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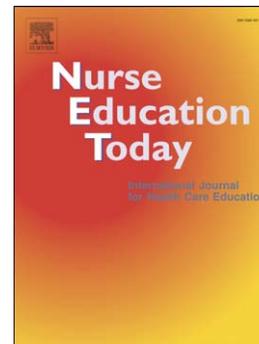
Nurse teacher candidates learned to use social media during the international teacher training course

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NURSE TEACHER CANDIDATES LEARNED TO USE SOCIAL MEDIA DURING THE INTERNATIONAL TEACHER TRAINING COURSE

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NURSE TEACHER CANDIDATES LEARNED TO USE SOCIAL MEDIA DURING THE INTERNATIONAL TEACHER TRAINING COURSE

ABSTRACT

The purpose of this study was to describe the nurse teacher candidates' learning outcomes and experiences in social media during the international nurse teacher training course, Empowering learning environments in nursing education, Intensive Program (EleneIP).

The pre-post research design was used. The data was collected before and after the course, with the questionnaire consisting of structured and open questions. Altogether, 24 nurse teacher candidates from four different European countries participated in the course and this study.

The results showed that the knowledge of using social media applications increased during the course from 5.2 (range 1-9) to 8.1 (range 4-10), and their skills increased from 4.5 (range 1-8) to 7.6 (range 4-10). The main topics learnt during the course were divided in two categories: subjects of the course and teaching and learning methods. The students' experiences concerning the EleneIP course were positive in both categories.

The international group created during EleneIP course also allowed the students to achieve another important aim, learning from a collaborative group the importance and possibilities of different learning environments, considering the cultural and social characteristics of each country participating in it.

INTRODUCTION

During the past decade, social media has become prevalent in the day-to-day life among all people, especially students (Abe and Jordan, 2013). For instance, in Finland, 92 per cent of the population aged 16 to 74 used the Internet in the year 2013 (OSF, 2014). The popularity of social media, like Facebook, Twitter, blogs and wikis, has grown exponentially (Kohtz et al., 2012). Social media offers teachers inexpensive methods of communication, collaboration and connection in real time (Peck, 2014). But teachers need more training and experience in using social media in their teaching (Tuominen et al., 2014), and there is a growing interest in using social media in education as a teaching and learning tool (Tower et al., 2014).

Occasionally, it has been debated on whether there should be a common nurse teacher education in the European Union, because the teacher education greatly varies in European countries, even though there is a common directive (European Commission Directive 55/2013/EU) that sets the guidelines for common nursing education in Europe (Salminen et al., 2010). In Finland, together with three other European countries (Cyprus, Lithuania, Spain), we designed an international nurse teacher-training course, Empowering learning environments in nursing education, Intensive Program (EleneIP), in which the topic was social media as a teaching method in nursing education. The aim of this intensive programme was to teach social media to Doctoral and Master students who were planning to follow a nurse teaching career. The students could choose this as an optional course for their studies, and it was credited with 15 ECTS. The role of the faculty members who participated was to teach and facilitate the organisation of the course. These faculty members were academics and experienced nurse teachers in their countries.

BACKGROUND

Social media is a new opportunity to connect with students in a manner that continues to provoke thoughts and discussions outside the classroom settings despite barriers of time and distance (Abe and Jordan, 2013, Green et al., 2014). With different social media tools, students can also create a professional voice, expand technological abilities and enhance their ability professionally (Schmitt et al., 2012). For nurse teachers, perhaps the most important challenge is to identify how they can use social media with different generations of students and maximise the student's learning potential (Fleming et al., 2011).

Nowadays, nursing students represent multiple generations and all generations have their own unique values, ideas, ethics and cultures, as well as different learning styles (Andreou et al., 2014). Understanding these differences can help teachers in using various teaching methods to meet the needs of the students. Most of the nursing students nowadays, however, are born in the group known as the "Millennial", born between 1982 and 2000, also known as "the net generation" or Y-generation (Johnson, 2005). This generation has grown up with computers and the Internet (Johnson, 2005), and they view new social media tools as a normal part of their life (Abe & Jordan, 2013, Peck, 2014). The majority of students think that the use of social media in the classroom is a positive thing (Abe and Jordan, 2013). There is a growing body of literature supporting social media as a viable pedagogical method, offering new possibilities to students, which can also foster non-traditional faculty development and mentoring in nursing (Green et al., 2014, Schmitt et al., 2014) as well as other health care professions (McAndrew et al., 2012, Pander et al., 2014, Penick Brock, 2014). "We live in The Internet Age, and young people spend huge amounts of time with social media. The best way

to bring courses to lives and make them more exciting, energetic and enjoyable is by using social media” (Friedman & Friedman, 2013).

Online learning offers many advantages over traditional classroom learning. The students who take courses that are either completely or partially online will perform better, on average, than students taking traditional, face-to-face courses. Courses that combine classroom learning with online learning seem to be the best of all delivery methods (Means et al., 2009). Lack of understanding about proper technology use for professional purposes continues as a barrier to nursing faculty in the adoption of new technology, such as social media in nursing education (May et al., 2013). Nurse teachers need more knowledge and possibilities to practice social media skills before they can implement technology in their classrooms. Moreover, the nurse teachers need more knowledge on how to evaluate the pedagogical usability of digital learning material. Also, the ethical issues must be constantly considered. (Nokelainen, 2006, Dunchan et al., 2013.)

Therefore, The EleneIP course was designed to prepare future nurse teachers to utilise social media and a digital learning environment. The course curriculum was developed and implemented together with Universitat Internacional de Catalunya, Klaipeda University, Cyprus University of Technology and the University of Turku. The EleneIP course consisted of pre-course assignments and readings and contact teaching, which was arranged in June 2013, at the University of Turku, Department of Nursing Science.

During this course, participants became familiar with the social media tools, environments and possibilities as well as its pedagogical advantages and disadvantages. The content of the course was designed to prepare future nurse teachers to use social media in teaching and in determining the variety of generations and their learning styles. By exploring strategies to

utilise technology and digitally enhance course content, nurse teacher candidates had the possibility to learn the significance and process of incorporating social media. The main learning outcomes of the course were that participants would be ready to integrate good practices of social media and new methods into their future daily work as nurse teachers. The content of the course included how to use social media in nursing education and what demands it sets on the teacher, student, teaching process and learning environment. The teaching was performed by using social media tools and other co-operative learning methods. Simulation was taken as one part of the course, because simulation is moving to virtual learning environments. (Table 1.)

Table 1. here

There is a lack of research on nurse teachers' or nurse teacher candidates' skills or competence in using social media in their teaching (Tuominen et al., 2014). The main aim of this study is to describe nurse teacher candidates' learning outcomes and experiences with the international EleneIP course. The research questions were as follows:

- 1) What were the students' learning outcomes of the knowledge and use of social media?
- 2) What were the experiences of nurse teacher candidates with the international teacher training course on the subject of social media?

METHODS

Design

The one group pre-post research design was used to study the learning outcomes of the EleneIP course. The EleneIP course was seen as an intervention in which effectiveness was measured. (Grove et al., 2013.)

Participants and data collection

The data were collected in June of 2013 from the nurse teacher candidate students (n=24) participating in the EleneIP course, using a questionnaire consisting of structured and open questions. The students participating in this course were selected by their own Universities. The selection criteria were interest and motivation on the subject of the course, bachelor qualifications, tutor teacher's recommendation and adequate English language skills.

The data were collected at the beginning and at the end of the EleneIP course. The coordinator teacher of the course delivered the paper-and-pencil questionnaires and the envelopes with which the students returned their questionnaires. All the participants returned the questionnaires. The respondent rate was 100%.

The questionnaire

The questionnaire was created for this study and was based on the literature (Schmitt et al., 2014, Tuominen et al., 2014). The questionnaire consisted of six background factors (age, gender, nationality, education level, the use of social media in daily life and in studies), four structured questions concerning the self-evaluations of students' learning outcomes and four open questions. The students were asked to evaluate their learning outcomes with a Visual Analogical scale(VAS) from 0 to 10 (0=not at all, 10=very good).A Visual Analogue Scale (VAS) is a measurement instrument that measure a characteristic or attitude that is believed to range across a continuum of values and cannot easily be directly measured (Gould et

al.,2001). VAS is a line 100 mm (10 cm) in length with right-angle stops at each end on which subjects are asked to record their response to a study variable (Grove et al., 2013). Four open questions were asked regarding the students' experiences with the EleneIP course and their main topics learnt during the course. Given that English was not the first language of the respondents, the questionnaire was designed to be compact and succinct to avoid issues with interpretation. Advanced statistical methods for validation could not be used for the questionnaire, because we had only two questions in the pre-test and two questions in the post-test. The other questions were open questions. However, face and content validity were obtained by a group of expert teachers who assessed the content of the questionnaire and how relevant it was for the aims of the study.

The questionnaire was piloted before data collecting with three Finnish PhD-candidates (nursing science) who had nurse teacher education and who did not participate in this course. On the basis of the feedback, only minor technical changes were made. The pilot tested data were not included in the research data.

Analysis

The data were analysed both statistically using the Microsoft Excel program, and with inductive content analysis. The background factors (age, gender, nationality, and education level, the use of social media in daily life and in studies), and the VAS were analysed by descriptive statistics, because the data is small and it was not possible to use parametric tests. Frequencies, percentages, means and standard deviations (sd) were used. The answers of the open questions concerning the learning experiences were analysed with inductive content analysis (Graneheimand & Lundman, 2004), in which the text material was analysed for the contents and structure of the contents (Hsieh & Shannon, 2005). The research material was

written in the text according to the study questions (Cavanagh, 1997). Two researchers read the material separately several times so that the idea of the content material was obtained. The text was examined and was encoded at the level of the manifest and the analysis unit was a meaning unit (Graneheim & Lundman, 2004).

Content areas of the students' experiences, which were named on the basis of central contents, were formed from the text material. Two researchers first classified the material separately, and after this, the content classifications (subcategories) were discussed together. After formulating the subcategories, the main categories were formed. (Graneheim & Lundman, 2004.) The research group was unanimous with this classification. The content of sub- and main categories were quantified, and these are presented with frequencies in the table (Table 2). The main topics learnt during the course were divided in two categories: teaching and learning methods and subjects of the course.

Ethical considerations

From the point of research ethics, this study was not problematic, and no formal ethical committee approval was needed. The required permission to conduct this study was obtained from the head of the department of the university, which arranged the course. All the participants had an equal opportunity to participate in the study. The rights of the participants were made known to the participants in the cover letter attached to the questionnaire.

Participation in the study was voluntary. All participants (n=24) signed the permission to use the materials produced during the intensive course as research data for scientific articles and other publications. All data were handled anonymously. All information was processed confidentially. (Pauwels, 2007, TENK, 2012.)

RESULTS

Participants

The participants were 24 nurse teacher candidates from four different European countries: 14 from Finland, four from Spain, three from Cyprus and three from Lithuania. There were 21 female and three male students. The mean age was 37 years, range 25–58 years (sd 5.9 years). The background educational level was seven PhD candidates, 12 Masters' students and five Bachelor students. Almost all of the students have used social media in their daily life. Only three students stated that they had never used social media. The most-used tools were an e-learning environment (mostly Moodle), Facebook, YouTube and Twitter. In their studies, the students had used social media tools very rarely. On the other hand, almost all had used an e-learning environment (mostly Moodle). Only some mentioned that they had used something other than an e-learning environment. Blogs, wikis, second life and the Ning were mentioned as other social media tools. All of the participants were participating for the first time in this kind of international course for nurse teacher candidates.

Learning outcomes

Using self-evaluation, students evaluated their overall knowledge of social media and their skills in using social media applications at the beginning and at the end of this course. The knowledge increased during the course from 5.2 (range 1–9, sd 2.3) to 8.1 (range 4–10, sd 1.4), and their skills in using social media applications raised from 4.5 (range 1–8, sd 2.3) to 7.6 (range 4–10, sd 1.6).

The main learning outcomes learnt during the course can be divided in two categories: teaching and learning methods and subjects of the course. The most often mentioned teaching and learning methods learnt during this course were social media tools, cooperative and activating teaching methods. The competence of simulation pedagogy (n=9, 38%) deepened during the course. In the course, students learned to engage with social media and developed creative skills to apply to teaching methods (n=23, 96%). One student said, “The course gave a good overall view of the benefits and challenges of social media”. Cooperative learning methods(n=6, 25%) were used as teaching methods all the time during the course. Students mentioned that they learned to use learning cafés and puzzle methods among other things. (Table 2.)

Concerning the subject of the course, the ethical issues in nursing education and in use of social media was to be one of the main topics (n=8, 33%). Moreover, students learned to evaluate digital learning material (n=3, 13%), for example YouTube videos and Twitter. During the course, an evaluation sheet (Nokelainen, 2006) was used, which can facilitate the material evaluation. The evaluation of teaching methods and evidence-based teaching were discussed during the course, and the students found how important it is to base their teaching on evidence and the latest research. Also, a better understanding about cultural, educational or health care systems in the EU (n=3, 13%) was brought up. (Table 2.)The students described this course as “it gave new knowledge and skills”, “it deepened my knowledge” and “it gave many new ideas and new information and its usage in health care teaching”.

Table 2 here

The students' experiences with the course

The students' experiences concerning the EleneIP course were very positive. They described the whole course with adjectives like excellent, interesting, fantastic and very good. One student even said, "It was one of the best experiences I have had in my life". The experiences in the course can be divided into six main categories: 1) Cooperation, 2) Teaching methods, 3) Learning, 4) Culture and internationality, 5) Language training and 6) Course organisations. (Table 3.)

Table 3 here

The experiences with the cooperation are described as discussions, interaction with each other and sharing thoughts and knowledge with students. They used phrases like, "cooperation with other students was the best part of the course" and "the cooperation with other students has been amazing". Only one student described the cooperation as difficult because of her poor language skills, and it decreased her motivation. Discussions with other students and teachers were mentioned as fruitful. The students felt that interaction and sharing knowledge were very important and interesting.

The teaching methods were experienced as suitable for the adult learners. The students liked group-working and varying teaching methods. One day was totally devoted to simulation exercises. There were only a few comments regarding the group-working as being difficult. One student said that there should be more time for group-working. Exercises and training on using social media tools was experienced in a good manner. Learning experiences meant gaining new knowledge, learning to apply the knowledge to new situations and getting new ideas. Students were pleased with the wide content with many teaching methods; group-working in international groups especially received acknowledgements. As one student wrote,

“The content covered most tools available in social media and gave good overall views of the benefits and challenges involved, concerning the use of the tools.” This was a good summary of the content answers. In general, all the students were very satisfied with the course content and teaching methods.

Getting to know different cultures and getting new international contacts were often mentioned as valuable. Language training was rated quite closely to internationalising. There were three students who mentioned that it was a good experience to exercise your English language skills. Overall, the students were satisfied with the course organisation and the arrangements. The atmosphere was experienced as motivating and open.

DISCUSSION

Although social media and technology competencies have been incorporated in several countries and many disciplines worldwide (ANA, 2011 and IOM, 2011), to our knowledge, there is still little progress in nursing education in European countries regarding the introduction of social media as a pedagogical method. This is more evident in the new EU Directive (2013) amending the Directive 2005\36\EC; although it has introduced a number of new elements, such as the internal market information system (IMI) and nursing competencies, there is no explicit mention of the tremendous developments in educational technology and how they can be used for the benefit of students as well as patients. Nurse teachers must take this challenge to use social media tools to improve students' learning and also improve the opportunities of patients in their own care.

The importance of this study lies in the fact that this is the first attempt in Europe to integrate social media as a contemporary method of teaching and communication and how it can be used in nursing education. It is not only the tool or technique used in teaching, the ethical questions are always present when using social media health care and, of course, also in everyday living. ANA (2011) has set the guidelines for nurses using social media in nursing. Also, in this study, the nurse teacher candidates emphasised the importance of the ethical issues of social media. There are millions of YouTube videos on the internet that can be used in your teaching. But only a few of those are pedagogically usable, and for this reason, teachers should carefully assess the videos that they use (Nokelainen, 2006, Duncan et al., 2013).

By practicing and learning different ways of using social media in nurse education, the participants of EleneIP may acquire tools to improve the application and use of social media in their teaching role and to meet the needs of their students with updated and varied teaching methods. According to the results of this study, the nurse teacher candidates learned to use different kinds of social media tools. This kind of course is evident for the competence of nurse teachers, as the results of Tuominen et al. (2014) showed that the skills of teachers in using social media tools are quite poor.

The international group created during the EleneIP course also allowed the students to achieve another important aim: learning from a collaborative group the importance and possibilities of different learning environments, considering the cultural and social characteristics of each country participating in it. This diversity of realities and professional environments was the perfect background for the first step in creating a common ground for the nurse teachers' education in Europe, focusing on the element of social media tools.

The course brought students and staff together from four different European countries. This will increase nurse teachers' awareness and understanding of the similarities and differences between nurse education and nurse teachers' education in different countries and cultures. As the Bologna declaration (1999) was established to increase the standardisation of higher education qualifications, including nursing education (Jackson et al., 2009), this course was a great opportunity to take that concept forward by supporting and promoting the discussion about nurse teacher education.

Limitations and the strengths

There are some limitations in this study. The questionnaire was created for this study and used for the first time, because there was no suitable tool to assess this kind of course. The face validity of the questionnaire was based on an expert panel. The questionnaire was piloted in order to strengthen its reliability. After piloting, we made only minor technical changes to make the questions more understandable. Even the sample size was quite small; the response rate (100%) was very good, because all students filled in the questionnaire. This research can be seen as a pilot study. The analysis has been done by two researchers, and the results were discussed with the research group, which strengthened the results.

CONCLUSIONS

The aim of EleneIP was to provide a platform for using social media in nursing education, to provide a collaborative learning environment and to increase technological literacy among teachers so as to adjust their pedagogical approaches to suit the new kind of learners. Rapid increases in nursing knowledge and related technologies, growing incorporation of evidence-

based practice into the curriculum and the changing of the teachers' role from lecturers to facilitators, have changed nursing education greatly. Technology and social media provide an excellent opportunity for exploration and research on how to use them for educational purposes and how to incorporate social media tools into traditional learning environments for the benefit of students.

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Table 1. The content of the course**Topics of the course**

- Social media in health care education
- Evaluation of digital learning material and social media
- Ethics and social media in health care education
- Empowering clinical environment and learning outcomes
- Evaluation of teaching methods and evidence-based teaching
- Simulation pedagogy
- Health care systems and health care education in EU
- Education research methodology

Teaching and learning methods used during the course

- Social media tools (wikies, chat, YouTube, Twitter)
 - Blended learning
 - Blog writing as a learning diary
 - Cooperative teaching methods, group working
 - Simulation
 - Pre-course assignments
 - Lectures, seminars
 - Excursions
-

Table 2. The main topics learnt during EleneIP course

Topics	f*	%**
Teaching and learning methods		
Social media tools (blogs, wikis)	23	96
Cooperative teaching methods (learning café, puzzle)	6	25
Simulation	9	38
Subject of the course		
Ethical issues	8	33
Evaluation of digital learning material and social media	3	13
Evaluation of teaching methods and evidence-based teaching	3	13
Better understanding about cultural, educational or health care systems in EU	3	13
Critical thinking	1	4

*f=frequency of topics; students can mention as many topics as they like

** Percentages were calculated per student (n=24)

Table 3. The Experiences of the course

Examples of the authentic phrase	Meaning unit	Sub-category	Main category
<p>“Cooperation with other students has been amazing”</p> <p>“The group collaboration”</p> <p>“Learning other people –cooperation”</p> <p>“Interaction with other people”</p> <p>“Love to share opinions”</p> <p>“Cooperation was hard because of poor language skills”</p>	<ul style="list-style-type: none"> - Cooperation with other students - Cooperation with teachers - Discussions with colleague students - Discussions with teachers sharing thoughts - Interaction -Sharing knowledge learning 	<ul style="list-style-type: none"> - Cooperation with others - discussions - interaction - sharing thoughts and knowledge 	Cooperation (f=18)
<p>“Good for adult learning needs”</p> <p>“Enjoy group-working”</p> <p>“Teaching methods were useful”</p> <p>“Different teaching methods were used”</p> <p>”Practical team-working”</p> <p>“Exercise different social media tools”</p> <p>“Using activating and cooperative teaching methods”</p> <p>“Simulation was fun”</p> <p>“Group works were excellent”</p> <p>“Group-working was hard”</p> <p>“ Not enough to have time to team-working”</p>	<ul style="list-style-type: none"> - Group-working - useful teaching methods - team-working - cooperative teaching methods - supportive teaching methods - active teaching methods - exercising - simulation - practical training 	<ul style="list-style-type: none"> - cooperative teaching and learning methods - exercises - training - simulation 	Teaching methods (f= 17)
<p>“Got a lot of knowledge and skills”</p> <p>“Lectures were good”</p> <p>“Learn a lot of social media”</p> <p>“New information about social media”</p> <p>”Gave a good overall view of the benefits and challenges of social media”</p>	<ul style="list-style-type: none"> - learn social media skills - knowledge social media - learn social media - apply the knowledge - developing ideas 	<ul style="list-style-type: none"> - learning knowledge - applying the knowledge - developing knowledge 	Learning (f=16)

<p>“Learn how to use social media” “Course deepened my knowledge” “New tools and ideas to teaching” “Learn to share knowledge”</p>			
<p>“Learning cultural differences” “Learning from other cultures” “International contacts were best” “Got plenty of new relationships” “Internationality”</p>	<ul style="list-style-type: none"> - cultural differences - learning from cultures - international contacts - new contacts 	<ul style="list-style-type: none"> - cultural awareness - international cooperation 	<p>Culture and internationality (f=13)</p>
<p>“Learn to speak English” “Can speak English” “Language skills were bad”</p>	<ul style="list-style-type: none"> - learn English language - train language skills 	<ul style="list-style-type: none"> - language skills training 	<p>Language training (f=3)</p>
<p>“The course arrangements were excellent” “The course was organized well” “The atmosphere was motivating” “Fantastic and open atmosphere” “Attitude was positive”</p>	<ul style="list-style-type: none"> - course arrangements - good atmosphere - positive attitudes 	<ul style="list-style-type: none"> - course arrangements - course atmosphere 	<p>Course organizations (f=6)</p>

Highlights

- The teacher candidates' knowledge of social media and skills to use it increased during the course
- The teacher candidates' experiences concerning the international course were very positive
- All the students were very satisfied with the course content, social media, and teaching methods used during the course