NURSE EDUCATORS

EMPOWERING FUTURE

UNIVERSITY OF TURKU

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FOREWORDS

The aim of the New Agenda for Nurse Educator Education (New Nurse Educator) project was to harmonize and optimize the nurse educator education in Europe by developing and testing a programme for nurse educator education: "Empowering the nurse educators in the changing world" and building evidence about nurse educator competences and continuing education needs as well as share and develop good practices for nurse educator education.

At the beginning of the project, there was no clear consensus about the qualification requirements or education of nurse educators in Europe. The world is changing, and prevalence of current health issues is estimated to increase due to population aging and emerging new health issues. The project was kick-started during Covid-19 pandemic, which underlined the need to increase both flexibility and clearer guidelines for education.

This project was conducted in collaboration between six universities from five European Union countries. The partners represent different parts of Europe and they were all very keen on developing the evidence-based nurse educator education, which was a fruitful base for the collaborative project.

Now, looking at the Empowering Future Nurse Educators, one of the key products of the Erasmus+ Funded project, it can be said, that the project has achieved its goals. We want to thank all the authors who have contributed to this book. We also thank our colleagues and students who have inspired us to write this book. We hope this book also inspires educators in their discussions of nursing education and their teaching of nursing. Only in this way can we promote high-quality evidence-based nursing education and high-quality patient care.

On behalf of the editors and authors, I wish you great moments with this handbook.

Sincerely,

Professor Leena Salminen

University of Turku

Transnational project meeting in Barcelona October 2022.

Project partners and students of ELENE in Turku in October 2021.

Project partners in A New Agenda for Nurse Educator Education in Europe - an International Conference at Universitat Internacional de Catalunya in February 2023.

Project partners at NETNEP 2022 conference in Sitges, Spain.

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Michelle Camilleri (Ph.D.). Works as a senior lecturer with the Department of Nursing, Faculty of Health Sciences at the University of Malta. Her doctoral research investigated the student to nurse transition as a process of learning. As a result of the doctoral research, she designed and developed the nurse mentoring system in Malta, and today is responsible for the training of all nurse and allied health mentors. Passionate about e-learning, she also designed and implemented a fully online academic top up degree for health care professionals. Teaching responsibilities include undergraduate and postgraduate teaching and research supervision.

Chapter 1: Introduction

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The competence of nurse educators and its recognition play an essential role in European nursing education. Teaching the profession of nursing to future student nurses requires excellence. Nurse educators have a significant role in developing nursing through their teaching. We must ensure that faculty are properly educated in the best pedagogical methods and technologies, with demonstrated clinical expertise in content areas (World Health Organization [WHO], 2021). There are many global health issues, e.g. pandemics, environmental risks and increasing chronic diseases. Moreover, ageing populations, globalization and technological advancements are changing nursing and heath care, and there is a need to consider this in the pre-registration nursing education. Quality of nursing depends on the quality of the nursing education and nurse educators have an important role in education.

The appropriate education for nurse educators is critical to the development of knowledge, skills, values and attitudes of student nurses and registered nurses. The education system alone cannot bring about the required changes in education. Ministries of health, national authorities, professional associations, health professionals and communities must be involved and support the education of nurses. European Union (EU) member countries have worked towards establishing nursing education in higher education institutions and creating comparable nursing degrees to ensure the quality of nursing education. EU directives for nursing education set the guidelines for nursing education, and they are applied in European countries, however, those documents do not describe the professional qualification requirements for nurse educators. At this moment, there is no consensus about nurse educators' education in Europe, although in some countries there are national defined

requirements for nurse educators, and in most of the countries, ministries are legal authorities that dictate the quality of education. In most of the European countries, the nurse educator must be a nurse, completed master' or doctoral level education and have some experience in nursing. (Campos Silva et al., 2022.)

A competent nurse educator should have the knowledge, skills and attitudes to adopt new approaches in planning, organizing, implementing and evaluating nurse education programs. The competence of nurse educators is multidimensional, and the roles and qualifications of the teaching faculty have been discussed for many years. Over the decades, the main role of nurse educators has been, and still is to promote students learning and professional development. Moreover, the educators have a significant role in promoting the educators own and also their students' occupational well-being.

This handbook is based on Erasmus+ funded project "A new Agenda for Nurse Educators in Europe (New Nurse educator)" conducted in the years 2020-2023 in five European countries (Finland, Malta, Scotland, Slovakia and Spain). The main outputs of the project were the research concerning the nurse educators' education, competence and continuing professional development needs. Nurse educator education varies in Europe. Furthermore, the systematic evaluation of nurse educators' competence has been scarce. According to our research results, educators evaluated themselves as having a good level of competence. The educators themselves evaluate their competence highest, but their students and their superiors evaluate their competence slightly lower. It has been also shown that the quality of nursing education is positively related to graduating nursing students' self-reported competence. Secondly, "Empowering the nurse educators in the changing world" - programme (30 ECTS) was created, piloted and evaluated. The feedback of the students was very good and, they appreciated studying and collaborating in international groups. Thirdly, the handbook for educators is written and produced here. The framework of this handbook is based on the document of the World Health Organization (2016) entitled "The core competencies of nurse educators". These core competencies comprise of following eight competence domains:

1. nursing practice,
2. pedagogical competence,
3. communication, collaboration skills,
4. monitoring and evaluating,
5. management and digital technology.
6. knowledge of teaching and learning theories,
7. the curriculum and its implementation, experience in research and gathering evidence,
8. having ethical principles and professionalism.

Nursing practice and pedagogical competence are regarded as essential competence areas for nurse educators. Still, not much research interest has been addressed to either the professional knowledge of nursing or the teaching and learning of nursing in educators' work. The nursing practice competence of nurse educators can be described as referring to their theoretical and clinical nursing knowledge and skills, and their attitudes towards nursing practice. Pedagogical competence is described as a process of facilitating students in their building of knowledge, skills and attitudes and conducting teaching and learning in a positive learning environment and atmosphere. It has been pointed out that learning in higher education should focus more on analytical knowledge and complex problem-solving, and educators need good pedagogical competence to teach those skills. In addition, the research carried out in this project strengthens the findings of the positive relationship between professional competence and occupational well-being, widening the evidence base within this scarcely studied area.

This handbook for nurse educators consists of three parts and in total eight chapters. The introduction is the first chapter and describes the theoretical framework for this book. In the second chapter we describe the common learning theories and principles of adult learning. We emphasise the importance of the active learning.

In the second part of the book, each chapter includes the theoretical description of the topic and some of our experiences in teaching the topics. In the third chapter, we present evidence-based teaching as a basis of nursing education. Nnursing education must be based

on evidence for both the content and the teaching methods. There is quite a lot of research concerning the teaching strategies, but the results are contradictory. We can't say one teaching method is better than the others because it depends on the topic, the learners, the study year/phase, learning environments and educator's competence to use the method.

The fourth chapter we discuss of the digitalization of nursing and nursing education. The competence of digital pedagogy became increasingly important during the COVID-19 pandemic when all over the world the teaching and learning moved rapidly to remote teaching using a variety of e-learning environments. This requires some new ways of working for nurse educators. The "Empowering learning environments in nursing education" study unit was created to promote educators and educator candidate's digital pedagogy and how to use social media in education in the appropriate way. Digitalization offers many possibilities for enhancing teaching, but we need to know how it can be used in a meaningful way to reach the intended learning outcomes. The fifth chapter focuses on sustainability and the contemporary health issues which should be taken into consideration in nursing education. Nursing education needs to play a strong role in ensuring sustainability of programmes and ensuring that new nurses are equipped with an understanding of ensuring sustainability in their practice.

The sixth chapter focuses on ethics in nurse educators' work. In most of the countries in Europe the nurse educators follow common ethical principles and rules of teachers because only in a few countries do nurse educators' have their own ethical principles for teaching nursing. In the seventh chapter, we discuss the future issues in nursing education. Nursing and nursing education must change and develop according to the development of medical treatments and nursing possibilities. The nursing profession has changed and is changing due to internal and external factors such as the increase in the number of multimorbidity aged people and tasks shifting from physicians to nurses.

In the third part of this handbook we summarize, discuss the content, and present the recommendations for the future nurse educator competence and education requirements, continuous education, occupational wellbeing and evolvement of the profession. The

recommendations aim to enhance the field of nurse education and improve the nurse educator preparedness to respond the future issues and requirements in nurse education.

This book gives you an insight to modern teaching and learning strategies. All the authors have extensive experience in teaching nursing and their idea is to always develop student centred teaching.

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Chapter 2: Theories and Principles for Educating Students of Nursing

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INTRODUCTION

What a wonderful opportunity! Shaping the future nursing workforce! As nurse educators we have the prospect of enthusing and motivating the next generation of nurses. Through our engagement with student nurses we can inspire them to study and develop skills for excellent patient care. There are many ways to engage in teaching practices and every qualified nurse engages in some teaching with the less experienced, but a formal role as a new nurse educator, can at times, feel a little daunting as we feel the responsibility to create the best learning environments for the students!

New to a nurse educator role, you may not feel 'expert' about how to teach for the students to attain all they need to know for the world of caring work. There are often conflicting emotions, the excitement of making a difference, yet feeling nervous! You are not the first to feel a little trepidation.

> How should I teach so that the students enjoy the experience and learn to meet the planned learning outcomes?

Well help is at hand! In this handbook we have developed some modules to help guide you in the process of becoming an educator of student nurses. In this chapter we introduce some underpinning theory of learning that can help you to think about the principles you wish to adopt as you plan your engaging teaching.

For most people teaching in clinical practice is quite different to teaching in the academic setting. Thinking about the educational encounter holistically and stepping back from the 'delivery' of your teaching is key for a firm foundation to flourish as a nurse educator. Up until now it might be your focus with teaching opportunities in practice may have been:

I need to teach X and I will need to do it in this particular way.

But becoming a nurse educator means needing to move from 'doing' to holistically thinking, planning and deliberating about how best to innovate to inspire the students. You are becoming 'an instrument' for knowledge and skills development in many people's lives as they study with you.

So, what might help you create positive learning encounters for students in the classroom environment and be an enjoyable educational role for you? I pose this reflective question here as a basis for you to reflect upon as you start out in your career as a nurse educator. Creating opportunities for reflection in your work is important for *you* to continually learn how to improve your teaching. Starting out with this approach will support deliberation and refinement of your teaching throughout your career. We hope that this handbook with some introduction to some principles and theory that we have used in developing the Nurse Educator programme will be a platform from which to explore the foundations of your own nurse educator practices.

Below, we introduce some learning theory and explore the importance of appreciating how different people learn in different ways. Belenky's (1986) work illustrates gender related aspects of knowing and five stages of knowing which illustrate key issues pertinent for consideration when planning learning opportunities. This work resonated with me as nursing has been seen as a predominantly female profession and I started to consider how teaching may be received and delivered differently by different people if our ways of knowing are at different stages. Knowing rather than knowledge is an important consideration as we examine learning theory because what we know is constantly changing. Knowing is provisional rather than about finalised truth or absolute knowledge. This is particularly important as we consider our continuing professional development within the profession. Also, this recognises how this might evolve with our engagement with learning too.

Table 1. The Five Stages of Knowing (Belenky et al., 1986)

1. Silence:	total dependence on whims of external authority
2. Received Knowledge:	receive and reproduce knowledge
3. Subjective Knowledge:	truth and knowledge are conceived of as personal, private, and intuited
4. Procedural Knowledge:	rely on objective procedures for obtaining and communicating knowledge
5. Constructed Knowledge:	view all knowledge as contextual; value subjective and objective strategies

What theory helps us as educators to helping our students in their learning journey? Knowing a little about how our students may learn can really help us plan and assess our teaching moments. We as educators need to have our own understanding of *what* we need to do, *why* we need to do it and how we *should* do it and how we *can* do it. An important distinction is *should* and *can* in the context of institutional constraints (room availability, online platforms etc). In addition, educators identify learning goals around which to design content and how this content can be delivered and constructed with the learners and finally evaluate the learning through assessment against the learning outcomes criteria.

To help our understanding of the diverse ways students learn let us now take a look at learning theory as this can give us some help and can go some way towards us developing our own guiding principles to understand how students learn by going about it in different ways.

This also helps us understand how we need to be flexible in our teaching and adapt to questions asked of us by different students about the subject we are trying to teach. Do not worry though – you have got this! Knowing your subject well means you can be flexible and adaptable.

GETTING TO GRIPS WITH LEARNING THEORY

The major theories of learning are for example: constructivism, social constructivism, behaviourism, social learning theory, and humanism (Phillips, 2022). In this handbook, we examine the phenomenon of learning from andragogy which deals with learning from the perspective of adult learning. Pedagogy and andragogy are sometimes contrasted with each other in their characteristics. Pedagogy is described from the point of view of children's learning, andragogy refers to adult learning. However, pedagogy has different meanings and is often referred to in adult education as well for including teacher-centred and learner-centred learning (Holmes & Abington-Cooper, 2000).

Thinking about the different ways of knowing and the fact that those of you reading this handbook will not be novice learners we designed the nurse educator programme with this in mind. Importantly you will be adult learners and andragogy will be most relevant to you (see Table 2).

Table 2. Assumptions and characteristics of Andragogy (adapted Hughes & Quinn, 2013).

Assumptions	**Andragogy**
Learner's need to know	Adults need to know why they must learn something
Learner's self-concept	Self-direction: adults take responsibility for their own learning
Role of learner's experience	Adult's readiness relates to things he or she needs to know and do in real life
Learner's readiness to learn	Adults have a life-centred orientation to learning involving problem solving and task-centred approach
Student's motivation	Adult's motivation is largely internal such as self-esteem, quality of life and job satisfaction

For you, reading this chapter as a novice nurse educator you are starting from a position of some knowledge - you have knowledge about both nursing and about some elements of education, so you have some knowledge and cognitive memory about both of these elements. We want to help you develop further your knowledge and enhance your pre-existing knowledge as you move through or adopt the nurse educator programme. As you are both an adult learner and experienced in learning when you commence the nurse educator programme we have primarily adopted the theoretical basis of constructivism for developing the programme and preparing the study units- our basis for this is that as you study the units in the programme you will reframe your knowledge based on new information. More specifically we draw on social constructivism (Thomas et al., 2014) as a guiding principle for much of the programme and study unit design as you learn *together* with other people in the programme. These learning theories can be used across different teaching modalities such as online, classroom, learning resource centres, and clinical settings. Let us explain this a little more before as it is pertinent to the subsequent study unit chapters in this handbook.

Constructivism

Constructivism is based on learning as a *process* and through this process the learner actively constructs or builds new ideas or concepts based on previous pre-existing knowledge. Their pre-existing knowledge is reframed by the learner as they process new information and blend it with what they already understand (their pre-existing knowledge) in their memory. In this process learners actively start reorganising their cognitive knowledge and representations of the world to develop new representations as more information and

experience is assimilated through their engagement with learning (Rolloff, 2010). Learners are knowledgeable from the outset and thorough a process of actively engaging with the facilitation by the educator, they engage in further learning producing new knowledge which is based on, but now different to previous knowledge and experience. The educator in the role of facilitator is able to challenge the previous knowledge and use teaching strategies to engage students as active participants in developing their own new knowledge which they commit to memory. The learners assimilate new understandings into their pre-existing knowledge. When the new information does not fit with pre-existing knowledge this pre-existing knowledge needs to evolve and then needs to be changed to accommodate the new information. Knowledge is a subjective construction of meaning NOT corresponding to an objective Truth.

Hopefully, you can see from this that novice nurse educators are learners who have a considerable amount of pre-existing knowledge. Through the process of facilitation by the study unit educators, you are able to assimilate new information and experiences through your active engagement with the study unit. This process means that you are learning new knowledge and that your pre-existing knowledge is then changed as you assimilate the new information and experiences of the study units in the nurse educator programme.

Constructivism is essentially considering the learner as an individual, but many of us study in groups and with peers in the classroom or online. When we were designing the Nurse Educator programme this became fundamental to our conceptualisations of how all the novice nurse educators would learn together and from each other. This led us to the core guiding principle for the construction of the programme as not merely constructivism but social constructivism.

Social Constructivism

Let's take a look at social constructivism (Hughes & Quinn, 2013; Pritchard, 2014). This is the main theoretical underpinnings for the study units in the handbook that we have prepared for the nurse educator program. The premise of social constructivism is that as an educator you facilitate expanding on the individual's current knowledge through interaction and collaborative working with other people so that with the new information and experiences can cognitively reframe their knowledge and understanding to further develop their learning (Thomas et al., 2014). This was a key principle for us to work with and the theoretical basis we built upon with the nurse educators' programme.

Social constructivism allows you to start to formulate your own knowledge (Pritchard, 2014; Thomas et al., 2014) as an individual as the study units give you some ideas for you to further develop your own knowledge. Then as you work with this new information and undertake the tasks and exercises together with your peers in the wider group through engaging and collaborating with other, you debate and negotiate to ultimately re-frame

your understanding in a collaborative way with other people in the group you are learning with. Whilst working collaboratively with others you are working your brain in a slightly different way to think as others may think. This is a really helpful way for challenging the ways of thinking and enables shifts in knowledge in new and different directions than you might have considered if you study as an individual learner on your own.

Now let us compare and contrast constructivism and social constructivism for helping students to learn. In constructivism you undertake the work as an individual and you are reconstructing knowledge that you already have after being facilitated by educators of the study units. You are working on developing your knowledge as you go about assignments and tasks as an individual. This is different to the social constructivism when you work with your peers to reframe your knowledge collaboratively-think about the group exercises you have undertaken. As they say two heads are better than one when thinking through ideas!

We intend that this chapter of the handbook gives you a sense of the theoretical underpinnings within the study units that are explained in the subsequent chapters in this handbook. This is a good starting point to think about how you may wish to work with students yourself in the future as a nurse educator. The theoretical basis really does depend on what you're trying to achieve and how you wish to achieve it with different learners.

Theoretical underpinnings help to guide teaching and can be useful in your preparation as a nurse educator. In addition to briefly explaining some of theories here, there are several excellent text books which expand on these theoretical approaches in nursing education for example Hughes & Quinn (2013), Utley (2011), Hunt (2018) and also in the broader education literature Pritchard (2014). Some of these learning theories will feel familiar when you reflect on your own learning experiences and education to date.

Unlike nurse educators who know something about the subject material they are learning and furthering their knowledge, student nurses have relatively less knowledge about the subject matter of nursing. So social constructivism whilst it may be very useful, it may have some limitations in some learning environments. In some circumstances it may be that a different learning theory will be helpful. Let us give some consideration to what these might be.

Other relevant Learning Theories

There are some other categories of learning theories: *behaviourism, social learning theory and humanism*. These are important to appreciate and can have a place in helping students to learn. It is important that educators do not lose sight of these theories because they support students' learning. Let's start with behaviourism then consider, social learning theory and finally humanism.

Behaviourism which has a focus on stimulus provoking a desired response (Hughes & Quinn, 2013; Pritchard, 2014). Behaviourist principles are evident when the educator structures a situation where steps can be observed, objectives are met, and feedback given (Billings & Halstead, 2019). In this theory the desired response from learning is rewarded. For example, the educator shares with the student some new information (stimulus) and then poses a question of the student and they give the correct answer (desired response so the objective is met) and the educator compliments the student -well done! (Feedback is positive and this is a reward). Many of us will have listened in class, put our hand up and given a good answer for the feedback from the educator to then be 'YES that is great'! Arguably the desired response is rewarded for learning to take place. Whilst exhibiting negative behaviour in the classroom e.g. unengaged, distracted and talking is not the desired objective and so the feedback from the educator is negative, there is no reward, but instead there is punishment. The consequences of the reward/punishment will affect the behaviour over time positively/negatively for learning respectively.

Bloom taxonomy behavioural model for educational learning outcomes

To help structure learning and curriculum in the study units the educational objectives for the learning encounters are made explicit. Whilst a variety of approaches can be used to make explicit the educational objectives, Bloom taxonomy (Bloom 1956,196; Anderson, 2013) is popular (Hughes & Quinn, 2013). Within the nurse educator study units, the classification of educational objectives of Bloom taxonomy is utilised to plan the different learning goals. Learning goals help structure the pedagogical interchange between nurse educators and students so both understand the purpose and intended outcome of the learning experiences. Structuring the pedagogical exchange makes clear to all that this is the plan for how to do, what you want to do and the way to do it, at the appropriate learning level for the learning goal. This helps to ensure the plan for teaching has a focus on designing positive learning and activities which correspond to and are aligned with valid assessment. The premise of Bloom taxonomy (Bloom, 1956, 1969; Anderson, 2013) is that the educational outcomes are predicted, and the achievement is anticipated (and rewarded), but a limitation is it does not adequately allow for recognition of unintended positive learning. Therefore, the student's own learning objectives and expectations are often mapped out in addition to general learning outcomes based on the Bloom taxonomy.

There are currently three main domains in Blooms taxonomy which are 1) cognitive with a focus on a person's knowledge and intellect, 2) affective which relates to a person's attitudes and values and thirdly psychomotor concerned with motor skills.

Within each of these three main domains, there are several categories which signify different levels from the simplest to the more complex. Within the cognitive domain there are 6 identified levels escalating from the first simple level considered to be having knowledge

then, comprehension and then application of the knowledge then the more complex levels of analysis, synthesis and evaluation. With each level of cognition there are associated verbs, Hughes & Quinn (2013) summarise this well and illustrates how the different verbs illustrate the different levels of cognition for constructing learning outcomes and guiding the nature of assessment. For the nurse educator programme the more complex cognitive levels 4-6 are emphasised for the learning outcomes. Similarly, the more complex levels of the affective domain and psychomotor domain are attended to in the programme.

Mastery learning with its roots in behaviourism and Blooms (1969) work is based on the assumption that all tasks can be learned over time. The argument is that given time students will learn to the same level of achievement.

Social Learning Theory builds on the availability of role modelling or observing others doing activities is key to learning. This theory from Bandura (1977, 1986) is about learning form what a person observes and the context in which learning occurs is important. Bandura (1977, 1986) argued that complex learning occurs by observing the behaviours and actions of other people role modelling. So social learning theory suggest that learners within the Nurse Educator programme are learning to become nurse educators through observing how the experienced nurse educators role model their teaching in the units. It can be quite helpful to understand this aspect of learning in nursing particularly for clinical skills, but also how we conduct ourselves professionally in our work. I am sure for many of us we have watched another person undertaking an activity with awe and thought-wow, I would like to be able to that with the same skill and then practised. We would like to finish this brief introduction to a few of the relevant learning theories by considering the influence of humanistic psychology. This is important to consider before we then conclude the chapter with some principles about feedback to learners.

Humanism considers people's thoughts feelings and experiences of learning so the nurse educator interpersonal relationship with the learner is highly important for affecting learning. This is very much about the educator building relationships that facilitate learning to learn. Hughes & Quinn (2013:17-22) offer some interesting insights to this approach for nursing education.

A relationship and learning environment that fosters curiosity, enthusiasm, the use of one's own initiative and the taking of personal responsibility when developing knowledge of the subject is important for personal growth. This is in contrast to the learner purely learning information and facts. Self-actualisation, the desire to grow, develop and sustain curiosity and enthusiasm are key ambitions of this learning theory. Facilitating learning to that learners want to continue to learn can be seen as very important in the context of a world of continuous development and learning! Avoiding classroom environments where there is conflict can be managed through positive interpersonal relationships between the nurse educator and the learners. If the classroom environment is not supportive and the relationship poor, this can result in negative learning experiences such as judgemental

educators that undermine the learners' ability and potentially lead to a toxic environment which negates the ambitions of learning to learn. Feelings and experiences are highly relevant for the nature of the learning that takes place. There is some criticism that humanistic approaches promote self-centred learners and undermining the intellectual aspects of learning.

ASSESSMENT AND FEEDBACK

The Nurse Educator Programme has a variety of assessments for each study unit within the programme. These assessments align to the educational objectives (learning outcomes) and they seek to identify if students have achieved the desired level of attainment (knowledge, skills and values). The assessments result in the assessor providing not only a mark, but also constructive feedback for the learner to further expand their knowledge. Feedback on assessment is important to help learners understand to what extent they met the attainment goal and where they can further develop their learning.

For learning to continue there needs to be learner engagement with the feedback that accompanies the grade. Feedback can take many forms and Boud and Molloy (2013) have a succinct, but informative text which debates aspects of feedback to enhance feedback practices. Within their text they have an important chapter- the impact of emotions in feedback. How the educator undertakes feedback can impact whether the student engages with the feedback to further develop their knowledge and skills- or not. Ultimately the learner decides about their engagement with the feedback, but the nurse educator can influence this process of engagement.

Feedback takes many forms, written, oral peer, structured and so on, but all have a place depending on the educational objectives, but emotions will play an important role in any form of feedback.

CONCLUSION

This chapter has given some overview of the learning theories underpinning the study units. The chapter sign posts further literature for you to explore about these theories as you embark on the nurse educator journey. For now, you have a good basis to explore the subsequent chapters of the Nurse Educator handbook and we wish you success with your journey.

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Chapter 3: Research and evidence in Nurse Education

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Nurse educators play an important role in developing education based on evidence. This requires critical thinking and reflection of current practices.

Evidence-based teaching covers the whole spectrum of educational processes from curriculum development to individual courses and lectures including theories and principles of adult learning.

The International Evidence-based teaching study unit developed nurse educators' and students' competence in evidence-based teaching and international collaboration as a functional way of developing this competence.

INTRODUCTION

We know that teaching should be based on research and be evidence-based. But what do we understand about evidence-based teaching in nurse education? In this chapter we seek to explain the (i) facets of evidence-based teaching in nurse education and (ii) evidence-based teaching and educators' competence in the development of nursing education, including the process of evidence-based teaching, we draw upon (iii) experiences of designing and delivering a study unit on Evidence-based teaching in the "Empowering the nurse educators in the changing world" –programme.

FACETS OF EVIDENCE-BASED TEACHING

Nursing education research and evidence-based teaching is essential for the development of nursing education. Often nurse educators seek research evidence from the teaching subject, but nursing education research and evidence-based teaching is much more. It is for example using evidence to support best practices (Ferguson & Day, 2005), best use of teaching strategies, engaging students in their learning process (Breytenbach at al., 2017; Oermann, 2021), encouraging students critical thinking (Breytenbach at al., 2017), and facilitating future nurses' ability to implement evidence-based practice (EBP) (Boswell et al., 2020).

Evidence-based teaching has its roots in EBP. EBP is known to all and has many definitions. According to World Health Organization [WHO] EBP is an interdisciplinary decision making in clinical settings including the best available evidence, care context, client values and preferences and health care professionals' professional judgement (WHO, 2017). Joanna Briggs Institute [JBI] (2022) defines evidence-based healthcare as a "decision-making that considers the feasibility, appropriateness, meaningfulness, and effectiveness (FAME) of healthcare practices".

Education is the foundation in development of EBP and through nurse education programmes nursing students understand and recognized the value of EBP and their role in it. There is wide consensus in the literature that nurse educators therefore have an in important role in the implementation and development of EBP and evidence-based health care (EBHC) (Immonen et al., 2022; WHO, 2017), and in preparing nurses to access and use evidence in their patient care. Furthermore, educators are seen as research implementers (Oermann, 2021).

Educators as researchers

Competence requirements across the nursing profession are changing constantly (WHO, 2021). Teaching should therefore address both contemporary and future learning needs of nursing students, and be based upon evidence. Another facet of evidence-based teaching in education refers to the queries around what kind of teaching is effective. How can we, as nurse educators achieve better learning outcomes? Is the new method better than the old one? Educators need evidence to answer such questions.

Therefore, it is important that nurse educators are adequately able not only to utilize nursing education research, but to also create it. The authors support the contention in the literature that it is our job, that of the nurse educators to build the evidence in nursing education (Oermann, 2020). Over the last few decades research has been carried out in this regard. The authors advocate that nursing education needs large dataset generation and analytics and big data management systems, multisite and global collaboration, well-developed instruments, and replication studies leading to more accurate and rigorous evidence (Monagle et al., 2022; Patterson, 2020). Moreover, research on the utilization of research results (Oermann, 2020) and reports on good practice in teaching are needed. In addition, Patterson (2020) highlights the importance of the solidity/plausibility, originality, and societal value of research because these lead to an increased impact of educational research.

Based on Oermann (2020) the impact of nursing education research depends on

1. Quality of studies conducted
2. Quality of reports that disseminate the study findings
3. Understanding how teachers use research results in teaching
4. Adoption of educators to new educational approaches

As noted above, EBP should form the foundation of education and training in nursing and midwifery (WHO, 2017). However, Skela-Savic et al. (2020)'s research, which explored nursing curricula in six European countries in bachelor, master, and PhD programs revealed findings which suggest that improvements are required in nursing programmes. Their descriptive research study revealed that teaching EBP is not, as yet, sufficiently integrated into nursing curricula. In parallel to these findings, there is consensus in the literature that cooperation and collaboration strategies with stakeholders in nursing practice and research is required for the effective adoption of EBP. (Immonen et al., 2022; Oermann, 2021; Skela-Savič et al., 2020; WHO, 2017). This consensus acknowledges the challenges associated with the referred cooperation and collaboration strategies. Against this background, the need for more research evidence which may promote and support EBP in nursing and the adoption of EBP by nurses is evident.

On the other hand, the EBHC model was also used in a systematic review which was carried out by Immonen et al. (2022) regarding the evidence-based healthcare competence of social and healthcare educators. According to this review educators had positive attitudes towards EBHC and demonstrated their abilities to locate and interpret the best evidence and had the competence to integrate it in to their teaching. (Immonen et al., 2022.) This bodes well for future research.

The process of evidence-based teaching

Tilley et al. (1997) defined research-based nursing education as an attitude of inquiry and seeking evidence to support nursing education practices. They considered critical questioning as a central aspect of research (Tilley et al., 1997). According to the National League for Nursing [NLN] (2020) Evidence-based teaching practice is "Using systematically-developed and appropriately-integrated research as the foundation for curriculum design, selection of teaching/learning strategies, selection of evaluation methods, advisement practices, and other elements of the educational enterprise.".

The process of evidence -based teaching is presented in a model of evidence-based teaching related to the decision-making process in nursing education (figure 1). This model is

developed by the authors and is based on The Trans-disciplinary Model of Evidence-based Practice (EBP) by Satterfield et al. (2009) and the definitions about evidence-based teaching by Tilley et al., (1997), Ferguson & Day (2005), Boswell & Cannon (2016), NLN (2020) and Oermann (2021). Beyond the research evidence guiding teaching-related decisions, Ferguson and Day (2005) also include the professional judgement of the educator, the needs of individual learners, and the required resources. NLN (2020) highlights the foundation for curriculum design whilst Boswell & Cannon (2016) and Oermann (2021) emphasise the learning of students.

At the center of this model is the ultimate goal, student learning based on educational decisions (Boswell & Cannon, 2016; Oermann, 2021) leading to better nursing care and patient/client well-being. The first upper circle describes the research evidence, the second circle describes educator's learning philosophy, competence, and experience to use the evidence, and the third circle the learner's preferences and goals for learning. We have put a "curriculum" inside the outer circle, which also includes the environmental and organisational context. The following section 2 opens the different levels of the curriculum and its connection to evidence-based nursing education. All these nested circles guide educator's educational decisions and practices.

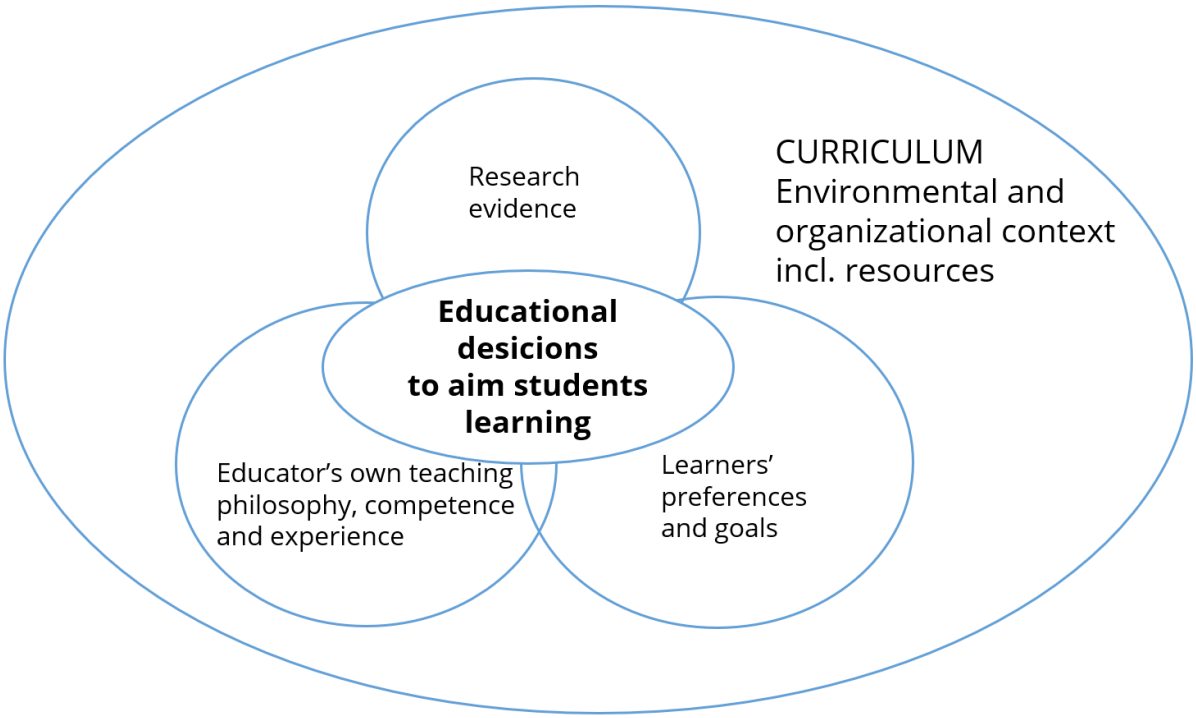

Figure 1. Evidence-based teaching related decision-making process. Adapted from Satterfield et al., 2009 (incl. Boswell & Cannon, 2016; Ferguson & Day, 2005; NLN, 2020; Oermann, 2021; Tilley et al., 1997).

EVIDENCE-BASED TEACHING AND EDUCATORS' COMPETENCE IN THE DEVELOPMENT OF NURSING EDUCATION

The curriculum for nursing education can be seen as the guiding framework for us educators in planning education. The intention of curriculum is to guide educators' teaching practices and therefore it affects also the implementation of evidence-based teaching. On this account, evidence-based teaching is related to the whole spectrum of educational processes **from curriculum development to individual courses.**

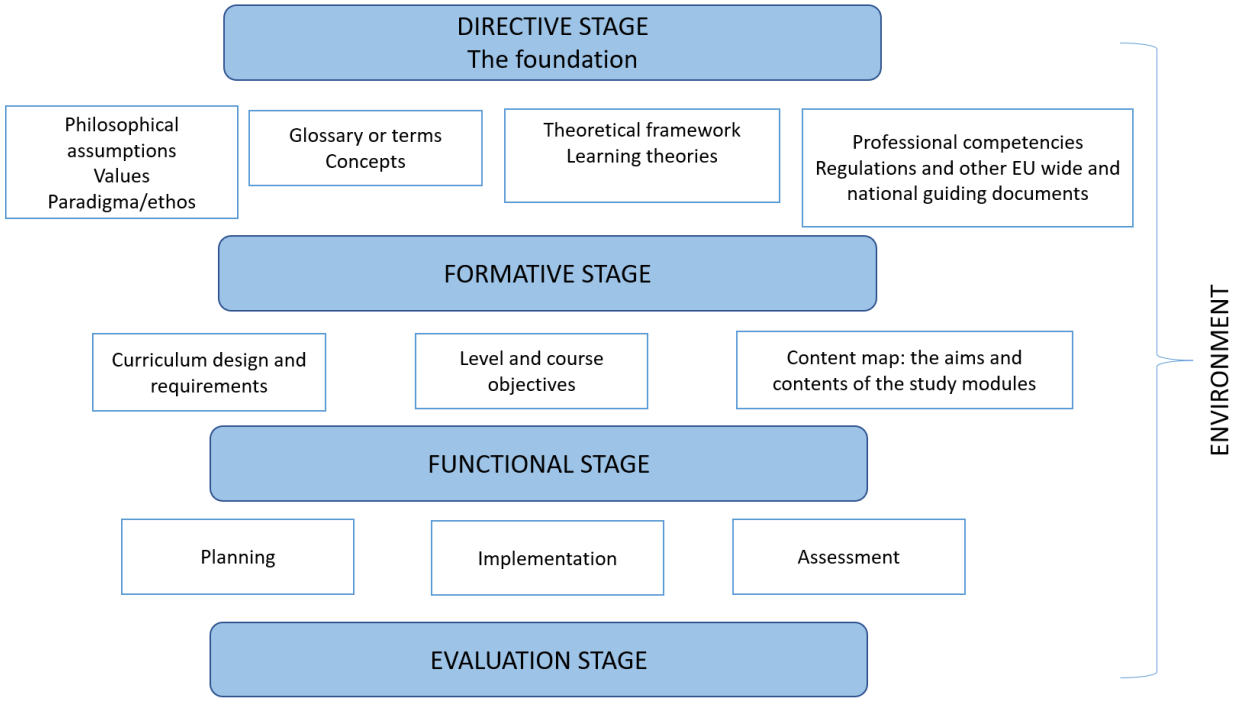

Figure 2. Curriculum development. Adapted from Torres & Stanton, 1982.

Figure 2 describes the process of developing the curriculum adopted from Torres and Stanton (1982). The curriculum development process is well linked to the outer circle of EBT decision-making process (figure 1) and this particular figure 2 from curriculum development is a very comprehensive description of the curriculum and the factors involved at many stages. The process contains four stages for curriculum development. ***Directive stage*** is the recognition of the foundation for education meaning the didactic and pedagogic principles, philosophical assumption, learning theories, professional competencies and European and national regulations and other guiding documents such as the EU directive on recognition of professional qualifications (Directive 2013/55/EU). ***Formative stage*** means the institutional level and organizational framework such as curriculum design and requirements, level and course objectives, and content map; the aims and content of the study modules. The next, ***Functional stage***, describes actions in certain course of teaching event covering the planning, implementing and evaluation of teaching and learning. The last stage, ***Evaluation stage***, means evaluation of the curriculum development process. (Adapted from Torres &

Stanton, 1982.) In addition, all of these stages are examined at different environmental perspectives, progression from general to individual.

Educators take into account these stages in their own work. In evidence-based teaching, the educator integrates evidence, but also reflects the theories and concepts about teaching and adult learning, the **educator's own teaching philosophy** (in previous chapter 2) and expertise, requirement of **the competence and experiences**, and **learners' preferences and goals** (Oermann, 2021). The formation of the educator' teaching philosophy and competence is influenced by the educators' personal life experience, worldview, and educator's education which is very different within Europe (Campos Silva et al., 2022). Next, we describe an example of research and evidence from the perspective of nurse educator competence development.

In the health care sector (especially the nurse educator) competencies have been studied and defined due the constantly changing social and health care environment and competence requirements (e.g. Mikkonen et al., 2019a, 2021; Salminen et al., 2013, 2021; Zlatanovic et al., 2017). In addition, WHO (2016) has defined the core competencies for nurse educators and National League for Nursing (2020) core competencies for academic nurse educators. In the New Nurse Educator project, we have used the WHO (2016) competencies as a guiding framework for the projects' activities. The core competencies of nurse educator contain eight competence areas and each area contains cognitive, affective and psychomotor domains of learning (WHO, 2016).

The core competencies of nurse educator mean the minimum competencies for qualified nurse educators. For this reason, the reference framework could be thought to guide the development of curricula. Fitzgerald et al. (2020) examined the representation of NLN Core Competencies for Nurse Educators in Master's of Science in Nursing Education and Post-Master's Certificate programs of 529 schools (USA). According to their study, half of the areas of competence were well represented and half were poorly represented in the curricula. (see Fitzgerald et al., 2020.)

Although the competencies of educators in health care have been defined, the education of nurses should be relevant to future health challenges and priorities, and therefore the competence areas should be revised on a regular basis. Several studies have been conducted to configure the current needs for nurse educator competencies. For example, Finnish Competence and development of social, health care, and rehabilitation educators (TerOpe) - project (2017-2019) developed an evidence-based competence model for social, health care and rehabilitation educators (Mikkonen et al., 2019b). In addition, three self-assessment instruments were developed and tested; The Health and Social Care Educator's Competence (HeSoEduCo) (see. Mikkonen et al., 2020, 2021), Continuous Professional Development of Educators (EduProDe) (see. Koskimäki et al., 2021), and Digital Competence of Educators (DigCompEduF) (see Pajari et al., 2022). In addition, Educators and Educator Candidates'

Competence in Digital Pedagogy (OODI) scale (Ryhtä et al., 2021) was also developed and tested (Pajari et al., 2023).

Social, Health and Rehabilitation educator' areas of competence according to the model includes: competence in social, health care and rehabilitation science and professionalism; pedagogical competence; ethical and cultural competence; interaction, collaboration and network competence; administration and welfare; competence in evidence-based practice; sustainable innovation and future competence; continuous development of competence. In addition, the model describes the competence of educators contributing factors such as social, health and rehabilitation and education policies, societal changes, and technological advances. (Mikkonen et al., 2019b.) With digitalisation, the digital competence of educators has been a key area of competence (Pajari et al., 2022) and during the COVID-19, the digital competence of educators became even more pronounced (Kalanlar, 2021). (See more on the chapter 4.)

In addition, in the model by Mikkonen et al. (2019b), occupational well-being has been raised as one competence areas for educators together with administrative competence. Based on several studies, the work of the nurse and health care educator is very emotionally demanding, and they are suffering with psychological burden, heavy workload, and an uneven distribution of workload during the academic year (Arian et al., 2018; Saaranen et al., 2020; Singh et al., 2020). The work of the educator is seen as very independent and autonomous (Arian et al., 2018). Therefore, the administrative competence and competence in managing and prioritising one's work are emphasised in addition to occupational well-being competence. Based on the research conducted in this project, competence of nurse educators (especially administrative and curriculum competence) is related to personal occupational well-being (Vauhkonen et al., 2023). Hence, based on research, it can be concluded that it is essential for the nurse educators to know that it is probably not worth pursuing excellent at the expense of their own well-being.

Evidence-based teaching contains four phases

According Oermann (2021) **evidence-based teaching contains four phases; *Questioning, Searching, Evaluating and Deciding. The focus is on decision-making when planning and developing teaching***. Questioning refers to questioning existing education practices, and also identifying the need to find evidence to guide teaching related decisions, followed by searching for education related research studies and other evidence to find the answer to the question posed. After searching, the quality of evidence found is then evaluated. In the decision phase educators decide are the findings applicable to the specific setting? (Oermann, 2021). These four phases with more detailed content are described at the table 1.

Evidence-based teaching starts with ***questioning*** and that requires critical thinking (Boswell & Cannon, 2016; Oermann, 2021). By critical thinking we can question existing education

practices and identify the need for searching for the evidence (Oermann, 2021). Questions can be descriptive e.g. searching information about practice (How can collaborative learning be used in teacher training?) or comparative e.g. Searching for information about the best approach to use: Is there a difference in EBT competence between online courses that use flipped learning compared with traditional online courses with traditional webinars? The question can be formulated in the well-known PICO format (Original PICO from Richardson et al., 1995). Oermann (2021) has added the **T** for timing and **S** for setting. As an example of the use of PICO, Wong et al. (2021) found in their systematic review that the environmental influences such as study programmes, study years, and teaching-learning strategies and personal influences such as age, problem-solving ability and self-efficacy were associated with the outcomes of self-directed learning of undergraduate nursing students. They used PICO question as followed: P = studies of nursing students, I = interventions or learning pedagogies, C = studies with comparison, O = learning outcomes (Wong et al., 2021.).

How to find evidence to guide education-related decisions? The second phase of the EBT is searching for the evidence (research studies and other evidence) on educational practices. ***Searching*** evidence requires skills for how to look, the skills of where to look (the right databases) and access to the information (resources for databases). Different databases have tools that facilitate searches that you should familiarize yourself with before making the search (Oermann, 2021.). To support these competence requirements, the services of the library information specialist can be utilized and the tutorials offered by the databases (Spencer & Eldredge, 2018).

The third phase of the EBT is the ***evaluating*** the quality of the evidence. Often different levels of evidence for research design are presented in the form of pyramid, with the top of the pyramid being systematic reviews and meta-analysis, followed by randomized control trials, cohort studies, case control and descriptive studies. The lower level of evidence in the pyramid is expert opinions (Oermann, 2021). JBI also defines detailed levels of evidence for effectiveness, diagnosis, prognosis, economic evaluations, and meaningfulness (JBI, 2014).

What kind of research studies should we look for? In an area which has been well studied, the best option is to find systematic reviews. This means someone has already critically appraised and synthesized the findings from several research articles from the chosen topic. On a little-studied topic you can rarely find systematic reviews and thus the evidence found in individual studies must be used.

In addition when evaluating the study design, it is good to make use of critical appraisal tool to evaluate the study more thoroughly and, in literature reviews and many theses developemnt this is also a required practice. Oermann (2021) also mentions Kirkpatrick's Four-Level Evaluation Model to appraise educational evidence. Lee and Song (2021) used this model to evaluate outcomes of nursing programs in second-degree baccalaureate and master level.

The journal in which the study is published is also important for the quality of the publications. The Journal's Impact factor can be checked from Journal Citation Reports (JCR) database and for example CiteScore metrics from Elsevier (Elsevier, 2022). You should be cautious of and avoid predatory journals. Predatory journals deliver bulk spam invitations to attract authors to submit their manuscripts and offer rapid review process. The name or website design is often similar to an existing respectful journal,the digital object identifier (DOI) of published articles usually cannot be checked at https://www.doi.org/ and often these journals are found in Cabells Predatory Reports. Unfortunately, some predatory journals have found their way in to reputable databases (Duc et al., 2020).

The fourth phase of the EBT refers to **deciding**. Not only is it enough to have found good teaching-related articles, but you have to decide if the findings are applicable to your curriculum, programme, courses, students, and context in which you are teaching (Boswell & Cannon, 2016; Oermann, 2021). For example, the teaching method should fit the specific learning objectives, learners, teacher, available resources, and moreover, will they help students to achieve intended learning objectives? (Oermann, 2021).

Table 1. Four phases of the evidence-based teaching process.

PHASE	THE CONTENT	TIPS FOR EDUCATOR
QUESTIONING	Is there a better way of teaching? Require critical thinking (Boswell & Cannon, 2016; Oermann, 2021)	The question can be formulated in the well-known PICO format (Original PICO from Richardson et al., 1995). Oermann et al. (2021) has added the T for timing and S for setting: PICOTS
SEARCHING	How to find evidence to guide education-related decisions? Requires research competence how to look and where to look for evidence (the right databases and access to the information; resources for databases)	Databases have tools that facilitate searches that you should familiarize yourself (Oermann et al., 2021). The services of the library information specialist can be utilized, and the tutorials offered by the databases (Spencer & Eldredge, 2018). At least the following databases for nursing education research (Oermann, 2021): • MEDLINE (Pubmed): Biomedical and life sciences, incl. nursing education • Cumulative Index to Nursing and Allied Health Literature (CINAHL): Nursing and allied health literature • Education Resources Information Center (ERIC): Education research database, incl. also conference proceedings and other reports on teaching practice Depending on the question you may want to search from PsycINFO (behavioural science and mental health) and Scopus, that combines various disciplines. In addition, Cochrane Database of Systematic Reviews and Joanna Briggs Institute Database of Systematic Reviews & Implementation Reports publish systematic reviews and review protocols on health care (Cochrane Library, 2022; JBI, 2022). • When searching databases, it is preferred to use controlled vocabulary, such as MeSH terms in PubMed or subject heading in CINAHL. • Manage the references by reference manager, use screening tools e.g. Covidence (Covidence, n.d.) (https://www.covidence.org/). • Use PRISMA checklist and flow diagram if you are conducting systematic review or meta-analysis (Page et al., 2021), and for recording the search strategy for a manuscript. • Set email alerts for recently published articles in the databases (Oermann, 2021).

EVALUATING	What kind of research studies we should look for and how to evaluate studies? Requires competence to evaluate research • Levels of evidence: systematic reviews and meta-analysis, followed by randomized control trials, cohort studies, case control and descriptive studies. (Oermann, 2021.) • Effectiveness, diagnosis, prognosis, economic evaluations, and meaningfulness. (JBI, 2014) • Critical appraisal of studies	There are plenty of good critical appraisal tools and checklists to utilize and here are just some examples: ➢ JBI's critical appraisal tools to various study design (https://jbi.global/critical-appraisal-tools) ➢ CASP Checklists: Checklists for different study designs about the validity of the study, methodology, results, and local applicability of the results. (https://casp-uk.net/casp-tools-checklists/) Kirkpatrick's Four-Level Evaluation Model to appraise educational evidence (Oermann, 2021). It also matters in which journal the study is published. Journal's Impact factor can be checked from Journal Citation Reports (JCR) database (Check the access from your university) and for example CiteScore metrics from Elsevier (Elsevier, 2022). ➢ If you are thinking of publishing, avoid predatory journals.
DECIDING	Are the findings applicable to your curriculum, programme, courses, students, and context in which you are teaching (Boswell & Cannon, 2016; Oermann, 2021)? Requires competence to apply found evidence to the specific teaching context	For example, the teaching method should fit the specific learning objectives, learners, teacher, available resources, and moreover, does it help students to achieve intended learning objectives (Oermann, 2021). Look at the figure 1.

After these phases it is important to evaluate whether the new approach to teaching was effective (nursing education research needs more rigorous studies about effectiveness). As mentioned earlier, the EBT has intercepts to EBP. When choosing, evaluating, and deciding the use of the retrieved evidence and when evaluating new teaching strategies, the JBI's FAME (Feasibility, Appropriateness, Meaningfulness and Effectiveness) scale can be utilised (JBI, 2014; table 2).

Table 2. JBI's FAME (Feasibility, Appropriateness, Meaningfulness and Effectiveness) scale (JBI, 2014, pp 10).

FAME	Guiding questions
F – Feasibility	• What is the cost effectiveness of the practice? • Is the resource/practice available? • Is their sufficient experience/levels of competency available?
A – Appropriateness	• Is it culturally acceptable? • Is it transferable/applicable to the population of interest? • Is it easily adaptable to a variety of circumstances?
M – Meaningfulness	• Is it associated with positive experiences? • Is it not associated with negative experiences?
E – Effectiveness	• Was there a beneficial effect? • Is it safe? (i.e. is there a lack of harm associated with the practice?)

EXPERIENCES OF EDUCATORS AND STUDENTS TAKING PART IN THE EVIDENCE-BASED TEACHING STUDY UNIT

An international Evidence-based Teaching (EBT) study unit (5 ECTS) was organized as a fourth study unit of the Empowering the nurse educators in the changing world – study programme (30 ECTS) during the spring 2022. The study unit had 25 participants from 6 European countries (Malta, Finland, Scotland, Spain, Germany and Slovakia). Students and nurse educators at different stages of their careers participated in the course. The level of education, teaching experience and pedagogical approaches of the participants varied across the different countries. Some were studying at the master's level, others were in post-graduate doctoral studies, and some had PhDs and teaching experience for several years, and all of the participants were adults. The guiding learning theories in the Evidence-based Teaching study unit were constructivism, building knowledge on previously learned knowledge, and social constructivism meaning that knowledge is built through social and collaborative processes. In addition, self-directed learning and collaborative learning were designed as part of the learning environment and learning approaches for the structure of the course. Critical thinking was emphasized as a foundation for evidence-based teaching (Boswell & Cannon, 2016; Oermann, 2021).

Learning goals of the EBT study unit were that after studying the course, the student is able to:

- Recognize the importance of evidence-based teaching in learning, teaching, and its development
- Critically evaluate nursing education research used in the planning and implementation of teaching
- Apply high-quality research in the design of teaching objectives, content, methods and assessment
- Plan and implement a teaching event following the evidence-based teaching process

The content of the study unit consisted of evidence-based teaching in nursing education, pedagogical training, versatile learning opportunities, and student exchange and teaching practicum. The study methods consisted of self-directed online learning in web-based learning environment (Digicampus) with video lectures, individual assignments, group discussions, and peer-evaluation; one week of international teacher training exchange; and two online webinars. The teacher training consisted of 1 week at a host institution in a partner country, whereby each student teacher had to deliver 5 hours of teaching and evaluate fellow student's teaching. In addition, the week consisted of study visits to different teaching and learning centres, hospitals and collaborative activities.

The course started with independent work in the DigiCampus Moodle environment. In addition, the students participated in the online pre-seminar. Students then continued to work in the online environment and in small groups. For the international teacher training exchange students prepared five hours of teaching for teacher training exchange week. Students utilised the teaching event planning form for organising their teaching programme (Annex 1). The students gave each other peer feedback on the contents of the planning form and the planned teaching. All students undertook a one week teacher training exchange and this was conducted in all six universities at the same time. The teaching events were evaluated by the nurse educator mentors and peer-students (Annex 2). After the exchange training week students finalized their written assignment and presented their work at the final seminar. Students received written evaluation from the written assignment.

A qualitative data analysis of participants' experiences at the pre-phase and the post-phase of the study unit during the spring 2022 was undertaken. Participants' expectations and objectives for the study unit related to gaining new knowledge and skills about evidence-based teaching in nursing education, teacher training and international collaboration. Post-phase survey results focused on competence with evidence-based teaching, collaboration and international teacher training exchange opportunity, and content and implementation of the study unit. The experiences of the study unit were mostly positive. In the category of competence with evidence-based teaching, most students achieved their own learning goals and increased their competence in pedagogy, reflection and evaluation, and increased knowledge and skills about evidence-based teaching. Students had evidence-based teaching experiences, gained confidence on evidence-based teaching, and experiences that they could apply to their own work and perceived greater competence in this.

Students had very good experiences from collaboration and international exchange (second category). Peer and mentor feedback motivated and increased student learning, students experienced joint learning and teaching, international collaboration, and group discussion, exchanged knowledge and experiences, increased cultural competence and gained experiences from different working cultures. Most considered the international teacher training exchange week the best experience of the whole study unit.

The third category consisted of experiences with the implementation of the study unit. The content and evaluation of the study unit was aligned with the objectives of the study unit and evaluation supported learning. The content and methods were also mostly aligned with student's personal objectives. Learning environments (virtual, seminars and teacher training) and the methods used supported learning, but some considered the content of the video lectures too hard to understand. The workload in the study unit was considered too heavy and almost all suggested to make the study unit longer and more than five ECTS. In addition some, particularly the more experienced participants, regarded the study unit content too general and wished for more specific examples of evidence-based teaching strategies (Figure 3).

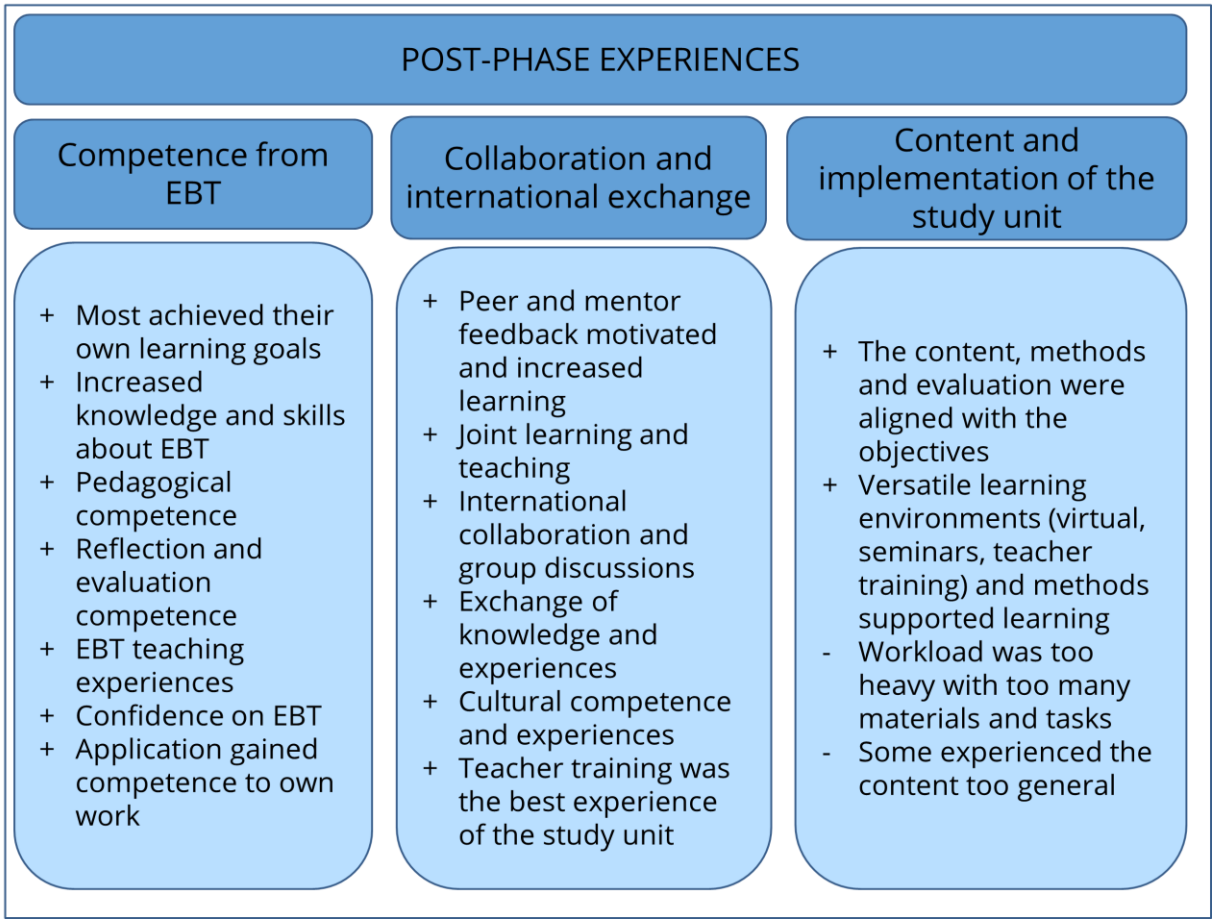

Figure 3. Post-phase experiences of students from the EBT study unit.

Conclusion and recommendations

Based on our experiences from the study unit development and implementation, and the experiences of the participating students we can conclude, that by participating in international study unit, nurse educator students can develop competence in evidence-based teaching and that international collaboration is functional way of developing this competence. Based on the feedback, we recommend a change to expand the study unit from 5 ECTS to 10 ECTS. In the future, the study unit should involve more countries.

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Chapter 4: Digitalisation of Nursing and Nurse Education

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- Competence in digital pedagogy is a vital part of nurse educator competence due to changing healthcare and education environments.
- Community of Inquiry and DigCompEdu are frameworks for digital education that help educators to plan, implement and evaluate digital education.
- There are variety of digital platforms and mobile applications that can be utilised in nursing education given that the ethical, legal and accessibility are addressed in advance.

INTRODUCTION

Digitalization sets competence requirements for both nursing and teaching, hence, nurse educators need to master the digitalization of both fields. The specific competences required of educators in digitalization have been established on European level (European Commission [EC], 2021; Redecker, 2017). Educators need to be professionally engaged to utilize digital resources. Furthermore, they need to be competent in providing teaching and learning through digital environments and using digital teaching and learning resources and be well acquainted with digital assessment methods as well (Saaranen et al., 2021). Educators seek to facilitate their digital learning to empower the learners in digital competence (Redecker, 2017). However, digitalization in nursing, is a complex issue which requires attention already during nursing education.

Digitalization of nursing is the use of digital equipment, utilization of digital resources to support evidence- based practice, communication with patients and colleagues, providing e-health services, embracing nursing leadership and renewing the profession according to the new digital era (Booth et al., 2021). This therefore suggests that nurses need digital competence, to use and maintain the digital equipment as well as to operate them safely, ethically and purposefully in their work (Booth et al., 2021; Ryhtä et al., 2020). Furthermore, digitalization and especially automated processing of personal data sets higher demands on data protection, hence both nurses and nurse educators need to know, understand and be able to apply European and national data protection regulations and laws (Booth et al., 2021; General Data Protection Regulation [GDPR], 2016; Redecker, 2017). Nurses are key

professionals to introduce and use, as well as develop and implement, technological solutions for the users of any healthcare service system (Nes et al., 2021), ideally in collaboration with others (for example industry, IT-experts etc.). This creates an opportunity to implement services in new, efficient ways, and enables health care users to access the services in multiple ways.

The utilization of different digital technologies is common in higher education, including in nurse education (Tømte et al., 2019; Thrower et al., 2020). Digitalization manifests itself in two ways, in the nurse educator's competence requirements and pedagogical work. The extent of the digitalisation in the pedagogical work can be adjusted to some extent, but in this digitalised era, it is impossible to avoid it. Digitalisation affects the competence requirements of educators in all of the competence areas: subject competence, pedagogical competence, ethical competence, cultural competence, competence in interaction and collaboration, competence in leadership and management, competence in evidence based teaching, competence in sustainability and future orientation and continuous professional development (CPD) competences (Mikkonen et al., 2019). Nurse educators play an important part as role models and influence the skills of future nursing professionals (Alves et al., 2020, Nes et al., 2021).

In 2020, the world experienced a simultaneous shutdown of societies caused by the COVID-19 pandemic, despite this, preparedness for digitalization was evident in multiple societies. For example online services, such as e-health and digital health clinics, online teaching and learning at all levels of education, etc., enabled endeavour of multiple functions of the society, despite of the strict restrictions. Education (European Association of Distance Teaching Universities [EADTU], 2020) and health services were provided online or with minimum physical contact (Morin, 2020; Saeed & Masters, 2021). Digitalization may be a solution also to enhance accessibility of both health care and education, hence it may contribute to narrowing the health gap for example in rural areas with long distances or in different family situations. Accessing distance education or consultation with a health care professional may be more accessible, than being physically present for a single parent or person with limited abilities to be mobile. However, the assumption of digitalisation enhancing accessibility, has to be considered with caution, as there is a valid concern that most vulnerable people will gain least from the digital services due to insufficient digital competence or lack of infrastructure (Saeed & Masters, 2021). There is a risk, that people with inadequate resources may be overlooked in designing digital services, especially if the digital services replace the physical ones. (Saeed & Masters, 2021; Tomczyk et al., 2022.) Considering the risks and the benefits, there is a need to increase the digital competence of graduating nurses by developing competency-based curriculums including the use of technology (World Healt Organization [WHO], 2021). Here the input of educators becomes significant.

The requirements for nurse educator competence in digital pedagogy are multifaceted. In addition to the digital competence requirements of the nurses in relation to skills and competences needed in nursing, also pedagogy needs to be adjusted accordingly. Education that is intended for face to face delivery, cannot be directly transferred into a digital environment. Digital pedagogy is a concept that combines digital, pedagogical and ethical components (Ryhtä et al., 2020; Väätäjä & Ruokamo, 2021). Digital pedagogy includes, but is not limited to, virtual and online learning environments. In addition, teaching and learning materials have been transformed into digital formats. Furthermore, guidance of the students and evaluation take place partly online. (Alves et al., 2020; Ryhtä et al., 2020; Matsumoto-Royo & Ramírez-Montoya, 2021.) Furthermore, pedagogical approaches and educator competence in digital pedagogy must be developed. (Redecker, 2017; Thoma et al., 2019; Matsumoto-Royo & Ramírez-Montoya 2021; Hebert et al., 2022.)

Educators also play a key role in the development and preparation of future nursing curricula. The know-how of applying information and communication technology should be included in the study plans of nursing education organizations (Nes et al., 2021) and also in the educator education to enhance professional development (Kleib et al., 2022). Moreover, the work of a nurse educator can include applying for research funding or participating in digital competence development and research activities. (Rodriguez et al., 2022). The multifaceted role of educators' multiply the competence requirements. Educators must identify the necessary competences in digital pedagogy and manage the use of information and communication technology, so that they are able to teach future nursing professionals and further develop education to meet the needs of the future nurses and health care users. WHO has also pointed out that competence in digital pedagogy is one part of the competence needs of a nurse educator (WHO, 2016).

In this chapter, we refer to competence in digital pedagogy, as understanding of the potential of the digital resources, skills and competences required to utilize technological and digital resources and attitude to use the digital resources in nurse education (Ryhtä et al., 2020). In this chapter, the educator's competence in digital pedagogy is discussed in accordance with this second perspective, what kind of competencies the educators need in their work as nurse educators. In addition, the chapter reviews a few examples of methods suitable for digital pedagogy and resources from the Empowering Learning Environments in Nursing Education (ELENE) study unit as well as the use of digital resources by educator candidates of health sciences during teaching practice. Nurse educators need knowledge and skills to use digital technology and digital pedagogical solutions in their teaching. The ELENE study unit has been developed to enhance and promote educators' competence in digital pedagogy. The course is intended for both educator candidates and educators as continuing professional education.

EDUCATORS' COMPETENCE IN DIGITAL PEDAGOGY

Nurse educators' general competence in Europe is high (Vauhkonen et al., 2023; Elonen et al., 2023; Salminen et al., 2021). There are fewer studies about nurse educators' competence in digital pedagogy. However, a recent study shows that nurse educators' competence and utilization of digital resources is high, meaning the nurse educators utilize a great variety of digital resources frequently (Pajari et al., 2022). However, there are differences in the use of digital resources and competence of educators (Pajari et al., 2022; Ryhtä et al., 2021).

Concepts

There are several different concepts that describe the knowledge related to the ability to use technology in nursing and education, and these are also used in parallel (Spante et al., 2018.) Competence in digital pedagogy (From, 2017; Hauck et al., 2020; Ryhtä et al., 2020, 2021) and digital competence (Redecker, 2017) are sometimes used interchangeably, even digital competence may be understood to mean merely the digital competences without pedagogical aspect. Hence, for clarity, in this chapter we are using competence in digital pedagogy of nurse educators to describe the comprehensive phenomena of educators' competence combining the digital and pedagogical competences (Väätäjä & Ruokamo, 2021). Competence in digital pedagogy refers to the skill of using digital technology for teaching and learning, finding research information and training students to be users of digital technology (WHO, 2016). Competence in digital pedagogy consists of three components; pedagogical competence, digital competence and ethical competence (Ryhtä et al., 2020).

As a concept, digital competence is still evolving and it is used to refer to skills and competencies needed for utilization of technological and digital resources (Ilomäki et al., 2016). There is great variety of terms used interchangeably with digital competence, however, the breadth and width of the content within the concept vary as well. Digital competence is used interchangeably with for example ICT-skills, digital literacy, media literacy, new literacies and multiliteracy, even these terms are either narrower or broader concepts, than digital competence. (Ilomäki et al., 2016.)–Furthermore, the terms computer literacy, computer competence, nursing informatics and eHealth literacy have been used to describe digital competence within nursing (Nes et al., 2021).

Appropriate utilization of digitalization requires pedagogical competence from the educator. Pedagogical competence can be described according to the competence model of social, healthcare and rehabilitation educators (Mikkonen et al., 2019, pp. 81–86 in English). Pedagogical competence refers to educators knowing how to plan, implement, evaluate and renew education. This includes development of competence-based curricula. Pedagogical competence also includes that the educators know how to teach and guide students' learning using pedagogically justified teaching methods and learning environments. (Mikkonen et al., 2019.) Teaching in digital environments, for example online, and the use of

digital resources require all of this pedagogical expertise. In addition, when utilizing digital resources, the following are highlighted; planning, learner-centeredness and variation of methods.

Digital resources in this chapter refer to all digital technologies, platforms and applications that can be used for evidence- based education, collaboration and networking professionally (Redecker, 2017).

SUPPORT FROM THE FRAMEWORKS FOR DIGITAL EDUCATION

There are different frameworks or models to support digital pedagogy. What these have in common is that they all describe how educators can integrate technology into their work in different activities. (McGarr & McDonagh, 2019; Cabero-Almenara et al., 2020; Pajari et al., 2022). The frameworks can be practical guides on what nurse educators need to master (Redecker, 2017) and what they need to take into consideration (Garrison et al., 1999; Redecker, 2017) to provide a high quality digital education.

Framework for digital competence of educators – The European Framework for the Digital Competence of Educators

The European Framework for the Digital Competence of Educators (DigCompEdu) provides detailed description on different competence areas in digital pedagogy. The framework is originally developed for primary and secondary education, but due to its generalizability it can be used as a framework for higher and professional education as well (Caena & Redecker, 2019; Cabero-Almenara et al., 2020). The competence descriptions in this framework can be used as a guideline for the critical issues within digital pedagogy that the educators have to take into consideration in their work and their own professional development (Redecker, 2017). Furthermore, DigCompEdu offers standards to plan and implement educators training to utilize digital resources (Caena & Redecker, 2019). (Figure 1.)

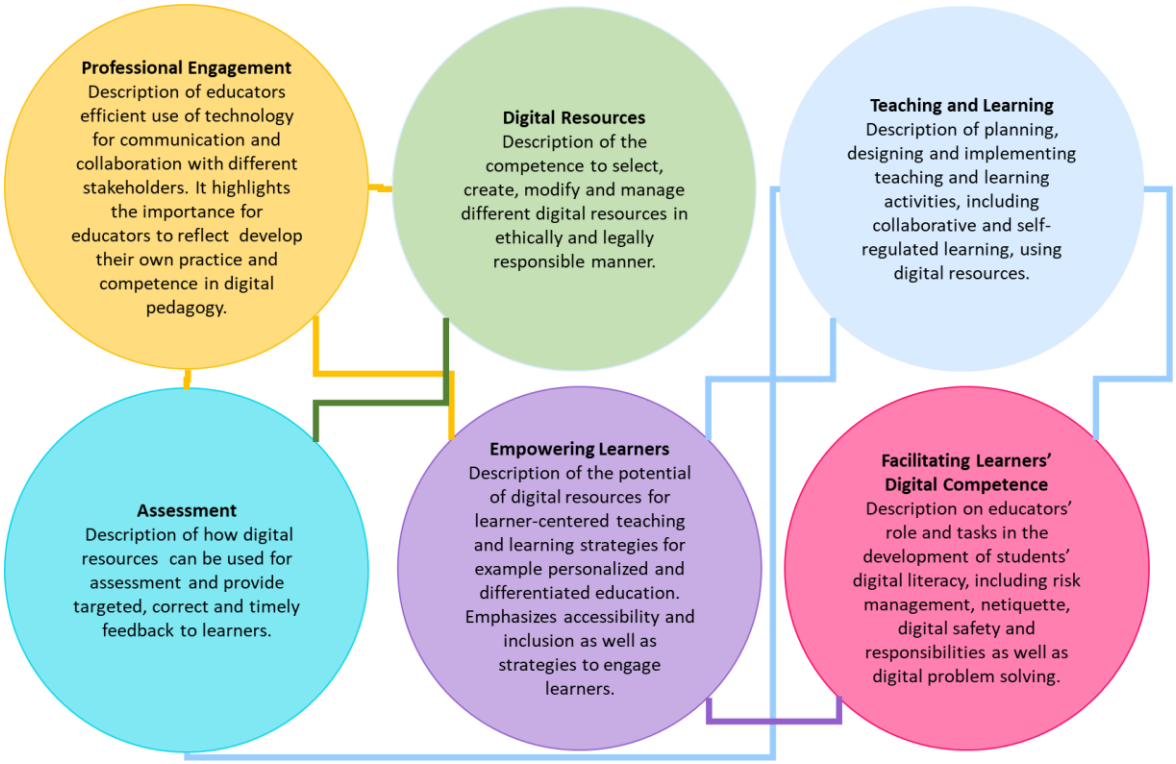

Figure 1: Competence areas of DigCompEdu (Redecker, 2017; Caena & Redecker, 2019.)

Framework for collaborative online learning – Community of Inquiry

The Community of Inquiry (COI) model states that educators and learners form a community that actively learns in collaboration with each other through the three core presences: teaching presence, social presence and cognitive presence. The actual learning experience happens in the center of the three presences. (Garrison et al., 1999). This model is based on social constructivism (Kozan & Caskurlu, 2018) and intended initially for digital text-based learning, but it has evolved and expanded alongside with the expansion of the digital teaching and learning resources. COI model can be utilized as a framework for digital education utilising a variety of teaching and learning methods and different digital resources. (Garrison, 2007; Garrison et al., 1999; Micsky & Foels, 2019.)

The model describes and guides educators on how to create the different presences. Teaching presence is achieved through planning and organising, facilitating communication and guiding the students in both practical and theoretical issues (Akyol & Garrison, 2019). Educators need to create instructions, goals, evaluation criteria and learning tasks that are clear and visible to the students and enable and facilitate collaborative learning. Similarly as DigCompEdu (Redecker, 2017), COI also emphasizes dividing the study unit into smaller, easily digestible portions, using multiple varying teaching and learning methods, and helping the students to focus on the essentials. (Akyol & Garrison, 2019; Boston et al., 2009; Shelton & Hayne, 2017).

Social presence is achieved through open communication, group cohesion and personalisation (Akyol & Garrison, 2019). Educators can promote social presence with enabling collaborative learning through group assignments and other activities, that help promoting trusting communication and group formation. It is critical to enable and facilitate the discourse in a manner that supports mutual respect and enables learning, creating a safe learning environment for students to share their own thoughts and ideas. (Akyol & Garrison, 2019; Micsky & Foels, 2019; Shelton & Hayne, 2017.)

Cognitive presence is formed, when the students and the educators form a joint understanding of the topic at hand. Collaboration within community, inquiring learning and reflection create cognitive presence. (Akyol et al., 2009; Akyol & Garrison, 2019; Garrison et al., 1999.) Cognitive presence is created with initiating triggering event that induct inquiry. Through inquiry, with the support from the group and the facilitators, the information is integrated, which leads to the resolution, mutual understanding of the topic. (Akyol & Garrison, 2019; Garrison et al., 1999; Micsky & Foels, 2019.) (Figure 2.)

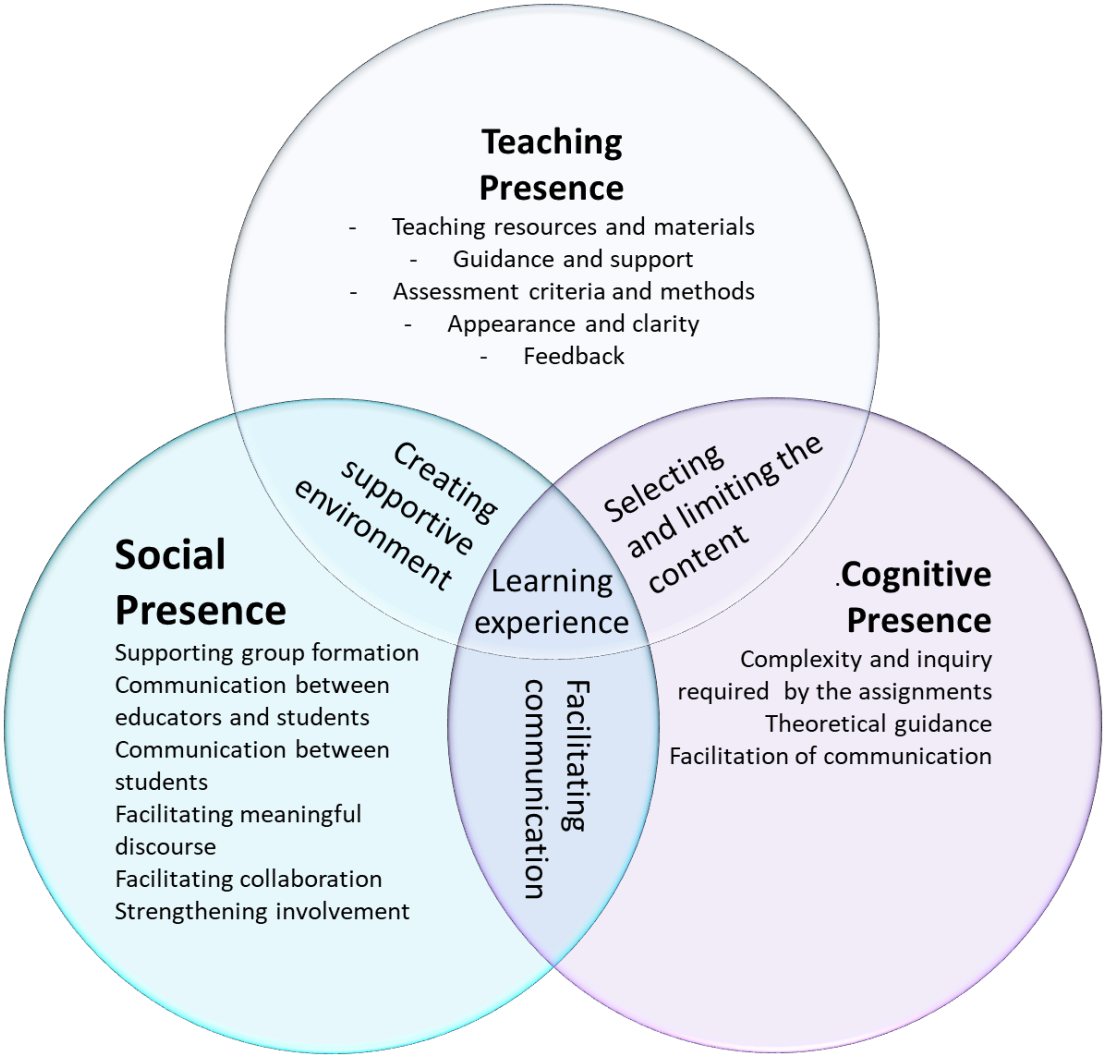

Figure 2. The presences of Community of Inquiry modified from the original. (Garrison et al., 1999). CC BY-NC-SA 2.0

DIGITIZATION IN THE WORK OF A NURSE EDUCATOR

The use of digital resources is one possibility to offer new ways of interaction, assessment and participation (Thoma et al., 2019; Thrower et al., 2020.) The digitalization in healthcare operating environments and education has increased (Webb et al., 2017; Thoma et al., 2019; Kalanlar 2022) and they are suitable for modern teaching alongside with traditional teaching (Webb et al., 2017). Various digital interventions have been used in higher education and the outcomes of the interventions have been mainly positive (Sormunen et al., 2022). For example, in nursing education, the experiences of using social media (Salminen et al,. 2016) or virtual reality (Chen et al., 2020) have been inspiring. But there are also challenges associated with their use (Chen et al., 2020; Nes et al., 2021). The challenges related to digital resources, such as accessibility of digital resources, functionality of technology and internet connections or possible students cognitive load, should be considered. The linearity of teaching from learning goals to assessment with pedagogical planning should also be consider (Nes et al., 2021; Orr et al., 2022). Therefore, the benefits of digital resources for teaching and learning must be assessed (Figure 1). Teaching online may require a different kind of presence and commitment from the educator than traditional classroom teaching. For example, online teaching highlights the student's active role and self-initiative. For educator, supporting social interaction can be more challenging online than face-to-face, so these need to be carefully planned. (Pramila-Savukoski et al., 2023.)

Empowering learning environments in nursing education (ELENE) – Evidence-based digital education

ELENE started in 2013 (Salminen et al., 2016) and has been further developed and updated over the years of its delivery. The learning goals of the study unit focus on deep understanding of digital learning environments, utilizing social media and digital applications in education and utilizing different digital pedagogical solutions in teaching and learning. Moreover, the aim has been to learn to use collaborative teaching and learning methods in nursing education and networking (Papastavrou et al., 2016), hence adapting community of inquiry and DigCompEdu as the frameworks for the study unit was a natural choice.

ELENE is a hybrid study unit, consisting of both distance and face-to-face learning. The study unit consist of online independent studying, group work, webinars and five days intensive learning. In the webinars the students return a written assignment of the certain topics, e.g., podcasts, 3D-technologies and robotics used in nursing education and present their topic as an oral presentation during the online webinar. The aim of the task is to understand and describe how these digital resources can be used in nursing education. The students are required to describe the use and learning possibilities of the resources and critically appraise their advantages and disadvantages from the perspective of educators, students and learning environment. The intensive week consists of guided group work, lectures,

workshops, excursions and a final seminar. In the beginning of the week, students are divided into new groups and they prepare a short teaching and learning activity utilizing a given social media or digital resource, such as thinglink, canva, podcast etc. which they present in the final seminar. (Figure 3.) The idea of the course is learning by doing, testing and discussing, and learning from each other.

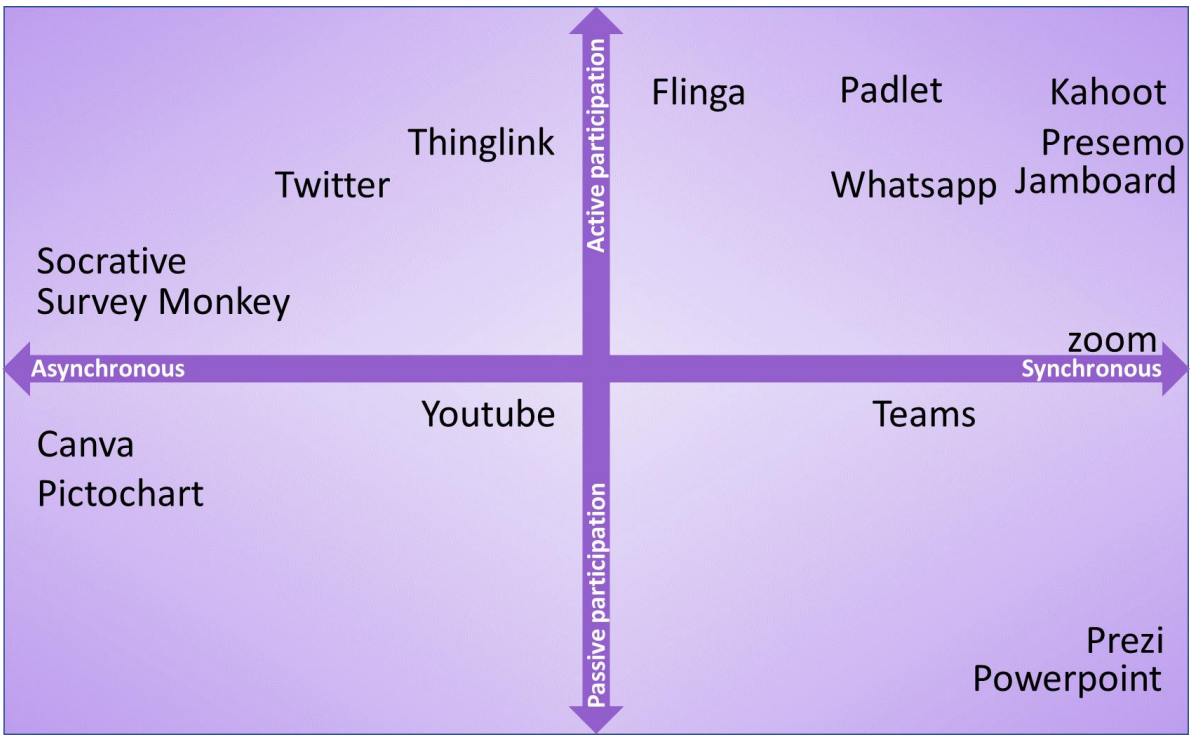

Figure 3. Chart of some examples of different digital applications and social media platforms divided according to their usability characteristics.

The planning and organisation of the study unit, plays an important role in achieving teaching presence in any study unit (Akyol & Garrison, 2019). ELENE has been delivered over a decade, yet to keep up with the constantly evolving and expanding digital landscape, the planning of the next study unit starts immediately after the feedback from the previous one. The instructions for the assignment are revised and renewed where necessary, to assure clear and visually engaging learning materials (Akyol & Garrison, 2019; Shelton & Hayne, 2017). Furthermore, in all written information, both visual elements and layout are conducted in a manner, that supports inclusion and accessibility of the learners (Redecker, 2017). The goals, guidelines and assessment criteria and methods are available for the students before the study unit starts, on the front-page of the learning environment (Shelton & Hayne, 2017). All students receive personalized information and instructions on how to access the learning environment and what is expected of them during the study unit prior starting the studies (Redecker, 2017.)

During ELENE open communication is both encouraged and required, as many of the assignments are conducted as collaborative group projects (Akyol & Garrison, 2019; Shelton & Hayne, 2017). Students have the option for online mentoring and individual support, should they need it (Redecker, 2017; Akyol & Garrison, 2019). Furthermore, to strengthen the pedagogical presence, the last two implementations have been conducted with voluntary group guidance, additional online and onsite mentoring, which received very positive feedback from students, as it eased scheduling and technical issues affecting accessibility and inclusion (Redecker, 2017). Educators have guided the group work both through written and oral instructions both online and face-to-face, and offering time and space for guided collaborative work both during webinar preparations and the intensive learning week, hence facilitating group formation, constructive communication and a safe space (Akyol & Garrison, 2019; Garrison et al, 1999; Micsky & Foels, 2019; Boston et al., 2009; Shelton & Hayne, 2017)

ELENE assignments require inquiry and scientific approaches (systematic information search, critical appraisal, synthetization and both oral and written reporting), as well as communication, collaboration, and leadership and management within the learning groups (Akyol & Garrison, 2019; Shelton and Hayne, 2017). There are multiple different learning assignments and methods used during the study unit, to motivate and engage the students and to enable a multifaceted learning experience aiming for deep understanding of the topic and the learning is divided into smaller units, to help the students construct knowledge and understanding (Redecker, 2017; Akyol & Garrison, 2019). Through ELENE we illustrate encouraging deep understanding and constructing knowledge through variety of approaches, summarized in figure 4.

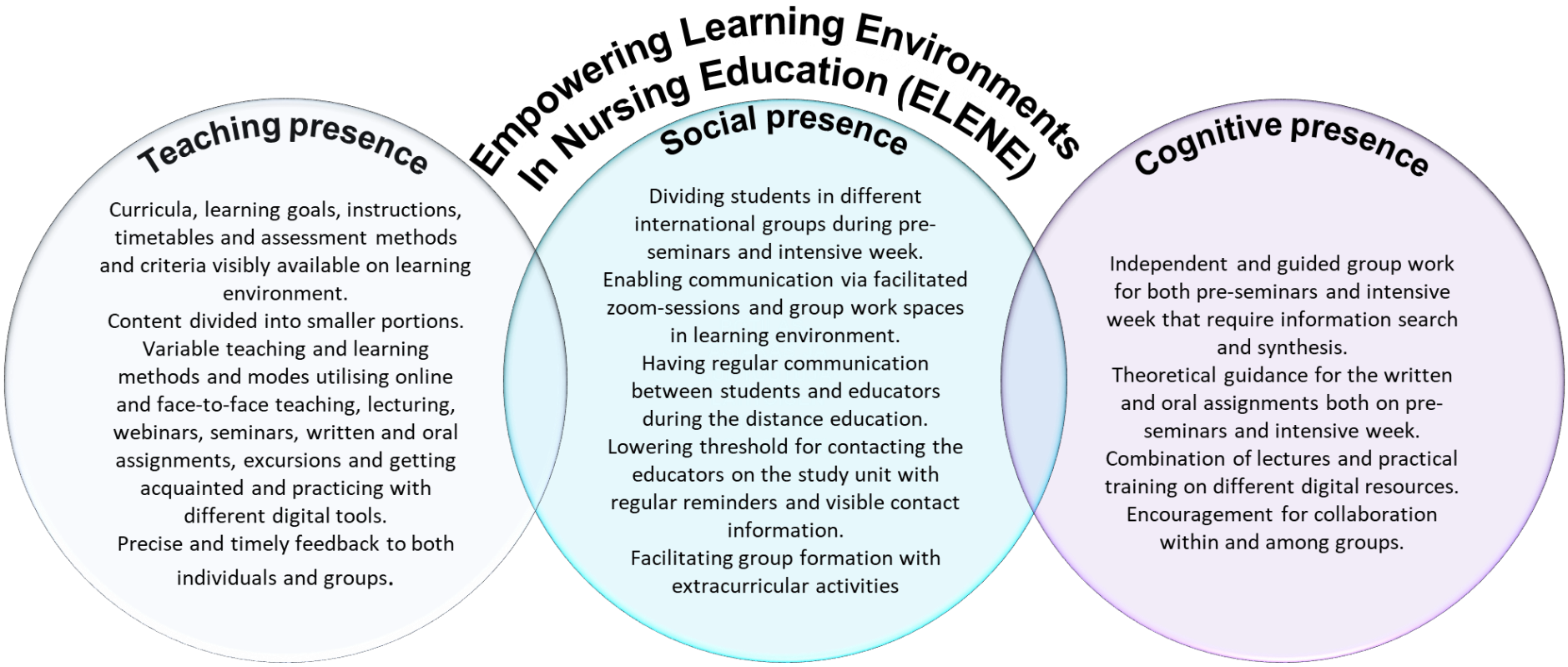

Figure 4: Teaching, social and cognitive presence on ELENE

DIGITAL PEDAGOGY AND THE CONTINUING EDUCATION NEEDS OF NURSE EDUCATORS

Digital pedagogy is multifaceted concept and the educators' competences in digital pedagogy vary considerably. There are several issues that have been linked with the educators' competence in digital pedagogy, such as educators' personal traits, possibilities for collaboration, available technological resources, organization's policies regarding digital pedagogy and CPD (Elonen et al., 2022). Educators' interest to utilise digital technology and competence in digital pedagogy can be enhanced with the continuous education of educators (Elonen et al., 2022; Ryhtä et al., 2021). The continuous education opportunities need to be timely, of high quality and purposeful continuous education that benefit both the educators and the organisations they represent (Elonen et al., 2022). In addition to continuous education, professional development can be achieved by being actively involved in projects, collaboration and self-directed learning (Koskimäki et al., 2021). Re-skilling and upskilling through education, have been named also in the European Declaration on Digital Rights and Principles for the Digital Decade, that is European Union's engagement to assure safe and sustainable digitalisation of Europe (European Comission [EC], 2022). CPD is not only and obligation but a right of educators (EC, 2022; Smith et al., 2023).

All educators need competence in digital pedagogy. However, the level and number of competencies required from all the nurse educators need to be justifiable. Can we and should we require all educators to have multiple competencies in digital pedagogy, or should we instead, promote collegiality, where educators would be prompted and encouraged to collaborate more and share their expertise and competencies within their work community? Instead of team-based learning, should we move towards team-based teaching? Teaching in teams frees all the educators to utilise their strengths while learning from each other's competencies simultaneously (Meizlish & Anderson, 2018). Furthermore, where the competence requirements of the educators (WHO, 2016) are fundamental, the sheer number and depth of competencies that are required from nurse educators today (Smith et al., 2023), with the digitalisation of society, nursing and education, makes it impossible for everyone master everything, hence collaborative teaching, may be the only way to go.

CONCLUSIONS

Digital competence of the nurse educator describes the ways, how an educator is able to use digital technology and digital environments in their teaching. Competence in digital pedagogy combines digital and pedagogical competence and is a requirement for the purposeful utilisation of technology in teaching and learning (From, 2017). Digitization has introduced modern and flexible opportunities to be implemented in nursing education. This has also resulted in new competence requirements that must be identified to organize education for the continuing professional development for nurse educators. Therefore, there is a need for research on pedagogical approaches to utilize digital resources so that higher

learning goals and deeper learning can be achieved, including problem solving and critical thinking competence (Nes et al., 2021; Orr et al., 2022).

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Chapter 5: Global Health and Sustainable Nurse Education

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INTRODUCTION

It is becoming increasingly obvious that Global Health in Nursing is intrinsically tied to sustainable education, on both the global and local levels. This chapter addresses the concept of global health with a focus on sustainable nurse education. It draws upon the work of the Consortium of Universities for Global Health (Consortium of Universities for Global Health [CUGH], 2023; Wilson et al., 2014), the WHO (World Health Organization [WHO], 2022) Global Competency Framework for Universal Health Coverage as well as Wilson et al (2014) Global Health Competencies to Prepare 21st Century Global Health Professionals.

This informed the development of the module entitled Global Health: Empowering nurse educators in the changing world which formed part of the Erasmus+ Programme: A New Agenda for Nurse Educators in Europe. The aim of the study unit was to equip learners with an understanding of the impact of common and emerging global health issues in their own local area (city, region, or country) and respond to their identified local needs by addressing the gaps in knowledge and skills within their pre-registration nursing curricula.

This chapter commences with a critical discussion on sustainability in education, followed by the need for sustainability in nursing education and its impact on the globe, and indirectly on global health. The competences and dimensions identified by WHO (2022) referred to in appendix 1 guided the intended learning. Finally, we draw on the feedback obtained from students who completed the global health module to make recommendations for sustainable ways of teaching and learning in nurse education.

Against the prevalent backdrop wherein economies around the world are being asked to actively seek to shift from linear to circular economies, the requirement to build skills and competencies which embrace sustainability is inevitable across most sectors and industries, including health and social care (Solheim, 2014). The commitment of the corporate bodies of healthcare organisations to include sustainability within their corporate responsibility portfolio has gained traction in recent years (Haddiya et al., 2020). Paradoxically, the healthcare industry is widely recognised as a dismal performer in the quest for sustainability

in its missions globally (Bosurgi, 2019; Muñoz, 2012; Schwerdtle, 2015). Therefore, the education of the healthcare workforce needs to prioritize awareness of the different global health issues such as poverty, migration, obesity, climate change or narrowly focused issues such as immunisation against a specific contagion (Jogerst et al., 2015). The United Nation's agenda for sustainable development (2015, 2020), identified sustainability as a key component to global health and education. This is especially pertinent in nurse education as nurses are on the frontline in the healthcare industry and are therefore best suited to address the urgent need to deliver healthcare services in a sustainable and environmentally-sound manner.

This chapter draws upon the contention that awareness in this regard has awakened within the profession. Firstly, we discuss the need to activate change at all levels of the profession, including the critical role of nurse education, in developing the required skills and competences required to address global health challenges, namely, sustainability. Secondly, we refer to and use examples from the Global Health module in the New Nurse Educator programme to explain and support the discussion, ideas and recommendations pertaining to addressing global health challenges including sustainability.

WHAT IS THE MEANING OF SUSTAINABILITY IN EDUCATION?

More than three decades ago, the Brundtland Report had implied that sustainability entails being able to meet "the needs of current generations without compromising the ability of future generations to meet their own needs" (Brundtland, 1987, p. 43). This definition of sustainability has since been commonly used in the published literature.

Sustainability comprises three main elements; economic, social, and environmental protection and development (Boyer et al., 2016; Moldan et al., 2012; Waas et al., 2011). The WHO (2015) highlighted the effects of all three elements on health across the world and called for an active approach which not only recognised that the social, economic, and environmental aspects of sustainability effect health, but that they are also interconnected.

One of the policy actions set out by the European Commission was that of a European Sustainability Competence Framework (Bianchi et al., 2022). GreenComp, as the framework is known in short, identified a set of sustainability competencies that need to form the basis of educational programmes to ensure that learners are developing knowledge, skill and attitudes that challenge ways of thinking, planning, and acting with responsibility and care for our planet as well as our global public health. In other words, to ensure our planet's health and our public health, it is vital to incorporate sustainability into our curricula. It is therefore not surprising that the European Commission has made learning for environmental sustainability a priority for the upcoming years.

Nurse education needs to resonate with this priority. Consequently, nurse education curricula should comprise a design, delivery and quality assurance or evaluation structure which spans economic, social, and environmental content. In addition, competence in sustainability

should be prioritised and developed. To date, the published literature regarding sustainable developments in nurse education is sparse (Ward et al., 2022). Acknowledging that nurses will not reach their full potential in influencing and setting policy direction as well as undertaking research, unless they are equipped with the competences that are related to sustainability. This is pivotal for the nursing profession to the successful growth of nurse education that is cutting edge, responsible and ultimately sustainable.

The outcomes of teaching and learning initiatives experienced by other health care professionals in this regard are encouraging (Redvers et al., 2023; Webb et al., 2023). These reports and critical evaluation of the impact of the educational paths of other health care professionals may inform current and future efforts and developments in nurse education. At this point in time, the literature also shows that health professions are currently inadequately prepared to meet the challenges that climate change and environmental degradation are posing, leading to an ethical responsibility to address this fast (Madden et al., 2020).

In view of the narrow, closing window in which to take action to avoid the worsening health outcomes resulting from climate change, urgent and systematic changes and developments at all levels are required in the education sector, including tertiary education. The long-term strategy for the inclusion of sustainable competence educational initiatives should entail establishing indicators which can demonstrate action and change. Such global indicators to support change may provide a focus for action (Shaw et al., 2021). Creating capacity for environmentally sustainable health care at scale and pace should be the common goal across all health care education.

Why sustainability in nurse education?

The nursing literature reports varying observations and evidence regarding sustainability in nurse education. At one end, reports include notions that nurse education has been elusive (Anåker et al., 2021), and a narrow focus on the effects of plastic use on populations and acceleration of global warming is exercised (Fazey et al., 2020). At the other end, the increased awareness of the wide impact of human action on the entire earth and expansive global citizenship development (OXFAM, 2023) have been often reported in nurse education. Sustainability has long been seen as important to nursing and the notion that students need to understand its impact on health outcomes through education has been historically proposed (Shaner-McRae et al., 2007). However, Goodman and East (2014) argued that the efforts to effectively address sustainability in education have not impacted the practice of nurses. Current realities suggest that efforts made, and actions taken to-date in nurse education, need to be increased and adjusted. This chapter attempts to underline the importance of this facet of nurse education and to empower nurse educators to enable impact on nurse practice in this regard.

In addition to the design and content of nurse education, the delivery of nurse education, too, needs to be revised and adjusted. Its delivery to calls for increased efforts and actions

towards sustainability that is addressing the needs of current generations – of nursing students, patients, and world populations- without compromising the ability of future generations to meet their own needs.

We support the contention that nurse educators could, and indeed should, develop their own "sustainability lens" (Goodman & East, 2014). Moreover, we advocate that quality assurance in nurse education is to bear on this "sustainability lens". We propose that professional standards of qualified nurses' practice will, as an outcome and impact of nurse education, embrace sustainability as a measure of optimal professional practice of a nurse. The prevalent lack of uniformity of nurse education is not favourable. The understanding of nursing roles and the position of nurses in healthcare is impacted negatively by the lack of uniformity (van van Kraaij et al., 2023). Therefore, common foci upon which standards and criteria may be developed and shared universally need to be identified and recognised across the globe by nurse educators.

There is a clear and long-standing consensus that "holistic" and "systems-thinking" approaches to health and health care delivery, along continua which span from the individual to a society, and which address illness to wellbeing, demand a broad-based curriculum and a cross-disciplinary approach in nurse education. The "sustainability lens" is viewed as consistent with such holistic and systems -thinking approaches. In line with this, the study unit on Global Health: Empowering Nurse Educators in the Changing World, sought to enable nurse educators to think globally, to unpack global health foci and to apply them to individuals in specific societies in respective local contexts.

The sustainability lens requires nurse educators to recognise that sustainability needs to take place on two levels: sustainability *of* a programme; and sustainability *within* a programme. Furthermore, these two levels necessarily need to integrate the pillars of equity, accessibility, inclusion, and diversity.

Sustainability of a programme

Ultimately the capacity to deliver a programme necessitates the correct individual, institutional and organisational factors. For an educational programme to happen, various stakeholders are needed: the educators to teach and deliver the programme; the learners to engage with the programme; and the administration to ensure that the typical academic processes and standards are adhered to. However, for a programme to be sustainable additional factors need to be considered. Perhaps of paramount importance is the relevance of the programme to professional practice. In tandem, in considering relevance, programme developers need to consider how attractive a programme would be to targeted learners. Particular attention needs to be given to the context in which the programme is to be offered, carefully considering the reproducibility of such a programme. The concept of reproducibility in programme development may be a little elusive. Escalating costs and small class sizes may often be the reason why certain programmes are terminated. Higher

education across the globe is becoming more and more expensive, and more and more conscious of financial sustainability. Using cost benefit analysis, one would purport that to be sustainable, programmes should run over a long period of time. As within health care, change is rapid, and therefore a programme may become outdated sooner than expected, which is why sustainability *of* a programme is inexplicably entwined with the sustainability *within* a programme.

Sustainability within a programme

Sustainability within a programme should be given due importance. Typically, specific academics lead programmes, and should they depart, for whatever reason, the programme may risk being terminated. Therefore, it is important that there are concrete processes and structures within the institutions to ensure the continuation of the programme. Accountability systems would ensure the continuation of the programme. For example, working teams, both at an administrative and academic level, is one way of enhancing the sustainability of a programme. Having team members holding the right skills and attitudes is another important element of ensuring continuation of a programme. In addition to this, strong stakeholder commitment is necessary, and this is further enhanced, if each member of the team values the programme concept, design, and delivery.

Ultimately a programme will continue to be sustainable, if there are internal processes that allow for the content to be conceptualised, delivered, and updated in such a way that it is interesting, engaging and challenging for the targeted learners. Learners need to feel comfortable to actively use and manipulate the learning material, and subsequently co-create relevant new knowledge that helps them in their own learning journey.

UNPACKING THE GLOBAL AND DRESSING THE LOCAL

In this part, we look at various aspects of sustainability of a programme and sustainability within a programme, through presenting a range of factors that were incorporated into the design and delivery of the Global Health module. In a sense we are "unpacking the global and dressing the local" on two levels: firstly, through this programme we are taking Global health concepts which may appear too large, too global, too distant and bringing them down to the local level, subsequently making them more tangible, more focused, and more local. We do this by asking our learners to analyse a global health issue that is affecting their own local area, and therefore getting them to think about how their current curriculum is preparing local nurses to deal with these global health issues. Secondly, we are simultaneously demonstrating how as educators, they can take global issues and incorporate the global aspect of learning into their local curriculum through role modelling the teaching and learning of this programme.

The programme entitled Global Health: Empowering nurse educators in the changing world took place over a 7-week period in an entirely online format. The aim of the study unit was to equip learners with the understanding of the impact of common and emerging global health issues upon their own local area (city, region or country) and respond to their identified local needs by addressing knowledge and skills gaps within their pre-registration nursing curricula (Figure 1).

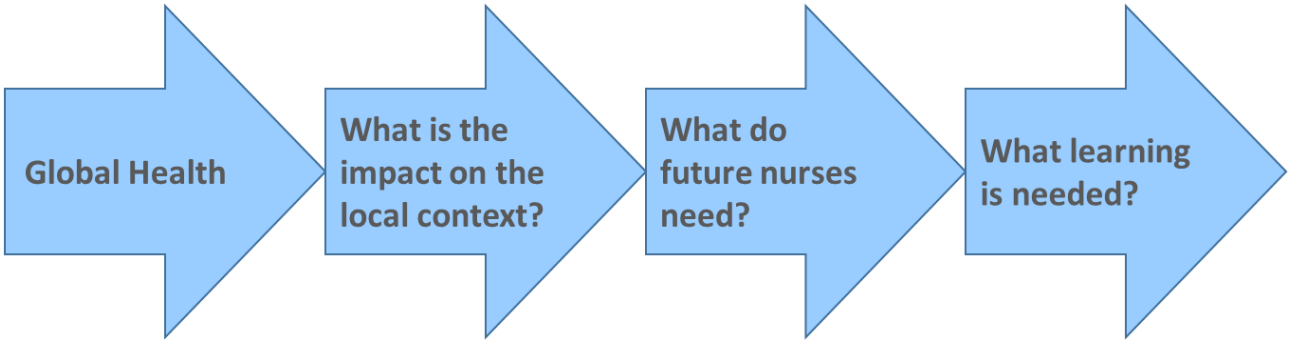

Figure 1: Sequence of learning

The learners were professional nurses who were either employed as nurse educators or learning to become nurse educators, therefore the range of experience in education varied, so did the range of experience as professional nurses vary in number of years. The faculty delivering this study unit was international.

Making use of networks

Whilst the programme was situated within the University of Malta, it was delivered as part of an Erasmus+ project, which is a collaboration between six partner universities. The departments of nursing within the six universities already have strong ties and have collaborated with each other in other circumstances, meaning that the relationships are strong. Sustainability depends upon strong relationships at an organisational level. Furthermore, in designing this study unit, we necessarily had to think global rather than local in terms of curriculum content and design because the global health realities of the various partner institutions vary across Europe and focusing on what is a global health issue in Malta, may not be relevant to learners in Scandinavia or the Eastern part of Europe.

Using our networks to access experts

By working within a collaboration of universities, we were able to draw on personal connections and relationships with experts in the Global Health field. We live in a global and connected society, and individuals from across the globe were very happy to contribute a 2-

hour lecture and discussion with our students. Not only does this provide them with the opportunity to share their knowledge and recent research findings, but it also enables them to contribute, even in a small way, to the learning of others in other parts of the world to their own. The use of experts ensures that the content being delivered is always current and up to date. The chance to discuss issues with experts, gives value to the learners, and it also demystifies "expertise". To continue to be sustainable, programme delivery should also offer something back to the experts too and create a health symbiotic relationship. In this programme, we ensured that there was enough time for a discussion to take place after each expert lecture, as this allowed the expert time to receive feedback on the relevance of their subject matter. In addition, as the lecture was ongoing, we created a Jamboard where the learners could post anonymously their feedback for each expert lecturer. These were then sent to the experts after the study unit was completed as feedback and a sign of appreciation.

Online delivery

This programme was designed to be entirely online. We had expertise for the design and development of online programmes within our department and therefore costs were kept to a minimum. The benefit of online delivery is that costs are minimal, it ensures accessibility, inclusion, and equity in the learning process. The online approach means that the programme may always have an international audience, which consists of educators and learners. Furthermore, the programme is easily replicated and run with minimal costs to the education institution hosting it. Moreover, the online delivery also allowed flexibility in the learning process. This programme had a blend of synchronous and asynchronous learning moments throughout the 7-week programme. The flexibility meant that students could engage in synchronous learning from any location as long as they had a device and a good internet connection. The flexibility ensured that students could engage in the learning either individually, or in their small group work, without having to commute to another country, region, or city. Finally, the online delivery ensured that learners with diverse needs could be accommodated more easily.

Collaborative small group learning

Much of the learning in this study unit required the learners to work in small groups according to the country they were living in. The small group learning put the focus on the subject matter that was most relevant to the learners. This approach to learning ensured that the knowledge was generated and co-created by the group themselves, which ensured that the learning was active, collaborative, and used a scaffolding approach. This approach to learning ensures equity in the learning process. Learners had to think "local about a global health issue", and through a series of questions posed in a scaffolding manner, they worked through the group work in a manner that was relevant, useful, and contextualised to their

context. The collaborative small group learning enabled a safe learning environment, where they would also communicate in their own language as they worked through the learning tasks.

Forward looking

Finally, the programme was designed to be forward looking. The aim was to challenge the learners to take stock of global health issues and re-defining possible local initiatives in nurse education that would create a more informed workforce. Furthermore, whilst the programme focused on one aspect of global health, and perhaps on one part of the existing nursing curriculum, the concept of scaling up ideas and efforts within the curriculum to build a more effective nurse education programme was planted.

In addition, by designing curricula that are forward looking, the chance of the curricula becoming outdated is minimised. Moreover, by opening the learning space, for the learners to bring their ideas, issues, and concerns, this allows space for diversity of ideas, attitudes, and knowledge, and in so doing it allows the learners, the ideas, and the output to be more inclusive.

CONCLUSION AND RECOMMENDATIONS

The lack of homogeneity arising from the lack of global and international standards for nurse education has hampered the universal impact and the evaluation of nursing programmes. A universal core focus on sustainability offers an opportunity for nurse educators to address this major deterrent to the efficiency and effectiveness of nurse education. A set of uniform criteria comprising a holistic and systems-thinking approach coupled with uniform standards for sustainability will provide an impetus to develop and validate sustainable nurse education programmes. The evaluation of the Global Health module delivered in the New Nurse Educator programme conveys a promising channel for the standardisation and improvement of nurse education. A focus on sustainability promises help to nurse educators and policy makers to improve and standardise nurse education.

It is however clear to us that the future of nurse education necessarily needs the development of sustainable programmes, to play our part in curbing the rapidly deteriorating global health of our planet. Education through the curriculum design, has a role to play in changing the mentality and way things are done. Nursing education has a role to play at being at the forefront of this unprecedented moment in history.

The requirement for knowledge, skills and competencies in global health issues such as international migration, cross-cultural sensitivity, prevention and management of infectious diseases and non-communicable diseases, social determinants of health, trans-border issues including war and conflict, poverty, inequalities in health care access, governance in service provision, human rights, environmental risks and climate change have become increasingly important, even for the individual nurse or health care worker, in providing nursing care for

individuals (WHO, 2021). The obligation of education programmes to address such learning needs is evident and arguing against this would clearly be wasteful.

Although the literature reports initiatives regarding this new educational focus, the complexity and evolving character of sustainability in education debate suggests that education for sustainability needs to be continually revisited, analysed, reflected upon and re-conceptualized, in response to local, national and global developments and changes (O'Brien et al., 2013; O'Connor & Zeichner, 2011). In turn, educators need to constantly reflect upon, and re-evaluate their positions, understandings and educational practice, in order to respond effectively to the challenge of sustainability in nursing education.

In conclusion, education for sustainability as a global health initiative would embrace various pedagogies and would value diverse ways of knowing in view of seeking to identify with the individual and communities of learners it purports to impact, and the changes is aims to enable. In our vision, education through effective curriculum design would not merely be academic content, but rather a participatory process which spans all facets of a community, where learners are guided in reflection and action on different interpretations of addressing sustainability (in education) as a global health challenge.

Take home messages

As educators develop your own sustainability lens

Reach out to experts, don't be shy!

Trust the learners to co-create the knowledge they need

Push learners to think beyond, and therefore think sustainable

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Chapter 6: Ethics in Nurse Education

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INTRODUCTION

The WHO (2016) describes nurse educators' core competencies in domain 6 as: Ethical/legal principles and professionalism, including five further competencies. These competencies (Table 1) specifically define skills, attitudes and knowledge that an educator must develop during their teaching activity and is therefore used as a framework that guides the objectives of this unit

Table 1: Ethical/legal principles and professionalism.

Competency	**Learning and teaching domains**
Competency 6.1: Promote social justice and the protection of human rights in teaching and learning processes and in the health care environment.	The student* understands the ethical principles of nurse educator work and can work according to them.
Competency 6.2: Promote ethical and legal principles of integrity, academic honesty, flexibility and respect through role modelling.	The student is capable to recognize ethical dilemmas in their work in teaching health care and can find different solutions to those problems.
Competency 6.3: Participate in ongoing professional self-development and support the professional learning of colleagues.	The student can justify the solutions of the ethical problems and recognize the outcomes of different solutions.
Competency 6.4: Facilitate professionalization for learners by creating learners' self-reflection, personal goal setting and socialization within the role of the nurse.	The student can instruct and guide their students in the development in becoming ethically aware health professionals.
Competency 6.5: Maintain a professional record (curriculum vitae and/or portfolio) that demonstrates current nursing and teaching competence.	The student knows how to work ethically in challenging situations and discuss about moral courage.

World Health Organization. (2016). Nurse educator core competencies.

*Student refers to nurse educator in this course

When thinking and discussing ethic in nursing, we often refer to the clinical or research role, neglecting ethics as an aspect in the teaching role. In contrast, the WHO (2016) document, explicitly refers to ethics in domain 6, thus drawing attention to ethical and legal principles in the teaching-learning process.

Nurse educators' knowledge of the ethical principles and their country's professional codes of ethics develops educators' ethical competence and improves their feeling of ethical competence. (Salminen et al., 2013). Based on a focus of recognising different points of views and values that are inherent in a framework of respect and trust, these ethical principles and concepts apply to the educator-student relationships as well as to the nurse-patient relationship.

Further, if we consider the student-educator relationship we can apply most of the ethical principles and concepts that relates to the nurse-patient relationship, recognizing different points of view and values under the framework of respect and trust. Also, taking into account that the student-educator relationship is a relationship between an expert and a novice, students have to be able to trust educators that they will deliver an up-to-date and evidence-based education that is fit for purpose in the nursing profession (Peters, 2015).

However, there is evidence that some nursing students experience inequality (Salminen et al., 2016), injustice and unethical behaviour by their educators over the course of their nursing studies (Salminen et al., 2017). Yet, the personal and professional ethical behaviour of educators is crucial for the development of learning, personal growth, and ethical reasoning of nursing students (Koskinen et al., 2020). Therefore, it is paramount of developing educators ethical competence in their educator education and thus improving their ethical competence.

This study unit aligns ethical competencies to the educator's activity. Consequently, there is no attempt made to delve into the clinical, legal or research aspects of the profession's regulation of different countries. It is however the case that any teaching activity on ethics requires to be contextualised within country's given professional, clinical and legal context.

To illustrate the content of this study unit, we can imagine a clinical skills scenario in a skills laboratory where a patient's privacy during a nursing activity is not protected. Students are asked to identify the issue and apply ethical principles that are safeguarding this patient's care, thus recognising and applying the ethical principles of the profession, human rights and so on. At the same time, educators must be aware of and able to apply these ethical principles of the profession as well as have an awareness of human rights to be able to explain these concepts. In addition, this will also foster the reflection of educators on their own teaching.

This teaching unit provides some tools for future educators, highlighting the importance of reflection on the professional ethics for educators in the context of their country and healthcare organization.

Dimensions of ethical issues in the work of nurse educators

Ethics, as a discipline, reflects on issues of good and bad, right and wrong (Thiroux, 1990). Nursing students learn, for example, about health promotion, the nursing care of individuals, groups and population and so on. Both nursing and education are value-based human actions, requiring ethical competence. Ethical competence includes, for example, knowledge about values, ethical principles, ethical sensitiveness, the ability of sound ethical decision making, and the solving and evaluating of actions (e.g. Poikkeus et al., 2014). The goal of educators is to impart this knowledge for the good of students, patients, educational organisations and society as a whole. Consequently, educators responsibility in this area is multidimensional (Koskinen et al., 2020, Petrovic et al., 2023). The ethical responsibilities of educators are identified in ethical codes (Rosenkoetter & Milstead, 2010; AAE, 2014), the WHO competence requirements (WHO, 2016), and, more generally, in research (e.g. Salminen et al., 2016) and policies of educational institutions. It is important for educators, that these responsibilities are in line with their own values.

Ethical issues of nurse educators relating to students and their education has been examined in many studies (Bijani et al., 2019; Kim & Park, 2019; Martins, et al., 2020). The main ethical issues that were identified in relation to students (Numminen, 2010, WHO, 2016) are: justice (fairness), equality and honesty. Justice, in this context, refers to having the same goals, teaching, supervision, and requirements for all students. Equality is closely linked to justice, the main point being respect for every student as a human being, irrespective of their differences in skills and motivation, and thus not having a favourite student. This is expressed in the following principles:

- all students are equal, have the same human value
- all students have the same educational goals
- all students have the same programme (e.g. equal requirements to same learning areas)
- all students have equal opportunities to select among opportunities
- all students are evaluated based on the same criteria
- all students have equal opportunities to get support from their teacher
- all students are aware of their equal rights.

Students also have the right to honesty from educators (e.g. Klocko, 2014). Honesty consists of an honest evaluation of their work (assignments, tasks, exams etc.) and truth telling. The student has the right to know the truth, make decisions based on this knowledge and rely on the privacy being respected. Consequently, educators need to be mindful of data protection and avoid having any pre-conceptions about a student or students.

Ethical issues of nurse educators relating to educational organisation and work environment are impacted by the leadership and management of an organisation, the relationships between colleagues, and resources needed for high-quality work. Research in

this field is limited (Poikkeus et al., 2014) but it identifies nurse leaders and colleagues as a key role in providing opportunities for nurses to gain ethical competence, and ethics education as a strategy to support ethical competence. The main ethical principles that apply to educational organisations relate to the respect of educators as individual human beings, respect their needs to new knowledge and hence continuing education, as well as the right for well-being. The educators themselves, however, are also responsible collaborators with leaders in achieving these goals/ aims.

Further, collegiality between educators is an important ethical principle (e.g. Padgett, 2015). Issues in this area include the refusal to support each other, envy, withholding information, rude behaviour, speaking behind someone's back, and not showing respect for others. These behaviours are unacceptable and unbecoming for professional educators, as advised in the ethical codes of educators (AAE, 2014). It is important to stress that teachers' education needs to include ethics and needs to be reflected in any evaluative strategies of organisations.

Ethical issues relating to health care organisations can be identified in students' clinical placements, curricula and educators' opportunities to keep their knowledge updated through collaborating with professionals in practice. It is, however, not clear that the issues raised are all of an ethical nature. For example, the competence of graduating nursing students have been criticised (Numminen et al., 2014). This critique does not necessarily relate to different values, but the different emphasis in the realization of values (Numminen et al., 2014). More research is needed in order to explore the ethical issues that are experienced by students in clinical placements (Erdil & Korkmaz, 2009).

Ethical issues relating to society have to do with educators' responsibility to use their expertise in health and care for the benefit of a society. This responsibility has been emphasised, for example, in connection with the professional workforce and the sufficient competence required to meet workforce needs (e.g. Jarosinski et al., 2022, WHO, 2016). A recent study indicates the rather good professional competence of graduating nurses in several European countries (Kajander-Unkuri et al., 2021). Educators' knowledge base and skills are multidimensional, including knowledge about the good and methods to reach it, moral courage to influence, adding ethical sensitivity and competence among professionals and to support solutions for high-level care. These aspects are all important for educators as leaders of ethical discussion as they related to health care in the society.

In summary, nurse educators have an ethical responsibility to make an impact and influence the future, and moral courage to speak out for the good. This responsibility applies on a national, European and global level, and hence emphasising the importance of a systematic ethical education of educators (e.g. Monteverde, 2014).

HOW TO MAKE NURSE EDUCATORS AWARE OF ETHICS IN TEACHING: ETHICS AND MORAL COURAGE IN NURSE EDUCATORS

As was discussed in the previous sections, professional nursing ethics is very evident in the clinical and research roles of nurses and linked to clinical or research decision-making (Barlow et al., 2018; Rainer et al., 2018). As part of this ethical competence, we also have to consider the concept of moral courage (Numminen et al., 2017; Pajakoski et al., 2021). Moral courage is considered as a multidimensional and multilevel concept, but remains an ambiguous concept in the literature. In an earlier concept analysis, seven core attributes were identified: true presence, moral integrity, responsibility, honesty, advocacy, commitment and perseverance, and personal risk. (Numminen et al., 2017)

Nurses are often part of ethics and research committees, and they know the rights of the patient and the code of ethics of the profession. Nurses are aware that they have to follow the ethical code of their nursing profession when providing care to patients and families. Indeed, nursing as a moral practice needs nurses who have the courage to think and act morally in their professional practice (Numminen et al., 2017). At the curricular level in nursing education, nursing students are expected to acquire this ethical competency. Consequently, the ethical and legal concepts that regulate the profession must be addressed, considering the context of a given country, clinical cases, simulations, and theoretical assumptions. Students apply these concepts by identifying potentially conflictive situations and recognizing the ethical and moral concepts that are part of their decision-making in their profession. Moreover, when students are in their clinical placements, they may face important ethical dilemmas they must be prepared for (Albert et al., 2020).

Also, as nurse educators, it's important that we reinforce the importance of whistleblowing. Whistleblowing might be required in nursing education when a student sees poor practice or any ethical concern in the clinical practice as well as in the classroom (Jack et al., 2021). However, these are not the only areas in which nurses must be aware of the moral complexity of their activity. In their teaching role (outside the clinical environment), for example, they may face morally complex situations that make it necessary to address professional ethics and moral courage in this specific role. In all academic situations, nurse educators have an important role helping students to develop the competence and the courage to confront these dilemmas among nursing students. (Albert et al., 2020)

Within the teaching role of nurse educators, it is important to recognize that professional ethics is evident both in the teaching-learning process, as well as in educational research, teaching management and the personal links between teachers-students-community (Ramos & López., 2019). In all these areas there are circumstances and situations where ethical considerations must be taken into account or even in which ethical conflicts have to be addressed. Some of these situations may relate to the preparation of teaching materials (detecting or avoiding plagiarism), as well as assuring fairness in the students' evaluation processes, or protecting the patient when they participate in teaching activities (Lynch et al.,

2017).

How we detect possible conflicts in these situations and how we resolve them is also a necessary part of the training of future nurse educators.

DESCRIPTION OF THE STUDY UNIT "ETHICS AND NURSE EDUCATORS WORK" (ENEW)

To work on the ethics unit, a 5 ECTS unit was developed, with a duration of six weeks with these learning objectives:

- The student understands the ethical principles of nurse educator work and can work according to them.
- The student is capable of recognizing ethical dilemmas in their work in teaching health care and can find different solutions to those problems.
- The student can justify the solutions of the ethical problems and recognize the outcomes of different solutions.
- The student can instruct and guide their students in the development in becoming ethically aware health professionals.
- The student knows how to work ethically in challenging situations and discuss about moral courage.

Based on the literature, we used different methodologies to work on the ethics and moral courage in nurse educators' education.

METHODOLOGIES TO WORK ON COMPETENCE WITH EDUCATORS

To develop ethical competence in the training of future nurse educators, we must try to use methodologies that not only provide content in ethical concepts, but also help develop critical and reflective thinking, and also provide tools that can be used by educators in their own teaching activity.

The literature suggests that methodologies such as case studies, peer learning, innovative teaching and clinical simulation with special interest in debriefing are some of the methodologies are successful in teaching ethics in nurse education (Cannaerts et al., 2014; Dinkins et al., 2019; Opsahl et al., 2020)

In addition, the use of personal experiences as a facilitator is important for facilitating the understanding of complex concepts through one's own experience and self-reflection, together with the use of active methodologies that must be applied in a safe learning environment where open reflection can be given (Cannaerts et al., 2014).

Based on the literature mentioned above, this study unit has been developed to include the following methodologies:

- Case based learning (CBL)
- Innovative methodologies: reflection through the cinema
- Reflection and discussion in small groups

Case based learning (CBL): This methodology has been shown as an effective and preferable method in ethics education. It equips students with the necessary problem-solving skills (Namadi et al., 2019). The selection of cases and how to resolve them needs to follow an appropriate process that allows for a general ethical reasoning, in addition to incorporating the specific professional context, which in this case is the nursing profession. It is also important that the participants can see themselves reflected in the case and that the resolution of it considers different options thus enhancing creative thinking (Warnick & Silverman, 2011). Following a framework that guides us in the elaboration and resolution of these cases may be useful. In our case, we relied on the framework proposed by Warnick and Silverman (2011) in developing and guiding the analysis of the cases. The cases were designed to identify different actors within the teaching-learning process, to be analyzed from different cultural and institutional perspectives and to facilitate the discussion of different solutions among educators from different countries.

Innovative methodologies: Although ethical dilemmas are frequent in the day-to-day life of a nursing professional, it is often difficult for nursing students to identify situations that are potentially ethical dilemmas since they often lack knowledge of the professional role, lack clinical experience as well as often lack the autonomy to make decisions in the clinical environment among others (Blasco et al., 2015). For this reason, it is important to work on ethical dilemmas through methodologies that facilitate and stimulate reflection, which are based on situations that students can understand and analyse. Several studies have shown that education through films are helpful in improving teaching skills and stimulates the learner's reflection (Blasco et al., 2015; Jerrentrup et al., 2018; Park & Cho, 2021). Films could be considered as "the audio-visual version of storytelling […] The film experiences act like emotional memories for developing attitudes and keeping them as reflective reference in the daily activities and events" (Blasco et al., 2015). In this study unit, we incorporate the methodology of reflection through film to offer nurse educators the possibility of experiencing the possibilities of this methodology.

Reflection and discussion in small groups: This methodology is widely used in ethics education (Cannaerts et al., 2014). For this methodology to be effective, it is key to draw on topics on which students have knowledge and hence are able to develop some strategies to form an opinion and be able to discuss in a fluid and productive way. Another key aspect is the time that is dedicated to reflection and discussion. Sufficient time is essential to facilitate a good discussion of the topic. At the same time, the time consideration must be mindful that too much time may result in participants losing interest in the discussion on the topic. The last key point to keep in mind is related to creating a safe environment for these group discussions. This requires creating a climate of trust among participants, where everyone has the opportunity to express their opinions without any judgements or consequences for their expressed views (Andersson et al., 2022).

STUDENTS' EXPERIENCES AND PERCEPTIONS

In conclusion of this chapter, we would like to present some student voices after they have participating in this study unit.

On a general level, the participants expressed the views that the methodologies used during this study unit and the content of it, inspired them and helped them to enrich their teaching role.

> "Later, as a teacher, I introduced the students – future nurses to the moral, ethical requirements, rules, principles to be followed in the performance of daily nursing activities. Being "here" today in 2022 (I have a satisfactory smile on my face) I am at the end of graduating from the educational module "ethics and nurse educators work" within the Empowering the nurse educators in the changing world (ENEC) – study program. My role as a teacher enriched by the fact that the current, dynamically evolving time demands in the educational process to not only use the classical teaching methods, but also less traditional ones. Those that can inspire and make students to work independently, in finding appropriate solutions to ethical issues and dilemmas in diligence. "

> "Subsequently, as a nurse in clinical practice, I knew about the code of ethics, I respected the four main principles in the provision of nursing care and somehow intuitively solved ethical issues, dilemmas."

Some participants developed more awareness of the ethical competence required of an educator and concluded that addressing ethical dilemmas that go beyond the clinical setting has given them a different perspective of how to teach ethics in nursing.

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Chapter 7: Evolving Nurse Education According to Future Needs

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INTRODUCTION

In designing a curriculum for nurse education, it is important to be able to integrate knowledge about critical issues and important topics into nursing education as well as utilising pedagogically relevant methods to deliver the education. Nurse educators when educating future nurses or other healthcare professionals should be able to respond to the changing needs in the healthcare system. Nurse educators should have competencies in management, leadership, and advocacy along with the skills necessary for designing, implementing, evaluating the management of curricula. Furthermore, subject competence as well as pedagogical competence remain important, despite new demands on these competences as a consequence of societal and health care changes. Various measures (for example: The Health and Social Care Educator's Competence – HeSoEduCo; Mikkonen et al., 2020) may be used in self-evaluation by nurse educators to evaluate their competence.

In this Chapter we focus on the content of critical issues in future nursing education both from the perspective of the pedagogy and the future health service requirements, and the competencies required to adapt to the potential changes that future may bring.

EDUCATORS' ROLE AND CAPACITY TO ADAPT TO FUTURE CHALLENGES IN NURSING EDUCATION

An important basis for changing and improving nursing in the 21st century is for high quality and effective education (World Health Organization [WHO], 2016, 2021). There have been constant changes and developments in nursing and midwifery education and also, other health care professionals' education. The quality of education relies largely on well-prepared and competent nurse educators (WHO, 2021). It is necessary that the professional education of nurses is able to constantly keep up with new issues and trends. In education, it is necessary to address new developments systematically: harmonise competencies with the needs of patients and the population; promote team cooperation; gender equality in

professional status; more community-based and primary care; and interdisciplinary cooperation and communication (Frenk et al., 2010). Nursing curriculum must be flexible, evidence-based and synergise with progress in providing health care (WHO, 2021).

In the face of a rapidly changing social environment and increasing demand for healthcare services, academic nurse educators should have an expert-level of competencies to continuously improve the level of nursing education (Satoh et al., 2020). Nurse educators should be able to respond promptly to and reform curricula reflecting the solutions for current and anticipated issues and trends in providing health care (WHO, 2016).

Changes in future nurse education may be perceived as four basic pillars (1) reconciling the shortage of nurses with expertise in public health and health equity, (2) creating policies that include and promote the tenets of diversity, antiracism, and well-being, (3) designing curricular resources and activities that address contemporary issues, and (4) creating and supporting an ethos that invites, retains, and graduates diverse students and facilitates a sense of belonging, our future nursing graduates will be prepared to advance health equity for all (Sumpter et al., 2022).

Inadequate nurse educator training is one of the topics discussed as a challenge facing nurse education. New nurse educators enter the academic environment with far less formal preparation for teaching, and the transition from nurse to nurse educator is considered difficult (WHO, 2021; Kenner, 2018; Schoening, 2013). Nurse educator transition is a theoretical model that describes the process of role transition from nurse to nurse educator. The model recommends integrating formal pedagogical education in to nurse educator education and developing evidence-based orientation and mentoring programmes for novice nurse educators (Schoening, 2013).

Managing complex changes in nurse education, leader nurse educators may use the so-called Kotter's principles of change: (a) including selecting leaders whilst engaging as many members as possible within the organization's effort, (b) ensuring the organization is emotionally compelled to want change, (c) demonstrating inspirational and motivational leadership, and (d) ensuring the network for change and organizational hierarchies work together with a seamless transfer of information during the process (Kotter, 2012).

FUTURE ISSUES IN NURSING EDUCATION

In designing curriculum for nurse education, it is important to be able to implement new knowledge to address future challenges (Figure 1).

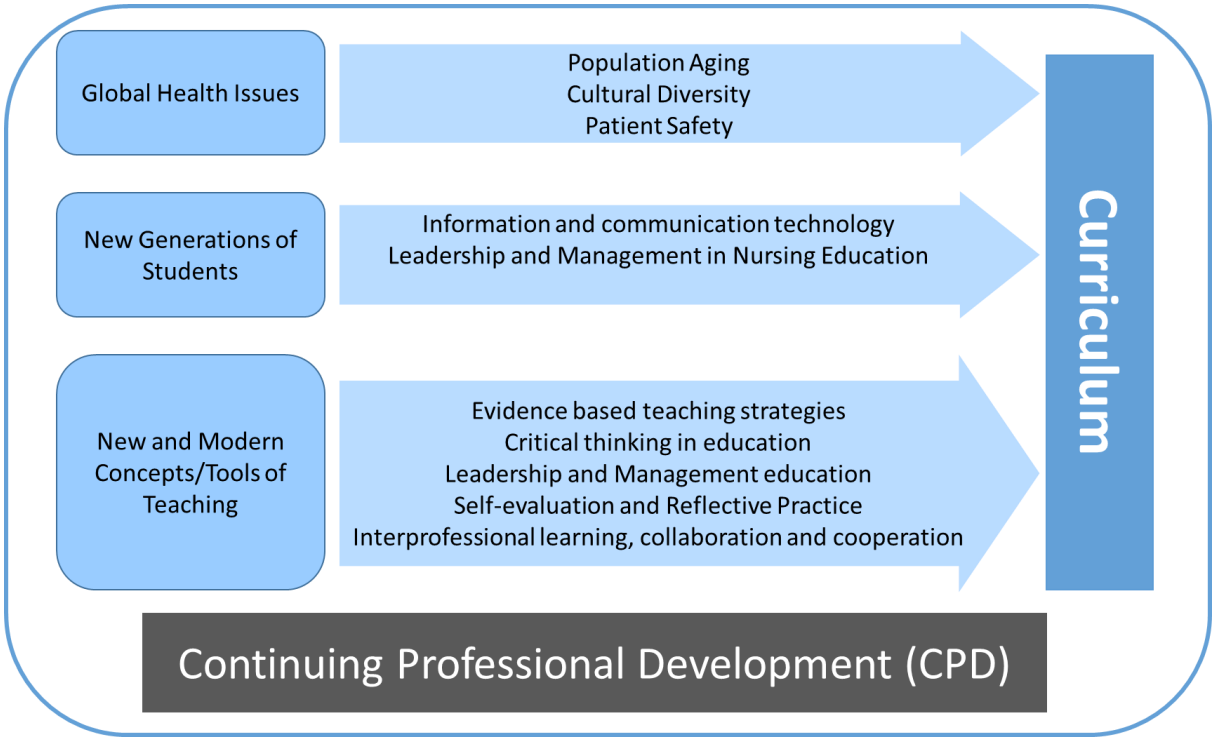

Figure 1. Future issues in curriculum design

Global health issues as important topics in future nursing education

Global health issues, management and leadership in nursing and nursing education, digitalisation of society, nursing, and education along with preparing for generations Y, Z and Alpha, are some of the challenging issues that are linked to future nurse education. Furthermore, patient safety, cultural diversity and shift in population demographics are challenging issues that will need to be a focus in the future. Nurse educators also need more tools, to be able to tackle the changing demands of nursing and nursing education.

In respect of the huge demographic changes and multicultural social revolution happening around the world, the trends in nurse education must adapt to new, global challenges resulting from the changing environmental, population, geographic and ethnic conditions (Tsai, 2020). Global health challenges and especially sustainable education are addressed separately in the chapter 5.

Population aging and the gerontology

The exponential increase in the proportion of the older population and its demands on health care play a crucial role in the need for nurse education so that care can be provided to this target group.

Better comprehension of the diversity of the ageing process and the context that has affected older people might motivate nurses to implement a holistic, respectful approach. It

is necessary to break the stereotypes about ageing and encourage improved integration of older people into social and health care facilities (Dahlke & Hunter, 2022).

Trends noted include planning to offer and retaining required stand-alone geriatric/gerontology courses. These results may be useful to nurse educators and researchers who are grappling with nursing education issues concerning geriatric and gerontology preparation. Of importance is that nursing curricula reflect nursing faculty's commitment to addressing the health care needs of the increasing number of elderly persons in society (Gilje & Moore, 2007).

Cultural diversity

With increasing migration and globalisation in the world, it is necessary for educational institutions and the nursing profession to focus their attention on education to improve the students' knowledge when providing nursing care for patients and communities with a variety of cultural backgrounds (Bednarz et al., 2010).

Cultural competence is a continuous process of cultural awareness, knowledge, interaction, and sensitivity among caregivers. It is the continuous acquisition of skills, practices, and attitudes that enables nurses to transform interventions into positive health outcomes (Nelson et al., 2016).

Nurse educators have a privileged position to assist students in the development of cultural competence through various teaching methods. To help students' form cultural competence, students must appreciate cultural diversity of patients through the education process. Diverse groups of patients (related to gender, race, ethnicity, culture, and age) need culturally competent nurses (Campinha-Bacote, 2002).

Culturally competent nursing education is the process of adapting teaching and learning techniques in a way that values, empowers, and accommodates nursing student diversity (Bednarz et al., 2010). It begins with an assessment of the learner's needs and includes student interactions, in-class and online considerations, curricula and policy development. Nurse educators need to be committed to lifelong learning (Smith, 2013). The purpose of the evaluation of cultural diversity is to identify attitudes and perspectives regarding cultural sensitivity in order to help people become aware of and understand their own prejudices and biases, and to help people understand the potential consequences of own approach to diversity in the workplace and education.

Integration of teaching methods and activities in the education process (Mapping My Community, Rituals and Traditions, Interview and Investigate, The D.I.V.E. Method, Non-Verbal Communication, Conflict Styles) facilitates more inclusive, acceptable intercultural nurse education. Competent learning environments translate into a more successful fulfilment of the educator's promise to future generations of nurses who perform skilled nursing care within a diverse world (Smith, 2018).

Patient safety

Patient Safety is a growing global phenomenon. Do No Harm is a basic ethical principle that underpins health care delivery. Patient safety education for the healthcare workforce has emerged as an important tool in safeguarding patient welfare (WHO, 2011).

Early introduction of patient safety principles to nursing students has a significant influence on the development and formation of their long-term knowledge, skills, and behaviour in the scope of patient safety (Patient Safety and Quality Care Group of European Commission, 2014).

Internationally, there are two frameworks that integrate the plan and development of education on patient safety in curricula in the field of nursing. They include the WHO Multi-Professional Patient Safety Curriculum Guide, which was published in 2011, and the Quality and Safety Nurse Education Framework; they must be adapted to fit the unique cultural and educational contexts of local academic environments (WHO, 2011; Sherwood & Barnsteiner, 2012).

The important steps to improve skills, knowledge, and attitudes of future nurses on patient safety include the development of accreditation of nursing baccalaureate programme at the national levels (Browne et al., 2009). Defining the topics and skills related to the integration of attributes (Knowledge, Skills and Attitudes) for each competence is considered to be the key direction in nurse education based on patient safety competence.

One of the key strategies in nurse education is to enable transformation through teaching methods. Students are more involved in the learning process in accordance with the Inquiry-Based Learning. It is the learning process in which students have better control over the selection of a goal, extent or topic of their learning while acquiring interpersonal, educational and communication skills, and team and professional work (Kong et al., 2014).

There is the need for enough competent educators familiar with modern conceptions related to education on patient safety. The basic ambition of educational interventions is to condition, make a change and solve problems adequately (Mansour, 2013). Understanding patients' needs in the unique educational and cultural contexts of students is crucial for providing high-quality education on patient safety (Aggarwal et al., 2010).

Undergraduate nursing education represents an important venue for providing future generations of nurses with the patient safety skills fit for the 21st century. Efforts to introduce patient safety in nursing education are both necessary and timely, and should accommodate students' unique needs and cultural context (Mansour et al., 2018).

New generation of students (including gen Y, Z and Alpha and cultural diversity)

The new generations of students need an innovative, up to date approaches. Among other things, the overall population of students of nursing is becoming more and more diverse regarding cultural, social or value differences. It is also necessary to consider the generation gap between students and educators as a factor influencing the educational process. Promoting interaction between educators and students is essential and makes the process more effective and better (Koohestani et al., 2018).

Information and communication technology

Contemporary society places high demands on abilities of individuals to work effectively with new information and information resources. Development of science and technology, the fast pace in development of new technologies penetrates all areas and is becoming a part of our everyday life. Based on these dynamic changes in society, the necessity of fundamental change in the education system is crucial (Strandell-Laine et al., 2018).

The challenge for future education is the use of *modern information technology*. Information and communication technology increasingly influence the provision of education and is attractive to modern students who have been confronted with the use of technology since an early age (Duncan et al., 2013). The virtual learning environment may serve as a communication base for students, teachers, and nurse supervisors (Salminen et al., 2010).

One of the innovation methods is *mobile learning* that allows learning to take place independent of geographic barriers and time constraints. It guarantees that students have access to learning materials in multiple contexts with various cultural and environmental stimuli necessary to understand the educational content. Furthermore, it facilitates social interaction between students and teachers through mobile applications (Nielsen et al., 2020).

Another reform in nursing education that brings a higher level of competency and knowledge in nursing practice by nurse educators who are able to induct transformational leadership into the profession through a conception of *simulation* and other educational strategies (Fawaz et al., 2018).

Implementation of simulation methods in the teaching process is an important teaching strategy for improving the quality of education of nurses. The use of simulation methods in teaching is attractive for students. It creates a space to apply theoretical knowledge and practical skills, develops students' critical thinking and at the same time gives space for immediate feedback and teacher's response. The simulation of real clinical cases improves mutual communication and enables practicing cooperation in a multidisciplinary team. Repeated opportunities to practise solving a clinical situation in a safe environment, creates space for learning and increases student confidence.

The *virtual reality*, designed as structured learning experiences, can replicate high-risk clinical experiences for nursing students to practice skills repeatedly without putting patients at risk (Nielsen et al., 2020).

In the present, most students belong to the group of people referred to as millennials, Net Generation, or Generation Y. This generation of students perceives the use of *social networks* in education as a positive element, as they are a common part of their lives (Abe & Jordan, 2013). Nurse educators should take on a new challenge and use social media tools to streamline the education of students of healthcare professions, and also improve the patient opportunities in their care (Salminen et al., 2010). In education, social media offers teachers an effective way for communication, cooperation, and connection with students in real time. Interesting models in the education of nurses are social media platforms such as blogs, Twitter, Instagram, Facebook, YouTube, Reddit, Khan Academy, Pantoon, Canva, Mentimeter, Quizzis, Speaker, Flipgrit or games where they need to provide healthcare and improve their critical reflection, decision-making skills, dialogue, and self-efficacy.

Nurse educators need more training on and experiences with the use of social media (Tuominen et al., 2014). Also, nurse educators should know how to evaluate the pedagogical usability of digital learning material, taking ethical principles into account (Duncan et al., 2013). International collaboration is essential for the digital transformation of nursing education.

The advances of information technology, such as mobile apps, offer attractive possibilities for designing more effective learning materials in multimedia environments that may encourage individualised learning and enable efficiency gains for learning achievement. The mobile apps provide an interactive and individualised opportunity to practise instructional procedures (Strandell-Laine et al., 2018).

Leadership and management in nursing education

The development of leadership is a key part of nurse education. Nursing leadership is identified by The International Council of Nurses [ICN] (2014) as one of the five core values guiding nursing activities. The Clinical Leadership Competency Framework (CLCF) includes five core domains that could improve nursing management: "demonstrating personal qualities", "working with others", "managing services", "improving services", and "setting direction". This framework is a useful tool for quality improvement within health care (National Health Service [NHS], 2011).

There has been, and still is, a problem with understanding and awareness of the meaning of leadership in nurses in practice to improve the quality of care provided and to facilitate effective care (Yoder-Wise, 2012). The need to integrate leadership in to nurse education at the bachelor level has been necessitated by several important factors, such as rapid changes in the healthcare system, staffing shortage, increased requirements for quality of provided

health care (Miles & Scott, 2019), as well as new diseases and technological progress (Démeh & Rosengren, 2015).

The (Changing) Faces of Nursing Leadership and its importance is described by Charalambous (2023) also in regard of the changing character of the health and treatment care provided often with many innovations. Nurses need leadership competency as they are often the ones who decide about introducing new innovations or propose new processes in patient care.

Nursing work is complex because it needs to coordinate requirements from many parties including colleagues, managers, and patients and their relatives. Clinical leadership is a valuable tool to overcome a gap between theory and practise in nursing. Leadership skills in care management clarify and simplify nursing activities and facilitate the transition from student nurse to staff nurse (Démeh & Rosengren, 2015).

Dynamic challenges of health care require understanding self-efficacy of leaders in nursing; furthermore, their academic training in leadership and further development in leadership are important. Nurses are encouraged to be leaders in proposing implementations and evaluating the healthcare system. Therefore, nurses must have strong leadership skills across the spectrum of nursing from clinical care at the bedside to health policy (Moran et al., 2021).

Early involvement of nursing students in leadership may inspire them to actively participate in leading later in their later careers and provides invaluable nursing perspective to healthcare organisations (Sumpter et al., 2022).

NEW AND MODERN CONCEPTS OF TEACHING – TOOLS FOR FUTURE EDUCATORS

Changing the approaches of traditional education as well as implementing new and modern concepts for teaching is key for the education of nurses (Strandell-Laine et al., 2018).

Nursing education is a field that is constantly changing and undergoing transformation, from conventional classrooms to web-based clinical teaching (Fawaz et al., 2018).

Transformative learning is a proposed outcome of educational reforms. It is learning through a three-level transition from informative to formative to transformative learning. Informative learning involves acquiring knowledge and skills (professional scope). Formative learning involves socialisation (professionalism). Transformative learning involves the development of leadership. Effective learning builds each level on the previous one. The learning outcomes are three basic transitions: 1) from memorising facts to searching, analysing and synthesising information for decision making; 2) from seeking professional credit to achieving key competencies for effective team work in healthcare systems; and 3) from uncritical adoption of educational models to the creativity of adapting global sources to address local priorities (Frenk et al., 2010).

Evidence-based teaching strategies and critical thinking

Another area in nurse education that requires change is the implementation of evidence-based teaching strategies. It is very important to apply this concept to nurse education properly, as stated in chapter three of this book. The main aim is to incorporate critical thinking and the concept of evidence-based teaching into the teaching of future nurses; empowering the future nurses to make decisions based on the best and most reliable evidence at that time.

Teaching research and conducting discussions about the credibility of evidence supported by research is essential to gain the ability to implement evidence-based nursing in practice. The support of the educators is particularly crucial at this point. Nurse educators need to be competent in practical evidence acquiring and appraising and they need to value the evidence-based teaching and practice. Furthermore, they need to be aware of their potential impact on knowledge acquisition, such as critical thinking, decision making, and competencies that are essential for modern nursing students (Breytenbach et al., 2017).

Patients' role in education

Patient involvement in the partnership in decision making about their own care is crucial in providing high-quality health services that respond to patients' individual needs and possibilities (Salminen et al., 2010).

It is also important to involve patients in nurse education because patient as a mediator of experience adds a new dimension to the understanding how students learn in the clinical setting. Patients have a clear, but different views of the quality of care provided (Stockhausen, 2009; Debyser et al., 2020).

Relationships with patients as experts on their own disease are considered valuable and crucial in the development of skills that all health professionals, including nursing students, need in their work with patients. They provide students with the opportunity to experience clinical reasoning and practise clinical skills in interaction with patients.

Suikkala et al. (2018) state that the relationships between students and patients are important to meet patients' health needs, and thus to increase the quality of care for patients.

The studies define three types of relationships between students and patients: the mechanistic relationship focused on student's educational needs; the authoritative relationship focused on what the student assumes is in the best interest of the patient; and the facilitative relationship focused on the common good of both the student and the patient. Students perceived their relationships with patients mostly as facilitative and authoritative rather than mechanistic; on the other hand, the patients' evaluation suggested the authoritative relationship as the most frequent and the facilitative relationship as the least frequent (Suikkala et al., 2018).

The clinical educational settings that support facilitative relationships through a dialogue between students and patients are very important and in accordance with the evidence-based person-centred approach (Håkansson-Eklund et al., 2019; Jylhä et al., 2017).

The patient-centred orientation of education should be the basis of the content of education. It is necessary to move from the traditional and paternalistic ways of providing care to active and collaborative patient involvement in education. The collaborative patient involvement in education will support efforts to equip nursing students so that they provide a truly close and empathic relationship-based care (Suikkala et al., 2018; Scammel et al., 2016; Manninen et al., 2014; Towle at al., 2010). Furthermore, it facilitates the integration of students' academic education in real settings, and thus increases the quality of clinical education (Suikkala et al., 2018).

In student education and evaluation, it is important to accept the value of patients' opinions in relation to their perceptions of nursing care provided by students, as well as students' competences, such as compassion and communication skills. Through patient involvement in education, students become more sensitive mainly to the needs of the vulnerable groups. Students state increased self-confidence and decreased anxiety when they learn clinical skills from patients – teachers because they get immediate feedback in a non-threatening environment (Towle et al., 2010; Tew et al., 2012).

The focus of education on the relationship between students and patients provides patients with many opportunities to enhance their own autonomy and expertise in self-care. Patients may enrich students' clinical training and evaluation, provide useful information to improve clinical training, and thus form students' self-efficacy and competence in providing holistic nursing care (Dijk et al., 2020, Suikkala et al., 2018).

Nurse educators play a key role in promoting a dialogue between patients and students. There is a need for the development and application of new ways of active patient involvement in education, as well as in spreading examples of good practice that inspire students to patient-centred learning (Gibbons et al., 2002; Scammel et al., 2016).

There has been an agreement that patients' knowledge should be actively used in clinical training of nursing students (Suikkala et al., 2018).

Patients' unique perceptions of care provided may contribute to precise evaluation of students' performance in practice (Gibbons et al., 2002; Scammel et al., 2016).

Patients' participation in nurse education may be the next step in the development towards individual-centred health care and education (Debyser, 2020).

Leadership and management programme/education

Leadership in nursing is a process for positive impact through nurses' engaged decision making to support nurses, patients, and the healthcare environment (Bleich, 2011). This definition has influenced the conceptualisation of the theoretical leadership development

model in nursing. Miles & Scott (2019) introduce an integrated leadership development model for nursing students as a basic skill of nursing practice. They stated nine leadership skills that are crucial for the leadership development model in nurses. The leadership development model in nursing is a concept map for leadership development in nursing students to support students' ability to internalise leadership and to support applying leadership skills in new nurses at the start of their nursing practice (Miles & Scott, 2019). The leadership development model offers a schematic interpretation of leadership in nursing and the authors recommend using it when creating a curriculum in leadership education in nurses.

In leadership education it is important to focus also on acquiring information, perceiving self as a leader, and the need to act (Komives et al., 2013). They are focus areas of knowledge, action and being that must be included in leadership education developed by Snook et al. (2012). It is a complex process of supporting vertical development that supports the learner's inner feeling of being able to lead (being), define what leadership is (knowing), and how to lead and influence in multiple situation and contexts (doing and contextual intelligence).

Clinical educators should seek ways and innovative strategies to support leadership skills in nursing students. In the literature, various pedagogic strategies are encouraged, such as application of the Active Learning Model (Middleton, 2013), service learning (Foli et al., 2014), clinical integration (Pepin et al., 2011), simulation experiences (Pollard & Wild, 2014), and the use of the social justice framework (Waite & Brooks, 2014).

According to Démeh & Rosengren, (2015) the education process could be described as a transition to become a nurse which begins with raising awareness, followed by a role model that helps bridge the students' gaps in knowledge about nursing activities.

One approach that has been proposed as a way of developing leadership skills among nursing students involves the use of dedicated education units (DEUs) (Galuska, 2015). Dedicated education units in the context of health education appear to be a feasible way of enhancing perceived leadership competence among nursing students. Satisfaction with this innovative strategy was high among all those involved, and the approach should be transferable to other settings (De Juan Pardo et al., 2022).

Combining theoretical and practical leadership in a continuous leadership development programme through the students learning experience and a visualised representation of leadership through role models, examples and theory may also be supportive (Ha & Pepin, 2018). Educators should support positive and inclusive leadership role modelling, while encouraging challenging of negative authoritarian examples and negative cultures (James, Watkins & Carrier, 2022).

Self-evaluation and reflective practices

The empowerment of students via metacognitive and self-evaluative practices also supports the critical theory pedagogy. Self-knowledge, self-evaluation and applicability of knowledge are constructs of the curricular theory of metacognition (Worrell, 1990).

The use of self-evaluation practices strengthens students' ability to think critically about their learning (Fonteyn & Cahill, 1998).

The ability to use self-evaluation and reflective practices is an important competency in nurse education. There is a demand for self-evaluating and autonomous students in the field of nursing, as nurses should be able to perceive situations from different points of view, and transform their past, present and future knowledge into effective interventions in the field of nursing care. Therefore, designing a curriculum in nursing should involve critically reflective curriculum and not the one containing subject-based learning and behaviouristic paradigms (Nilsson & Silen, 2010).

In the metacognitive approach, asking a question or a verbal stimulus in nursing education improves students' self-evaluation in the area of understanding and improves decision-making skills (Fiorella, Vogel-Walcutt & Fiore, 2012). In general, this approach has an impact on the provision of quality care to patients.

Nurse educators need to educate nursing students on nursing skills and knowledge; however, they also need to teach them and encourage the ability to use self-evaluation and reflection (Josephsen, 2014).

Writing a *reflective learning diary* is an educational activity that enhances critical self-reflection and self-awareness, and develops experiential learning skills. The experiential learning theory defines learning as the creation of knowledge through the transformation of experiences. Experiences are the foundation for learning, but learning cannot occur without reflection (Kolb, 1984). A reflective learning diary is an educational strategy to support meaningful learning (Mason & Boscolo, 2000; Karaca et al., 2016).

The main purpose of reflective diaries use is to reflect the dimensions of analysis, definition, and evaluation in regard to the learning experiences and academic achievements of individuals (Stiggins, 2006).

Using this strategy, students take notes about the educational process, and thus their ideas become clearer. Furthermore, students may describe events, experiences and emotions from the classes and describe what they learnt in the class, using their own words (Tynjälä, 1998). In the learning process students may also think about their learning goals and improve their critical thinking (Rivard & Straw, 2000).

Interprofessional learning, collaboration and cooperation

Interprofessional collaboration is defined as a team-focused approach to healthcare delivery that occurs when professionals work and communicate in intentional ways that focus on providing high-quality patient care (World Health Organization [WHO], 2010).

Purposeful communication and cooperation between experts improve the health care provided to patients, improves access to and coordination of care, and reduces the occurrence of errors (Lutfiyya et al., 2019). Therefore, it is important for healthcare providers, including nurses, to learn team cooperation and communication skills during their education (Berghout, 2021).

The IPEC (Interprofessional Education Collaborative) core competencies (2016) include a) the development of respectful attitudes towards all contributors of healthcare, b) an acknowledgment that all team members share common values and ethics, c) a focus on interprofessional teamwork and communication skills, and d) an awareness of the various roles and responsibilities of each team member (IPEC, 2016). The basis of education is the training of effective communication strategies and conflict resolution, promotion of team cooperation, and understanding the clarity of roles of each team member (Caronia & Sagliette, 2018).

The nurse's position as a leader is an integral part with a high level of responsibility for the quality of health care provided and patient safety through interprofessional collaboration. The general goal of interprofessional collaboration is to improve collaboration in the team with positive support of care for patients and to achieve positive outcomes (Au, 2023).

In the development of interprofessional collaboration, a lot of emphasis is placed on improving training in this competence, especially in collaboration with physicians (Stucky et al., 2022).

Nurse educators must be sufficiently trained to teach interprofessional collaboration (IPC) to future nurses (Berghout, 2021). Studies report that IPE curricula, courses, and simulation experiences encourage interdisciplinary collaboration and teamwork (Chew et al., 2019).

Collaborative learning is defined as a set of teaching methods intended for students to achieve the learning goal together (Slavin, 1987). Students themselves are responsible for the management and outcome of education (Bruffee, 1984). Collaborative learning brings cognitive benefits and improves social skills necessary for future professional work (Scager et al., 2016). Most previous studies have supported a positive effect of collaborative learning among nursing students (Zhang & Cui, 2018).

The collaborative learning approach also eased the transition from the classroom to the clinical learning environment and enhanced patient outcomes (Ruth-Sahd, 2011).

CONTINUING PROFESSIONAL DEVELOPMENT FOR EDUCATORS

The needs of continuing education and development refer to the requirements for the continuing professional development of nurse educators as required by regulatory authorities. They also refer to the nurses' internal motivation for the continuing professional development (Zlatanovic, 2019).

Results of an integrative review (Smith et al., 2023) show, that nurse educators have multiple roles which have specific and multiple personal and institutional needs and that these are related to the needs of nurse educators' development (Figure 3).

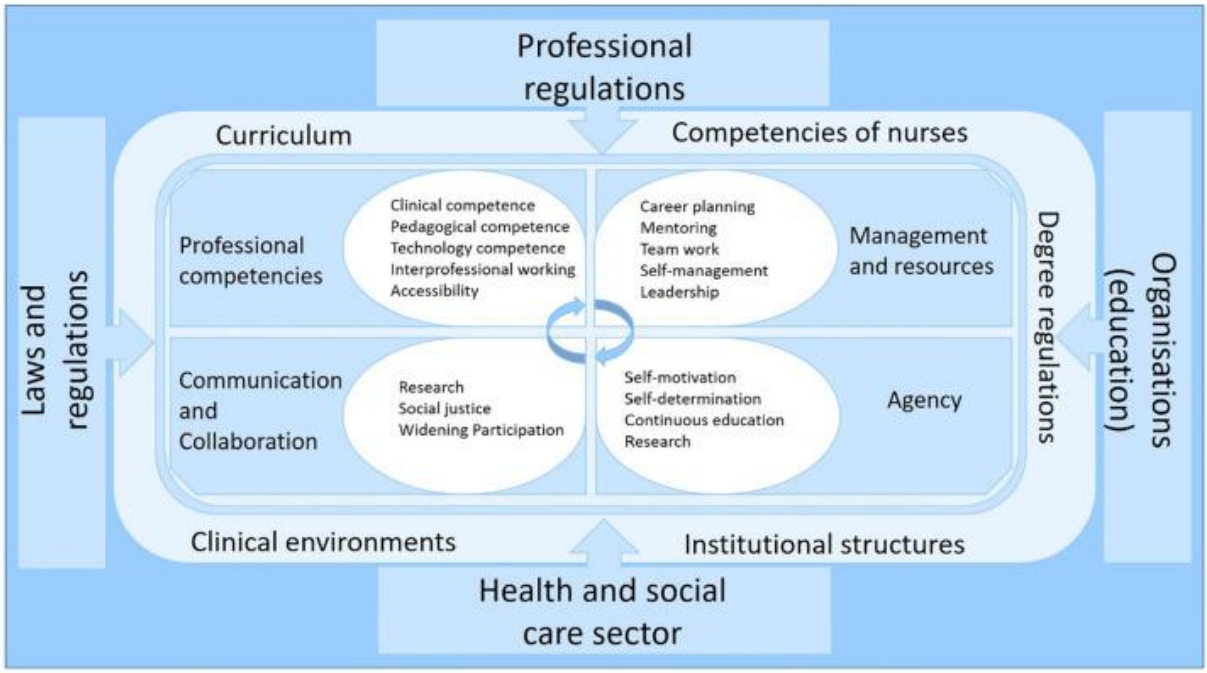

Figure 3. Model of review analysis findings and contextual relationships for the continuing development needs of nurse educators (Smith et al., 2023.)

CPD in nursing is defined as a lifelong process of active participation of nurses in educational activities that help develop and maintain their own continuous competence, improve their own professional experience, and support achievement of their personal career goals (Pool et al., 2015). It is an integral part of developing career resilience, one of the key attributes that can enable nurses to respond to and influence their constantly changing work environment with the potential outcome of increased job satisfaction and commitment to the profession (Waddell, 2015).

Continuing professional development needs are heterogeneous among nurse educators, nevertheless, they have some common features among teams as a whole and among different countries. Mentoring is a way of coordinating and creating a structure for nurse educators to deal with and navigate certain situations, especially in the dynamic and changing environment of health education (Smith et al., 2023).

In addition to small-group simulations, large-group simulations (Saaranen et al., 2020) have also been developed in order to make teaching, including continuous learning, also more cost-effective. Research-based simulation of a large-group simulation, even online, increases students' and professionals' understanding of interprofessional collaboration (Saaranen et al., 2020, Silen-Lipponen & Saaranen, 2021).

The development of an international framework of continuous professional development for nurse educators, independent of the formal requirements of individual countries, aimed at external verification of the individual needs of nurse educators, is required (Smith et al., 2023).

Adaptation of nurse educators to future challenges

The constant increase in health issues at the local and national levels, and the rapid increase of nursing knowledge of evidence-based practice into the curriculum requires the ability of nurse educators to be reflective of these changes. Nurse educators cannot foresee the future, but they can be on the cutting edge of nursing and pedagogical issues. Aforementioned evidence-based teaching is core to the future orientation. Furthermore, nurse educators need to be prepared to be flexible and agile in forming the education according to the pedagogical needs of the new student generations and changing requirements for education and content needs of the nursing field (Flaubert et al., 2021).

In the designed study programme ***Empowering the nurse educators in the changing world***, one of the study units is: Issues in future nurse education (5 ECTS, 7 weeks). The main purpose of the study unit is to encourage faculty engagement in the education of nurses in continuous re-design of curricula.

The study unit is for nurse educators to improve understanding of management, leadership and advocacy competencies. Foreseeable issues in nursing, such as changes in population demographics and changes in student population demographics, coupled with understanding of pedagogical issues, such as inter-professional and interdisciplinary collaboration need to be addressed. In addition, the role of patients in both nursing and nursing education in additional to the nurse educators own role development, continuous professional development (CPD) and reflective practices are also highly important.

To further the skills of management and leadership, the objective is to gain better skills in self-evaluation and learn reflective practice skills. In addition, we aim to enhance the learners' interdisciplinary and interpersonal collaboration and communication skills. One of the main targets is to increase nurse educators understanding and competence about future health issues and adaptation of those issues in their teaching and nurse education curricula. In addition, this study unit provides the learners with understanding of the effect of the education system and health care organization system to nursing education.

The content of the study unit is designed to prepare future nurse educators for the foreseeable issues of future nursing education and help them adapt more quickly to the unforeseeable changes. In the study unit, a method of team-based learning was utilised, to

deepen the learning experience of the students. Team-based learning was selected for the studies in Issues in Future Nurse Education (IFNE), because both language proficiency and cultural acceptance can be increased with Team-based learning (Randal et al., 2020). Furthermore, international collaboration has positive impact on both subject learning and collaboration skills for nurse educators (Salminen et al., 2016).

Team-based learning consists of six phases (Burgess et al., 2020) and consists of four crucial components (Michaelsen & Sweet, 2008). The phases of team-based learning are: Phase 1. Pre class preparations: In the IFNE study unit, the pre-class preparations consisted of an introductory lecture, and six country specific video lectures or video panels the students could follow at their own pace. In addition to these, there were six country specific webinars about the topics of the video lectures and panels to further clarify and deepen the understanding of the issues.

Phase 2 and 3. Individual and group readiness assurance test: In IFNE, instead of tests, due to the breadth and depth of the subject, a reflective learning diary was utilised (during the 1st week before the start of the assignment, during week 3 and during week 6). In addition, the groups would present their weekly progress of their project plan to the instructors and the other teams.

Phase 4. Immediate feedback and clarification: Students of IFNE received feedback on their learning diary in written form. In addition, each session started with a larger group session with clarification of last weeks issue and introduction to the following weeks issue. Each session also included guidance for each individual team, as they were divided into break-out rooms.

Phase 5. Problem solving activities: During IFNE the students created a mock research plan about a selected future issue. The task was divided into 4 sessions, each week a new elment of the reserch process was introduced to the teams.

Phase 6. Closing: Each session ended with a joint summary of the day's task. In addition a final seminar was arranged, where the students were able to present their team's work in the form of an oral and visual presentation. Students were recievd and gave immediate peer-feedback. All students had individually reflected on their own learning with the learning diaries and they had received written feedback on their diaries (Figure 2).

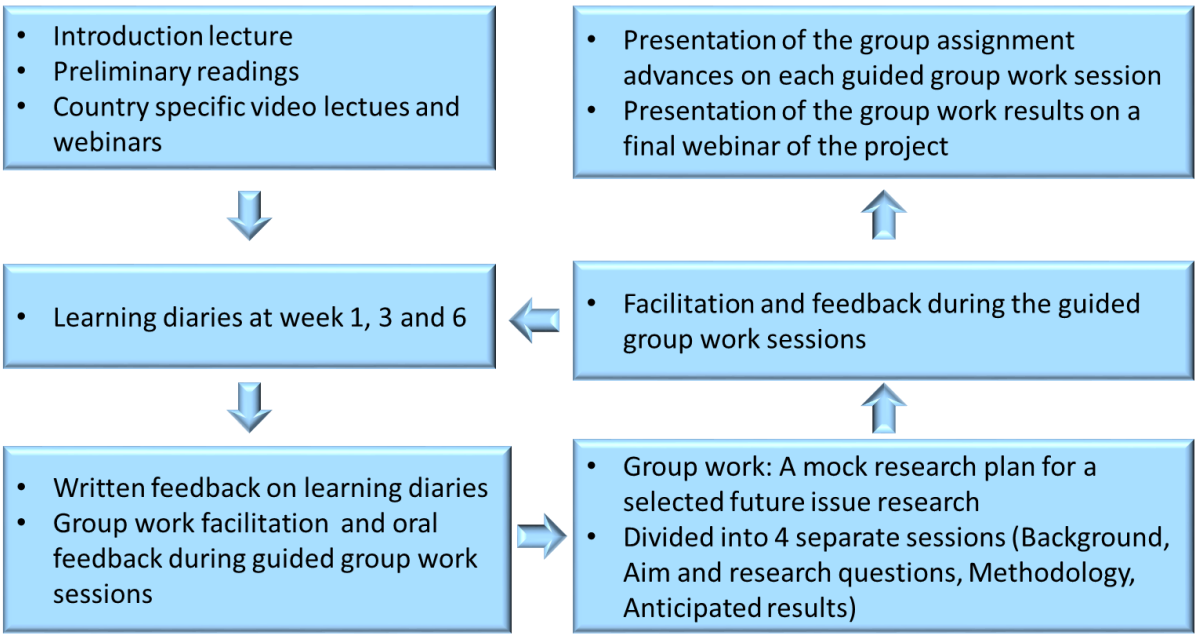

Figure 2. The phases of the team-based learning on IFNE (Elonen et al., 2022)

The four essential elements of the team-based learning are: groups, accountability, feedback and assignment design. In our study unit, the group formation was moderated and facilitated by an instructor. Diversity of the group is essential to gain best effect out of team-based learning (Michaelsen & Sweet, 2008). In our study unit, students were allowed to select a group that had the topic they most felt engaged with. This leads to experienced and novice educators sharing their experiences and competence with each other. Students were also required to assure, that group consisted of minimum three different nationalities, to gain the international perspective. The groups would remain the same throughout the study unit.

The students were held accountable for the quality of their work, they were assessed during each of the webinars, and with the learning diaries. They were all required to participate with both individual assignments (learning diaries) and group assignments (the mock research plan). The students were responsible of their own and their group learning, which they could reflect upon in their learning diaries.

Feedback supports both learning and retention; hence it needs to be accurate, frequent, and timely (Michaelsen & Sweet, 2008). The students received immediate feedback during the webinars, and they received written feedback about their learning diaries within a couple weeks of the submitting.

The group assignment has a dual role: Promotion of learning and promotion of team formation. In our study unit (IFNE) the students were allowed to form the topic according to their own choices. The groups were formed around the topics that the groups formed together. This promotes decision making and open discourse. Finally, the students were able to present their final assignment to the whole group, receiving feedback from their peers and facilitating discussion with the other educators and educator candidates, being able to share their expertise and promote learning in other groups as well as their own.

Based on the student feedback and research conducted during the study unit, similarly, as with the Randal et al. (2020) study, both language proficiency and cultural acceptance were increased with team-based learning. Participants reflected that their understanding and knowledge of the subject had broadened during the study unit, which is similar as Salminen et al. (2016) study. International collaboration and especially working in groups during their studies was highly valued by the students. There were also some challenges, but nevertheless, students were motivated to study and continue networking and collaboration in the future.

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Chapter 8: Future Recommendations

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CHANGES IN SOCIETY AND WORKING LIFE SET NEW DEMANDS FOR NURSING EDUCATION AND NURSE EDUCATORS

Nurses are the largest category of health care professionals in almost all EU countries. On average, there are 8.3 nurses per 1 000 population in 2020 in EU countries (The Organisation for Economic Co-operation and Development [OECD], 2022). The increase in chronic diseases, an ageing population, global health issues (Shustack, 2020), e.g. pandemics (Lake, 2020), many environmental risks (Alvarez-Nieto et al., 2018) and technological solutions have changed health care, nursing and all working life (European Commission, 2017). The competence of nurses is an important issue in health care; patient safety and the quality of care rely upon nurses' competence in any health system.

Global shortages of health care professionals have caused significant changes in the staffing of health care systems. In Europe, the strategies to tackle nursing shortages in many countries, has been to increase the intake of students into nursing education degree programs and increase international recruitment. In addition, many countries have started to implement more advanced roles for nurses to improve accessibility to quality care, e.g. "nurse practitioner" roles. These advanced practice nurses address certain, specific illnesses and people needing routine follow-up have been found to report improved access to services, reduced waiting times, and to enable doctors time to be spent with more serious patients' care. (OECD, 2022.) All these strategies and changes set new demands on nurse education and educator qualifications and competence requirements.

Professional, organizational, societal, environmental, and occupational changes have necessitated change for nurses and nurse educators. Changes in teaching nursing, nurse educator's work and competence (Salminen et al., 2021) are indicated for securing a nurse workforce fit for contemporary times and moreover to future-proof the health care. The

competence of nurse educators is central to high quality and evidence-based nurse education which may effectively and efficiently enable the development of student nurses' knowledge, skills and attitudes (World Health Organization [WHO], 2021). In addition to competent educators, there is a need for support and guidelines from ministries of health or/and education, and the relevant regulatory bodies of different countries, contexts and regions. Competent nurse educators have different roles, and they should base their teaching on evidence-based knowledge. Nurse educators need knowledge and skills to apply the new subjects and embed them in the nurse education curricula. Moreover, they need modern evidence-based teaching strategies and adaptation to new and evolving teaching and learning methods. Competence in digital pedagogy in nurse education has become a necessity.

A NEW AGENDA FOR NURSE EDUCATORS

The ERASMUS+ project, "A new agenda for nurse educator education in Europe" (2020–2023) sought to address the demands mentioned above. Essentially, the scope of the project was to develop, update and seek to harmonise nurse educator education in Europe. The aim of this project was to harmonize and optimize nurse educator education in Europe by developing and testing a programme for nurse educator education: "Empowering the nurse educators in the changing world" (in total 30 ECTS), across a number of counties At this moment there is no consensus about the qualification or education requirements of nurse educators in Europe, despite the fact that nurse education is very highly regulated (Campos Silva et al., 2022).

Therefore, the project endeavors to provide recommendations as a consequence of evaluating the 30 ECTS educational programme for nurse educators. The aim of which is the development of education opportunities which meet the current and future global health needs and pedagogical challenges. The recommendations identify the minimum competence requirements for nurse educators and suggestions regarding the development of these competences. The minimum competence requirements draw upon the knowledge and skills of health educators advocated by WHO (2016) and the existent evidence in this regard (e.g. van Laar et al., 2017; McAllister & Flynn, 2016; Mikkonen et al., 2019; Ryhtä et al., 2021; Shustack, 2020; Smith et al., 2022; Zlatanovic et al., 2017).

This project was conducted across six universities from five European countries: Finland (two universities), Malta, Scotland, Slovakia and Spain. University of Turku, Department of Nursing Science coordinated the project. The project consisted of three work packages: WP1 Current situation of Nurse Educators' competence and education, WP2 Future Health Care Issues and Pedagogical Solutions, and WP3 Recommendations for a New Agenda for Nurse Educator Education in Europe.

Collectively, the three workpackages comprised the first steps to a common modern and future oriented European nurse educator education across different countries.

EMPOWERING THE NURSE EDUCATORS IN THE CHANGING WORLD – A STUDY PROGRAMME

During the project the transnational education programme "Empowering the nurse educators in the changing world" for nurse educators was designed, developed and delivered in all the participating countries. The aims of this new nurse educator programme was: to increase nurse educators' competence in the teaching of current and future global health issues; to increase nurse educators' health pedagogy and digital pedagogical competence, and to increase nurse education collaboration and exchange between participating countries. Moreover, the usability and effect of the program was evaluated. There were altogether 37 participants who completed at least one study unit within the programme and 19 students who completed all the five study units.

The 30 ECTS programme consisted of five modules and was conducted 2021–2022:

- Module 1, Empowering learning environments in nursing education (Elene), 10ects
- Module 2, Global health issues, 5ects
- Module 3, Issues in future nurse education, 5ects
- Module 4, Evidence based teaching, 5ects
- Module 5, Ethics and nurse educators work, 5ects

The study programme was evaluated through a comprehensive mixed methods research evaluation carried out by the project partners. The data gathered in this research strongly suggests that the competence of nurse educators who pursued this new programme increased during the study programme. The motivation to participate in the study program varied, as did their experience as health care professionals and as educators. Some were new nurse teachers, some candidates were learning to become nurse educators, some were experienced nurse educators. The multinationality of the participants was deemed an enriching factor and collaboration and networking were seen as a positive aspect of the study program.

SUMMARY OF THE RESULTS OF THE A NEW AGENDA FOR NURSE EDUCATOR EDUCATION IN EUROPE -PROJECT

The education of nurse educators in Europe is scarcely described in international research articles and the requirements for nurse educator education is heterogeneous. The legal regulation and education requirements of nurse educator education varies. Mostly, it seemed that educators have doctoral level education, but not in all countries. Also, in most but not all countries, the nurse educator must be a registered nurse (RN). The tasks and the working

environments of nurse educators also varies widely across the different countries participating in the project (Campos Silva et al., 2022).

The competence of nurse educators is good according to the educators themselves, their students and the head of the subjects (Elonen et al., 2023). In most countries, nurse educators' self-evaluation revealed high levels of competence in nursing and evidence-based practice and low levels of cultural competence (Vauhkonen et al., 2023). The literature review to-date indicates that the continuing education needs of nurse educators are mainly focused on professional competencies, management and resources, communication and collaboration, and agency. Nurse educators have many roles which, in turn, set different personal and institutional needs consequently, the continuing professional development needs of educators are heterogenous, but certain commonalities were found across different countries (Smith et al., 2022). This is the backdrop against which the educational programme for nurse educators and the recommendations for the future of nurse educator education were built.

THE RECOMMENDATIONS AND THEIR JUSTIFICATIONS

1. The recommendations for nurse educators' qualification and competence requirements

More than ever, teaching nursing to the future student nurses requires excellence. Continuous changes in both society and in working life require the development of evidence-based teaching, both in content and teaching methods. Academic nurse educators must demonstrate high competence in teaching, research, clinical practice, management, communication, and ethics to educate nurses on the needs of the constantly developing field of health care (Salminen et al., 2013; Mikkonen et al., 2018; Zlatanovic et al., 2017). There is a need to model nurse educator competence and base nurse educator education in the best available evidence (WHO, 2016; Quintana et al., 2023).

Table 1. The recommendations for nurse educators' qualification and competence requirements.

Set the common European level qualification and competence requirements for nurse educators	Establish common requirements for the qualifications and competence for nurse educators across the European countries guided by the EU-directives for nurse education
	Align nurse educators' education and competence requirements to the most recent and the best available evidence.
	Hold a doctoral level qualification and evidence of a minimum of 30 ECTS pedagogical studies.

Justification for the qualifications and competence requirements

Nurse educator education varies within Europe (Campos Silva et al., 2022), and there is no consensus about the required qualification and competence requirements for nurse educators (Jackson et al., 2009; Salminen et al., 2021; Campos Silva et al., 2022). It is important to consider all the differences in the nursing education that we find across Europe. Despite these differences we have to reach an agreement of the minimum required competences to be a nurse educator. The appropriate preparation of nurse educators is critical to develop their knowledge, skills, and attitudes. It is important to improve and make equal the quality of nursing education globally and to address disparities in nursing service quality at the international level (Satoh et al., 2020)

The development and innovation of the curriculum for nurse educator education and competences should be based on the best available evidence. This adds equality, quality, transparency, and visibility of nurse educator education. (Alonso et al., 2023)

To have a clear knowledge of the meaning and validity of the certification we have a unit that is well recognised and equally understood in all of Europe, this is ECTS meaning 25 to 30 hours each ECTS. We suggest educators should be of doctoral level in the university and have 30 ECTS of relevant health pedagogical studies.

2. The recommendations for nurse educator continuous professional development

Nurse educators educate our future nursing workforce. Health and social care are continuously evolving and reacting to challenges such as climate change, the recent pandemic or the rise of long-term conditions and requiring nurse educators to commit to and being offered continuing learning opportunities to maintain professionalism in nurse education. Advances in technology equally apply to education and today's educators are required to know of, integrate and use new technologies in their teaching.

Table 2: The recommendation to develop continuous professional development resources

Develop international continuing education opportunities.	Tailor pan European continuing nurse educator education programmes reflecting societal health trends and changes.
	Incorporate structured mentoring within the continuous professional development of nurse educators.
	Foster opportunities for international collaboration for nurse educators in their continuing professional development.
	Direct employees to allow resources including time and money, for nurse educators' continuous professional development at all stages of their careers.

Justifications for the continuous professional development

Whilst continuing professional development (CPD) is a self-directed post-graduate learning process that includes the reflection, identification and development of competencies (Drude et al., 2019) that lasts throughout the duration of an educator's professional life, there is a need for structured education programmes to support this learning process. This ensures that educators can maintain their professional knowledgebase and further develop their competences and expertise (Pool et al., 2015) to meet population needs. Development of a structured mentoring model for new and experienced nurse educators appears to be an effective way of coordinating and providing structure for continuous professional development.

Continuous professional development serves a number of aims: (1) maintaining and/ or developing professional expertise in education, (2) maintaining and/ or developing expert knowledge in an area of interest, (3) ensuring the education and development of a future nursing workforce that is able to meet a population's healthcare needs in any healthcare or community setting, and (4) career development of nurse educators which is also link to their occupational well-being. Therefore, continuing professional development of nurse educators is crucial and highly recommended.

Insights from this project support the view that there is little research on the continuing education needs for nurse educators, hence identifying a knowledge gap in this area and the need for future research (Smith et al., 2022). The needs for continuous education vary, based on the individual educator and country specific contexts, mentoring and international collaborations. However, important factors identified across counties were leadership (and its development), and the need for adequate resources to promote continuous development of professional competencies (Smith et al., 2022).

3. The recommendation to maintain and improve occupational well-being of nurse educators

Based on previous studies, nurse educators suffer from high workloads which is unevenly distribution over the academic year (Arian et al., 2018; Rinne et al., 2022; Saaranen et al., 2020). In addition, they experience mental strain and work-related stress (Singh, 2020). At the same time, the education sector faces a number of challenges, such as the global pandemic and work management (Howard et al., 2022) alongside technological advances such as digitization. In addition, the nurse educator's work is affected by demographic changes across Europe that increase the demand on health care whilst also experiencing a shortage of nurses and nurse educators. The occupational well-being of nurse educators in different European countries is an under researched area and requires further exploration.

Table 3. The recommendation to address the occupational well-being of nurse educators

Promote occupational well-being in nurse educators	Provide strategies to improve personal and occupational well-being of nurse educators.
	Enable nurse educators to manage work pressures and workload.
	Implement manageable workload for nurse educators.

Justifications for the occupational well-being recommendation

The level of occupational well-being and the mental workload of nurse educators varies across Europe (Vauhkonen et al., 2023). Given the strong link between a balanced mental workload and positive occupational well-being. In addition, the competence of nurse educators (e.g. administrative and curriculum competence) were positively related to occupational well-being. Similarly, being able to manage well their own work and their ability to adapt to rapid changes emerged as important factors for educators' occupational well-being (Vauhkonen et al., 2023). Self-management has been recognized as continuing professional development need for nurse educators (Smith et al., 2023). Based on earlier research there is the need to reduce workload including backlogs (Rinne et al., 2022; Singh, 2022) as mental stressors (Singh et al., 2020). Employers should increase occupational well-being through manageable workloads and supportive activities during working hours (Rinne et al., 2021, 2022). Nurse educators need to learn to recognize issues impacting occupational well-being. Nurse educators should enhance their own and the student nurses ability to reflect on occupational well-being throughout their initial education and subsequent continuous education.

Consequently, further national and international including intervention research is needed to find evidence strategies to improve occupational well-being of educators across Europe.

4. The recommendation to establish an observatory body for nurse educators

The education of nurse educators varies greatly in Europe (Campos Silva et al., 2022). Their role and performance is also diverse. In turn, continuing professional development needs vary across countries, contexts, and regions. In parallel to this recognition of variance and its implications, there is a growing body of evidence which suggests significant similarities (Smith et al., 2022; Fuster-Linares et al., 2023).

Table 4. Foundation of an observatory body for nurse educators

Establish an Observatory for Nurse Educators (ONE)	Foster collaborations and exchanges between universities and organisations to develop nurse educator expertise and experience across different nations.
	Advise global organisations on best practice of nurse educator education.
	Create opportunities for the development and sharing of resources to support a sustainable nurse educator work force.

Justification for an observatory body for nurse educators

The establishment of an Observatory for Nurse Educators is recommended to advance the quality development of nurse educators across Europe. The documented successful legacy of CEDEFOP's (European Centre for the Development of Vocational Training) observatories supports and guides this recommendation. The governance and operations of the Observatory should be carried out by an Executive Council which will operate according to a statute. The Observatory will seek the patronage of international bodies such as the European Commission, Council of Europe, World Health Organisation or the International Council of Nurses.

One of the main functions of the observatory will be to foster collaborations between entities in different countries as well as collaborations between individual educators. It will actively increase possibilities for professional international collaboration in a structured and systematic manner to enhance unified and harmonised education for nurse educators across Europe. The internationalisation element was a strong factor that attracted novice and experienced educators to the programme signalling the need for increased formal and structured support for international opportunities. The observatory will operate as a strategic hub facilitating such international opportunities for educators.

The observatory will serve as a body for the assimilation, review, and evaluation of research studies in view of dissemination of evidence and best practice in line with continuous improvement in education (OECD, 2022). Finally, the observatory will serve as a repository for resources that facilitate teaching and learning for nurse educators. The resources will be co-created by educators or teams of educators and shared across nations, to support the sustainability of the nurse educator workforce.

5. The recommendation to establish a European Academy for nurse educator education

Nurse educators have varying needs for continuous professional development (CPD) to maintain and build their competence in the constantly evolving field of nursing and health care (Smith et al., 2022). Lack of resources is often stated as a hindering factor for CPD (Smith

et al., 2022; Koskimäki et al., 2021. Hence, the academy would enable institutions to collaborate across national, regional and international borders by enabling the sharing and exchange of staff and resources.

Table 5. Recommendations for the establishment of a European Academy

Establish a European Academy for Nurse Educator education	Create a formal network of educational entities that function as a collaborative entity in the design and delivery of international educator education programmes.
	Undertake research to advance global nurse educator practice and development.

Justification for a European academy for nurse educator education

The sharing of knowledge and expertise between the partner entities has provided a rich space for the learning and development of early career as well as experienced nurse educators. Wastage and inefficiency, arising from fragmentation of investments and duplication of initiatives, coupled with the limited predictability of the future are widely recognised as two of the main challenges which nurse educators are currently experiencing (Kalanlar, 2022; Leaver et al., 2022). Hence, international collaborations are viewed as real sustainable solutions to address identified gaps in programme design and delivery. The academy will consolidate expertise, resources, initiatives and investments across different countries.

The European Academy of Nurse Educators will provide a formal working arena for research. This research activity is necessary as it provides the evidence that informs policies and practices that ensures the quality of programmes, as well as teaching and learning processes. The research function of the Academy will address the need for research evidence of good practice through facilitating the sharing and pooling of resources and expertise.

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Annexes

Annex 1

THE REVIEW OF THE RECOMMENDATIONS

Gathering expert feedback on the recommendations and justifications

In the previous section "The recommendations for nurse educators' qualifications, competence and continuous professional development" are presented. The recommendations are based on our project results and research undertaken during the project. The recommendations have been prepared in collaboration with all partners involved in the project. The draft recommendations were reviewed by 12 experts in health care education from seven different countries, and also by FINE-organization (European Federation Educators in Nursing Science), altogether 13 reviews. The feedback was gathered via online survey.

The reviewers were asked to assess the following aspects of the recommendations with a 5-point scale (1 very poor 2 poor 3 adequate 4 good 5 very good):

- The length of the recommendation
- The understandability of the recommendation
- The justification of the recommendation
- The presentation of the recommendation and justification
- The urgency of the recommendation
- The link between the theory / evidence and the recommendation/ recommended action
- The logic of recommendation
- The logic of the justification
- The usefulness of the recommendation
- The applicability of the recommendation
- The evidence and knowledge supporting the recommendation

At the end of the survey there was one open-ended question seeking the reviewers overall feedback and their comments about the recommendations and justifications. All thirteen reviewers supplied feedback.

The reviewers assessed the recommendations at the good and very good level. The total means for each recommendation varied between 4.38–4.56. The recommendations and their justification were assessed as very adequate, important, clear and timely. Some recommendations and justifications needed clarification and we took the reviewers comments into consideration when calrifying the wording for chapter 8.

The reviewers comments on the recommendations and justifications

The first recommendation describes setting a common European level qualification and competence requirements for nurse educators. Reviewers assessed that there is a need to have a clear knowledge of the meaning and validity of the certification. The suggestion that educators should be of doctoral level in the university was seen difficult to achieve because there is lack of doctoral level nurses. Also, critics queried on what basis the doctoral level education is recommended. There is a need for more evidence about doctoral preparation for enhancing educator competence. The length of health pedagogical studies, 30 ECTS, was seen adequate. The extension of the studies to 60 ECTS was also recommended in view of the demanding work of nurse educators and the need of high-level nursing and pedagogical competence.
Moreover, some of the reviewers suggested that more emphasis should be put on clinical teaching and recommendation should state a minimum clinical experience required, however, this argument is not substanstaied by the data gathered for this programme evaluation.

The second recommendation describes the development of international continuing education opportunities. This recommendation has been assessed very appropriate. The suggestion of mentoring for new nurse educators is seen pertinent and valuable. All in all, the benefits of CPD is seen manifold. Our evaluation suggests maintaining and enhancing professional competence is important for career development and it is linked to occupational well-being. A strong emphasis should be placed on the importance of continuing education. More knowledge of implementating a mentoring model for CPD is required.

The third recommendation describes promoting occupational well-being in nurse educators. This recommendation was considered very timely and valuable for managing change and work life balance. The reviewers emphasise the importance self-management skills for nurse educators. In addition, the knowledge and skills to effectively carry out the role of nurse educator resulting in educators experiencing high job-satisfaction and personal well-being need to be enhanced. Occupational well-being has been identified as very important in the evaluation of the nurse educator education programme.

The fourth recommendation describes establishing an Observatory for Nurse Educators (ONE) was assessed as very relevant and that it would really promote collaborations between different countries and individual educators. ONE can play a critical role in disseminating evidence-based best practices in nursing education. This dissemination of knowledge will contribute to continuous improvement in nursing education, fostering a culture of innovation and excellence among nurse educators. ONE can be strategically designed and operated to meet the specific needs and challenges faced by nurse educators and contribute

to the development and enhancement of nurse educators' quality and effectiveness across Europe.

The fifth recommendation suggested is to establish a European Academy for Nurse Educator education. This is the first step towards the creation of new networks and new standards, knowledge and education requirements in Europe. This might standardize the educators' training. The proposal for a European Academy for Nurse Educator Education addresses significant challenges faced by nurse educators and offers promising solutions for improvement. By bringing together educators and experts from various countries, the academy can facilitate the exchange of innovative ideas and best practices, ultimately leading to the enhancement of nurse educator education across Europe. Critique of this recommendtioon is also presented. There needed to be greater calrity as to what is the "nature" of the European Academy of Nurse Educators and this recommendation is currently insufficiently linked to implementation at an international level.

Feedback for refining the recommendations

After receiving the comments and feedback from the expert reviewers we analysed the comments and discussed the feedback in our management board meeting. In accordance with the feedback we further clarified some recommendations and justifications. We wish to emphasise that our recommendations are based on our project evaluation results and that there is a need for more research concerning the competence qualifications for nurse educators and how they should be implemented across Europe.

Summary

To summarise, the educational expert panel thought the recommendations were very well written and very well justified. The content of recommendations was just what is needed to guarantee the high-quality competence and well-being of educators. There seems to be a need for enhanced collaboration between educators in Europe.

We want to thank all the expert reviewers for their time when assessing the recommendations and for providing us with valuable written feedback and comments. Eleven of the thirteen reviewers gave us permissions to publish their names for us to acknowldge their contribution to the review process and these are listed below.

Expert Reviewers:

Raúl Quintana Alonso, Dr, Associate Dean, Spain
Rosario Caruso, PhD, Researcher, Italy
Joanna Depares, Dr, Lecturer, Malta
Cecile Dury,President of FINE (representative of the FINE organization), Belgium
Lucia Filomeno, Dr, Nursing Assistant Professor, Italy
Lisa Gomes, Professor, Portugal
Maria Jiménez Herrera, PhD, Associate professor, Spain
Natalja Istomina, Professor, Director of Institute of Health Sciences and Head of Department of Nursing, Lithuania
Elena Chamorro Rebollo, Dean, Spain
Brigita Skela-Savič, Professor, Slovenia
Herdís Sveinsdóttir, Professor, Iceland