standardized practices that support safety and quality. (Safety)
				3. Use appropriate strategies to reduce reliance on memory (such as checklists). (Safety)
				4. Communicate observations or concerns related to hazards and errors to patients, families, and the health care team. (Safety)
				5. Use organizational error reporting systems for near-miss and error reporting. (Safety)
				6. Demonstrate effective use of strategies to reduce risk of harm to self or others. (Safety)
				   a. *Ensuring side rails are up per agency protocol.*
				   b. *Keeping floor and room clean, to prevent accidents.*
				   c. *Providing assistance with mobility safely.*
				   d. *Disposing of all soiled material (linen, trash, needles, equipment, etc.) properly.*
				   e. *Observing standard precautions.*
				   f. *Practicing consistent, careful hand hygiene.*
				   g. *Properly identifying clients before all procedures.*
				   h. *Answering call lights promptly.*
				   i. *Identifying patient and nurse risks and problems related to safety, cleanliness, and comfort.*
				   j. *Ensuring that all new/first time skills & procedures are observed by clinical instructor, unless otherwise indicated.*

				Attitudes: 1. Appreciate that continuous quality improvement is an essential part of the daily work of all health professionals. (QI) 2. Value own and others' contributions to outcomes of care in local care settings. (QI) 3. Value measurement and its role in good patient care. (QI) 4. Appreciate the value of what individuals and teams can do to improve care. (QI) 5. Appreciate the cognitive and physical limits of human performance. (Safety) 6. Value own role in preventing errors. (Safety) 7. Value vigilance and monitoring (even of own performance of care activities) by patients, families, and other members of the health care team. (Safety)

*Italicized items are examples

Met		Unmet		Essential Concept: Clinical Reasoning (QSEN Competency: Evidence-Based Practice)
Mid	**Final**	**Mid**	**Final**	**Clinical Outcome 2:** **Explain how evidence, clinical judgment, interprofessional perspectives and patient preferences are included in patient care.**
				Knowledge: 1. Demonstrate knowledge of basic scientific methods and processes. 2. Describe EBP to include the components of research evidence, clinical expertise, and patient/family values. 3. Describe reliable sources for locating evidence reports and clinical practice guidelines. 4. Explain the role of evidence in determining best clinical practice.
				Skills: 1. Base individualized care plan on patient values, clinical expertise and evidence. 2. Read original research and evidence reports related to area of practice.
				Attitudes: 1. Appreciate strengths and weaknesses of scientific bases for practice. 2. Value the need for ethical conduct of research and quality improvement. 3. Value the concept of EBP as integral to determining best clinical practice. 4. Appreciate the importance of regularly reading relevant professional journals. 5. Acknowledge own limitations in knowledge and clinical expertise before determining when to deviate from evidence-based best practices.

Met		Unmet		Essential Concept: Skills (QSEN Competency: Informatics)
Mid	**Final**	**Mid**	**Final**	**Clinical Outcome 3:** **Demonstrate skill in using patient care technologies, information systems, and communication devices.**
				Knowledge: 1. Explain why information and technology skills are essential for safe patient care. 2. Identify essential information that must be available in a common database to support patient care.
				Skills: 1. Apply technology and information management tools to support safe processes of care. 2. Navigate the electronic health record. 3. Plan and document patient care in an electronic health record. 4. Use high quality electronic sources of healthcare information.
				Attitudes: 1. Appreciate the necessity for all health professionals to seek lifelong, continuous learning of information technology skills. 2. Value technologies that support clinical decision-making, error prevention, and care coordination. 3. Protect confidentiality of protected health information in electronic health records.

Met		Unmet		Essential Concept: Policy (QSEN Competency: Team Work & Collaboration)
Mid	**Final**	**Mid**	**Final**	**Clinical Outcome 4: Identify how local and global health policies affect the quality and safety of patient care delivered.**
				Knowledge: 1. Describe scopes of practice and roles of health care team members. 2. Recognize contributions of other individuals (and groups) in helping patient/family achieve health goals.
				Skills: 1. Demonstrate awareness of own strength and limitations as a team member. 2. Function competently within own scope of practice as a member of the health care team. 3. Demonstrate commitment to team goals (communicate & implement established team goals). 4. Follow communication practices that minimize risk associated with handoffs among providers.
				Attitudes: 1. Acknowledge own potential to contribute to effective team functioning. 2. Appreciate importance of intra- and inter- professional collaboration. 3. Value the perspective and expertise of all health team members. 4. Respect the central role of the patient/family as core members of any health care team. 5. Appreciate the risk associated with handoffs among providers.
Met		Unmet		Essential Concept: Communication (QSEN Competency: Patient-Centered Care & Teamwork & Collaboration)
Mid	**Final**	**Mid**	**Final**	**Clinical Outcome 5: Use basic communication and collaborative skills to optimize patient outcomes.**
				Knowledge: 1. Describe impact of own communication style on others. (TW&C) 2. Discuss the principles of effective communication. (PCC) 3. Describe basic principles of consensus building and conflict resolution. (PPC)

				Skills:
				 1. Act with integrity, consistency and respect for differing views. (TW&C)
				    a. *Demonstrating tact and sensitivity in manner, speech, and awareness with patient and family.*
				 2. Initiate request for help when appropriate to situation. (TW&C)
				    a. *Seeks out clarification or assistance if unsure of instructions or tasks.*
				    b. *Communicates promptly any changes or 'red flags' in patient assessment or condition to the nurse responsible for the patient's care and the clinical faculty.*
				 3. Communicate with team members, adapting own style of communication to needs of the team and situation. (TWC)
				 4. Assess own level of communication skill in encounters with patients and families. (PCC)

				Attitudes: 1. Value teamwork and the relationships upon which it is based. (TW&C) 2. Value different styles of communication used by patients, families, and health care providers. (TW&C) 3. Value continuous improvement of own communication and conflict resolutions skills. (PCC)

*Italicized items are examples

Met		Unmet		Essential Concept: Community & Health Promotion (QSEN Competency: Patient-Centered Care)
Mid	**Final**	**Mid**	**Final**	**Clinical Outcome 6:** Describe the role of the nurse as a health team member in the health promotion and prevention of disease or injury in the community setting.

				Knowledge:
				1. Integrate understanding of multiple dimension of patient-centered care.
				    a. Patient/family/community preferences, values.
				    b. Physical comfort and emotional support.
				    c. Involvement of family and friends.
				    d. Information, communication, and education.
				    e. Coordination and integration of care.
				2. Describe how diverse cultural, ethnic, and social backgrounds function as sources of patient, family, and community values.
				3. Demonstrate understanding of the concepts of pain and suffering.
				4. Demonstrate understanding of evidenced based comfort measures to treat pain and suffering.

				Skills: 1. Provide patient-centered care with sensitivity and respect for the diversity of human experience. 2. Elicit patient values, preferences and expressed needs as part of clinical interview, implementation of care plan, and evaluation of care. 3. Communicate patient values, preferences, and expressed needs to other members of health care team. 4. Assess levels of physical and emotional comfort (Using approved scales). 5. Initiate effective treatments to relieve pain and suffering in light of patient values, preferences, and expressed needs.
				Attitudes: 1. Value seeing health care situations "through patients' eyes". 2. Value the patient's expertise with own health and symptoms. 3. Seek learning opportunities with patients who represent all aspects of human diversity. 4. Willingly support patient-centered care for individuals and groups whose values differ from own. 5. Recognize personally held values and beliefs about the management of pain or suffering. 6. Recognize that patient expectations influence outcomes in management of pain and/or suffering. 7. Appreciate the role of the nurse in relief of all types and sources of pain and/or suffering.

*Italicized items are examples

Met		Unmet		Essential Concept: Values & Ethics (QSEN Competencies: Patient-Centered Care & Teamwork & Collaboration)
Mid	**Final**	**Mid**	**Final**	**Clinical Outcome 7:** Illustrates how the nurse incorporates professional values into ethical nursing practice and personal accountability.
				Knowledge: 1. Explore ethical and legal implications of patient-centered care. (PCC) 2. Examine nursing roles in assuring coordination, integration and continuity of care. (PCC) 3. Examine common barriers to active involvement of patients in their own health care processes. (PCC) 4. Discuss the limits and boundaries of therapeutic patient-centered care. (PCC)

				Skills:
				1. Demonstrates professional behaviors:
				
				a. Punctuality in appointments and written assignments.
				    o *Arrives on time with appropriate attire and equipment*
				    o *Arrives on time to conferences, participates actively in pre/post conference.*
				b. Preparation for clinical.
				c. Adaptability and ability to function safely and maintain direction under reasonable amount of stress.
				d. Maintaining competent, confident, and professional bedside manner.
				e. Remains on assigned unit unless permission to leave is granted.
				f. Using time wisely, even when direct patient care with assigned patient is completed.
				g. Taking responsibility for developing sensitivity, awareness, and confidence in manner and speech.

				Attitudes: 1. Recognize personally held attitudes about working with patients from different ethnic, cultural, and social backgrounds. (PCC) 2. Respect and encourage individual expression of patient values, preferences and expressed needs. (PCC) 3. Respect patient preferences for degree of active engagement in care process. (PCC) 4. Value teamwork and the relationships upon which it is based. (TW&C) 5. Maintains a positive, approachable attitude with clinical faculty, patients, families, staff, and other healthcare providers. (TW&C) 6. Acknowledge own potential to contribute to effective team functioning. (TW&C)

*Italicized items are examples

DEVELOPMENT AND SELF-IMPROVEMENT				
* Keeping abreast with time and capabilities * Mastery of new technology * Capability of research, development and self-improvement * Capability of leadership and influence * Critical and creative mind * Development of professional identity * Ability to control change * Capability of marketing	Shows no interest in sorting things out Fails in planning his/her work, or in observing the agreed duty Does not take care of his/her working condition/inappropriate appearance/acts dishonestly Has very little capability of coping with stress/avoids new situations	Seeks actively new information and is willing to share it/ is capable of using information from nursing research in the care of client Sets goals, acts systematically and shows organisation in his/her work Sets a good example of professional conduct in his/her work and works according to professional ethics/reflects on ethical solutions Faces changes with an open mind, using his/her personal strengths in his/her work		

The statement given by the clinical facility on the student's strengths and areas of development:

_____

_____

_____

_____

The teacher's comments:

_____

_____

_____

_____

TOTAL ASSESSMENT: (Approved/Fail/Satisfactory/Good/Excellent) _____

Place:_____ Date: ____ / ____ / _____

Assessor/Director: _____

Student: _____

Teacher: _____

MIKKELIN AMMATTIKORKEAKOULUN JULKAISUSARJA

A: Tutkimuksia ja raportteja – Research reports

A:1   Kyllikki Klemm: Maalla on somaa. Sosiaalinen hyvinvointi maaseudulla. 2005. 41 s.

A:2   Anneli Jaroma – Tuija Vänttinen – Inkeri Nousiainen (toim.) Ammattikorkeakoulujen hyvinvointiala alueellisen kehittämisen lähtökohtia Etelä-Savossa. 2005. 17 s. + liitt. 12 s.

A:3   Pirjo Käyhkö: Oppimisen kokemuksia hoitotyön kädentaitojen harjoittelusta sairaanhoitaja- ja terveydenhoitajaopiskelijoiden kuvaamina. 2005. 103 s. + liitt. 6 s.

A:4   Jaana Lähteenmaa: "AVARTTI" as Experienced by Youth. A Qualitative Case Study. 2006. 34 s.

A:5   Heikki Malinen (toim.) Ammattikorkeakoulujen valtakunnalliset tutkimus- ja kehitystoiminnan päivät Mikkelissä 8. – 9.2.2006. 2006. 72 s.

A:6   Hanne Orava – Pirjo Kivijärvi – Riitta Lahtinen – Anne Matilainen – Anne Tillanen – Hannu Kuopanportti: Hajoavan katteen kehittäminen riviviljelykasveille. 2006. 52 s. + liitt. 2 s.

A:7   Sari Järn – Susanna Kokkinen – Osmo Palonen (toim.): ElkaD – Puheenvuoroja sähköiseen arkistointiin. 2006. 77 s.

A:8   Katja Komonen (toim.): Työpajatoimintaa kehittämässä - Työpajojen kehittäminen Etelä-Savossa -hankkeen kokemukset. 2006. 183 s. (nid.) 180 s. (pdf)

A:9   Reetaleena Rissanen – Mikko Selenius – Hannu Kuopanportti – Reijo Lappalainen: Puutislepinnoitusmenetelmän kehittäminen. 2006. 57 s. + liitt. 2 s.

A:10   Paula Kärmeniemi – Kristiina Lehtola – Pirjo Vuoskoski: Arvioinnin kehittäminen PBL-opetussuunnitelmassa – kaksi tapausesimerkkiä fysioterapeuttikoulutuksesta. 2006. 146 s.

A:11   Eero Jäppinen – Jussi Heinimö – Hanne Orava – Leena Mäkelä: Metsäpolttoaineen saatavuus, tuotanto ja laivakuljetusmahdollisuudet Saimaan alueella. 2006. 128 s. + liitt. 8 s.

A:12   Pasi Pakkala – Jukka Mäntylä: "Kiva tulla aamulla…" - johtaminen ja työhyvinvointi metsänhoitoyhdistyksissä. 2006. 40 s. + liitt. 7 s.

A:13   Marja Lehtonen – Pia Ahoranta – Sirkka Erämaa – Elise Kosonen – Jaakko Pitkänen (toim.): Hyvinvointia ja kuntoa kulttuurista. HAKKU-projektin loppuraportti. 2006. 101 s. + liitt. 5 s.

A:14   Mervi Naakka – Pia Ahoranta: Palveluketjusta turvaverkoksi -projekti: Osaaminen ja joustavuus edellytyksenä toimivalle vanhus-palveluverkostolle. 2007. 34 s. + liitt. 6 s.

A:15   Paula Anttila – Tuomo Linnanto – Iiro Kiukas – Hannu Kuopanportti: Lujitemuovijätteen poltto, esikäsittely ja uusiotuotteiden valmistaminen. 2007. 87 s.

A:16   Mervi Louhivaara (toim.): Elintarvikeyrittäjän opas Venäjän markkinoille. 2007. 23 s. + liitt. 7 s.

A:17   Päivi Tikkanen: Fysioterapian kehittämishanke Mikkelin seudulla. 2007. 18 s. + liitt. 70 s.

A:18   Aila Puttonen: International activities in Mikkeli University of Applied Sciences. Developing by benchmarking. 2007. 95 s. + liitt. 42 s.

A:19   Iiro Kiukas – Hanne Soininen – Leena Mäkelä – Martti Pouru: Puun lämpökäsittelyssä muodostuvien hajukaasujen puhdistaminen biosuotimella. 2007. 80 s. + liitt. 3 s.

A:20 Johanna Heikkilä, Susanna Hytönen – Tero Janatuinen – Ulla Keto – Outi Kinttula – Jari Lahti –Heikki Malinen – Hanna Myllys – Marjo Eerikäinen: Itsearviointityökalun kehittäminen korkeakouluille. 2007. 48 s. + liitt. (94 s. CD-ROM)

A:21 Katja Komonen: Puhuttu paikka. Nuorten työpajatoiminnan rakentuminen työpajakerronnassa. 2007. 207 s. + liitt. 3 s. (nid.) 207 s. + liitt. 3 s. (pdf)

A:22 Teija Taskinen: Ammattikeittiöiden ruokatuotantoprosessit. 2007. 54 s.

A:23 Teija Taskinen: Ammattikeittiöt Suomessa 2015 – vaihtoehtoisia tulevaisuudennäkymiä. 2007. 77 s. + liitt. 5 s. (nid.) 77 s. + liitt. 5 s. (pdf.)

A:24 Hanne Soininen, Iiro Kiukas, Leena Mäkelä: Biokaasusta bioenergiaa eteläsavolaisille maaseutuyrityksille. 2007. 78 s. + liitt. 2 s. (nid.)

A:25 Marjaana Julkunen – Panu Väänänen (toim.): RAJALLA – aikuiskasvatus suuntaa verkkoon. 2007. 198 s.

A:26 Samuli Heikkonen – Katri Luostarinen – Kimmo Piispa: Kiln drying of Siberian Larch (*Larix sibirica*) timber. 2007. 78 p. + app. 4 p.

A:27 Rauni Väätämöinen – Arja Tiippana – Sonja Pyykkönen – Riitta Pylvänäinen – Voitto Helander: Hyvän elämän keskus. ”Ikä-keskus”, hyvinvointia, terveyttä ja toimintakykyä ikääntyville –hankkeen loppuraportti. 2007. 162 s

A:28 Hanne Soininen – Leena Mäkelä – Saana Oksa: Etelä-Savon maaseutuyritysten ympäristö- ja elintarviketurvallisuuden kehittäminen. 2007. 224 s. + liitt. 55 s.

A:29 Katja Komonen (toim.): UUDISTUVAT OPPIMISYMPÄRISTÖT – puheenvuoroja ja esimerkkejä. 2007. 231 s. (nid.) 221 s. (pdf)

A:30 Johanna Logrén: Venäjän elintarviketurvallisuus, elintarvikelainsäädäntö ja -valvonta. 2007. 163 s.

A:31 Hanne Soininen – Iiro Kiukas – Leena Mäkelä – Timo Nordman – Hannu Kuopanportti: Jätepolttoaineiden lentotuhkat. 2007. 102 s.

A:32   Hannele Luostarinen – Erja Ruotsalainen: Opiskelijoiden oppimisen ja osaamisen arviointikriteerit Mikkelin ammattikorkeakoulun opiskelija-arviointiin. 2007. 29 s. + liitt. 25 s.

A:33   Leena Mäkelä – Hanne Soininen – Saana Oksa: Ympäristöriskien hallinta. 2008. 142 s.

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