



Social Media Challenges Vocational Teacher Education in Finland

Maija Kärnä, Pirjo Jaakkola, Päivi Lehtonen

Tampere University of Applied Sciences School of Vocational Teacher Education (Finland)

maija.karna@tamk.fi, pirjo.jaakkola@tamk.fi, paivi.lehtonen@tamk.fi

Abstract

Several recent studies indicate that there is a need for increased use of ICT and social media in the Finnish education. This challenge has also been recognized in the teacher training at Tampere University of Applied Sciences School of Vocational Teacher Education (TAOKK) which offers training for future professionals mainly in vocational and higher education.

To improve and develop teacher training at TAOKK a narrative study was launched. The study proceeded in three phases: 1) Narratives highlighting the motivation of 60 teacher students to use ICT were collected in Spring 2013; 2) Teacher training methods were revised, a systematic use of social media tools was introduced; 3) A second narrative was collected from 59 teacher students in November 2013 to assess the effect of the new learning design.

In the first study phase two essential themes were recognized in the narratives: skills of using social media and the level of activity of using social media. Thus the material could be divided into four groups. Each group was analyzed using two different angles: conceptions of teaching and learning and expressions of emotions in the narratives. The four groups could be characterized as Outsiders, Insiders, Sceptics and Optimists. Outsiders and Sceptics had a relatively teacher-centered conception of learning and teaching, and their narratives expressed emotions of fear and doubts. Both Insiders and Optimists showed a positive undercurrent in their narratives, and their conception of learning and teaching was in transformation towards a more learner-centered approach.

Following the first phase of the study an intervention was made to introduce an intensive use of social media in teacher studies after which narratives were collected for a second time. The second phase of the study encouraged a different approach to the analysis. Differences in motivation to use social media in teaching and learning characterized these narratives. Typification suggested six groups which could be described as Cynical, Reserved, Confident, Enthusiastics, Pedagogic Reflectors, and Change Agents. These groups positioned the narrators in the field defined by the two coordinates, Motivation and Pedagogical thinking.

The narrators were evidently at different stages in the process of building their professional teacher identities. The effectivities of the narrators were in most cases not at a level which would enable them to fully utilize the affordances of social media for teaching and learning. The integration of social media into the teacher training curriculum is seen vital in TAOKK, and this study provides new information and guidelines for the future development work.

1. Introduction

Finland has been successful in several PISA surveys as well as in the recent OECD Survey of Adult Skills assessing literacy, numeracy and problem-solving skills of adults in technology-rich environments [1]. However, the OECD survey also shows that about 30 % of the Finnish respondents either refuse to use the computer in problem solving or their skills are insufficient for it. Further, the level of the skills differ significantly between various age groups. The age groups of 25 to 34 years have excellent skills, whereas for the older age groups (35 to 65 years) the use of computer in problem solving is challenging.

A recent survey by European Commission [2] shows that although computers are abundant in Finnish classrooms they are infrequently used. In vocational schools 16 % of students report that they never or very seldom use computers in learning. According to the survey one of the reasons for the low utilization of ICT in learning is teachers' lack of pedagogical skills and models for the use of the e-learning tools. At the same time,



the Horizon report (2013) indicates that education paradigms continue to shift towards online learning and collaborative models which changes the role of educators from teachers to facilitators [3].

The above challenges have been recognized in the teacher training at Tampere University of Applied Sciences School of Vocational Teacher Education (TAOKK) which offers training for future professionals mainly in vocational and higher education. This article aims at deepening the understanding of how the vocational teacher students see the role of ICT and social media in teaching and learning, and how modification of the learning design to include an intensive use of social media in the teacher studies will impact the positions of the teacher students towards it.

2. Methodology

A narrative study was launched that proceeded in two research cycles: First narratives highlighting the motivation of 60 teacher students to use ICT were collected in Spring 2013; Second narratives were collected in November 2013 to assess the effect of the revised learning design that was introduced between the two research cycles. The revised learning environment included the use of Google tools during the teacher studies in autumn 2013: Google+ for communication and Google Drive for collaborative knowledge construction. A two hour guidance how to use these tools supported by special lectures, events and discussion forums was arranged for all students.

Triangulation was used in analyzing the study material in both narrative cycles to assure reliability. Three researchers analysed the material independently and the results were compared. In the first cycle the narratives were read and analysed by each researcher to locate various themes after which the researchers met to discuss their findings. Two major themes were found: skills of using social media and the level of activity of using social media. Using these themes the material could be divided into four groups. A simultaneous process of commenting followed in Google Drive. In this analysis the narratives were scrutinized focusing on the narrators' conceptions of teaching and learning (which is the core context of the study - teacher training). The material, also, contained abundantly emotional comments concerning social media, thus, emotions were chosen as the second focus of scrutiny.

The initial analysis of the second narratives done by three researchers independently revealed motivation to use social media in teaching and learning as the characterizing factor. The other factor used in the analysis was the pedagogical thinking of the narrators.

3. Results

3.1. Results of the study of the first narratives

The results of the study showed that the narratives could be divided into four groups referred to as Outsiders, Insiders, Sceptics and Optimists. (Figure 1)

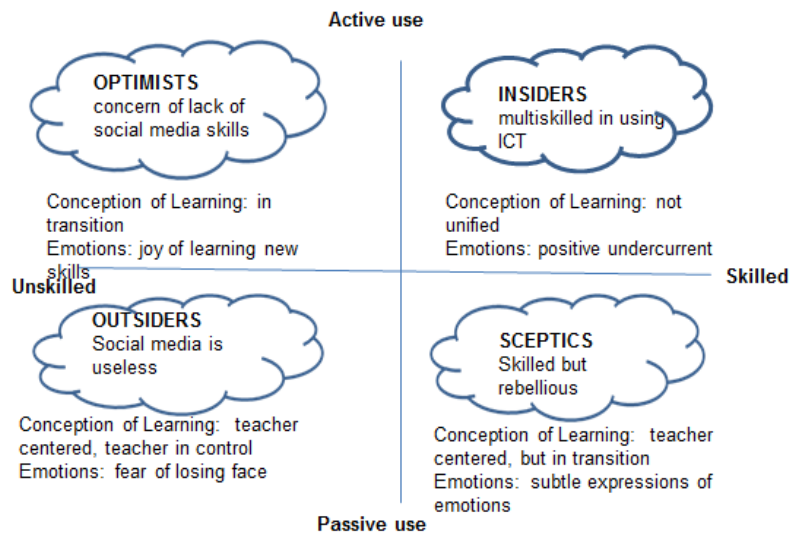


Figure 1. Typification and characterization of the first narratives

The analysis focusing on the concepts of *teaching and learning* showed that *Outsiders* (33 %) saw the teacher in control of learning activities and knowledge. The fear of losing control, if social media is involved, is evident in the narratives. Social media blurred the role of the teacher. Concerning the conceptions of learning *Insiders* (42 %) showed approaches ranging from traditional teacher-centered learning to collaborative student-centered learning process. *Skeptics* (13 %) had a traditional view of teaching: learning is teacher-centered, teacher is strongly in control of teaching and knowledge. The learners lack the ownership of their learning process. However, some indications of a transformation process towards a more student-centered approach could be observed. Teacher identity was clearly under construction. *Optimists* (12 %) were mostly at the very beginning of building their teacher identity. Social media in the teaching context was under reflection but the focus lied on technology rather than on pedagogic issues. Learning was mostly seen teacher-centered.

The expressions of *emotions* observed in the narratives were highly characteristic for each of the four groups. The narratives of *Outsiders* showed anguish. Fear of losing face caused defensive reactions. They explained in colorful language numerous reasons why social media should not be used at all. They felt forced to join social media. Several narrators had earlier challenging experiences of learning how to use ICT technology. Some of the narratives expressed, also, challenges in social contacts in general. Doubts, fears and anxiousness appeared in the narratives of *Skeptics* but in a subtle way. Whether to join social media or not was mostly based on rational reflection of individual motives. Positive attitudes towards social media were connected to narrators' private life. Possession of multiple skills in using ICT technology and/or social media characterized the narratives of *Insiders*. Social media was discussed in a rational manner. Expressions of feelings were subtle. The narratives had a positive undertone. However, some *Insiders* carried a negative burden caused by earlier difficulties in learning to use ICT. This caused frustration, fatigue and melancholy. *Optimists* were concerned about their lack of skills to use social media. Nevertheless, their narratives expressed general optimism and trust in their ability to acquire the necessary skills. Expressions of joy and pride of success and progress in learning new skills was observed.

The narrators were evidently at different stages in the process of building their professional teacher identities. The effectivities [4] of the narrators were in most cases not at a level which would enable them to fully utilize the affordances [5] of social media for teaching and learning.



3.2. Results of the study of the second narratives

A characteristic feature of the second narratives was a clearly lowered threshold to use various social media applications. The narrators had gained experiences, knowledge and skills of using social media during the training period in autumn 2013. The narratives were less emotionally loaded than in the first cycle. Six positions towards the motivation to use social media in teaching and learning were identified: *Cynical*, *Reserved*, *Confident*, *Enthusiasts*, *Pedagogical Reflectors*, and *Change Agents* (Figure 2).

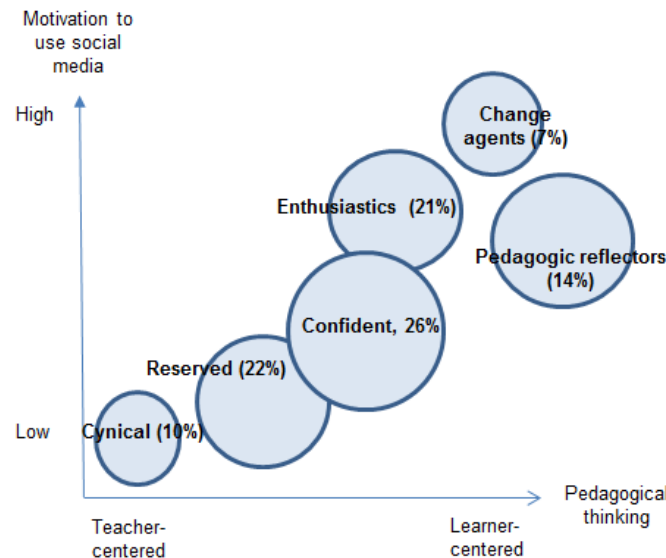


Figure 2. Teacher students' positions towards social media in teaching and learning in the second narratives

Approximately 10 % of the narratives could be classified as *Cynical*. The narrators were critical towards the use of social media both in private and professional contexts. Social media represented a technical challenge which they were unwilling to meet. It was not seen as part of learning environment. The *reserved* (22 %) presented ideas how social media could be used in teaching and learning but simultaneously listed out numerous reasons why it is difficult. Threats and fears were prominent in their thinking and the narratives lacked in-depth reflections on social media and pedagogy.

The *confident* (26 %) expected teaching to change towards a learner-centered approach, and saw social media as a natural part of learning environments in the future. The stories had a positive but not enthusiastic undercurrent towards the use of social media in teaching. The narrators were open and ready to use social media in teaching but were still pedagogically uncertain how to do it.

The *enthusiasts* (21 %) had completely changed their position towards the use of social media as a result of the Autumn 2013 training period. They now saw social media as an integral part of pedagogy and expected web-based learning to increase in the future. The narrators had a relatively low threshold and a lot of enthusiasm to experiment various social media applications.

Pedagogical reflectors (14 %) looked at the social media broadly and from a philosophical point of view. The increasing amount of information and its' fast spreading was seen to inevitably impact learning, too. The focus on teaching was shifting towards a more learner-centered and facilitative direction involving novel pedagogical concepts like exploratory and authentic learning in virtual environments. Social media was understood to give new opportunities for students with limitations in capabilities.

The training period during the autumn 2013 had a radical impact on the *change agents*' (7 %) thinking. The discussions and events during the training were seen as important factors in their teacher-identity building process. In these stories the narrators took a role as facilitators for others, and showed a responsible attitude in



developing web-based learning environments. In these narratives learning environments and social media as part of them were reflected from multiple aspects.

4. Conclusions

This narrative research has given valuable information and understanding for the implementation of a revised learning model for TAOKK with open-source social media included in the teacher training. The teacher students are required to use to social media tools and applications in their teacher studies with the expectation that they will adapt the new knowledge also in their work as teachers. This is TAOKK's response to recent studies and the guidelines of the Finnish government concerning the use of ICT and social media and education.

The research seemed to suggest that a relatively small intervention could produce good results in increasing the use of social media in learning and teaching. The intervention helped the students to overcome the first obstacles for use, and the lively discussions and argumentations during the teacher studies opened a forum for taking in ideas as well as forming personal opinions on the matter.

This narrative research study indicated that all students learned to use social media and the conception of social media widened and became multifaceted. The second narratives contained more facts and rational argumentations than the first narratives as well as less expressions of emotions. The increasing amount of knowledge concerning social media suppressed feelings of fear and threats.

The *Change Agents* experienced the most radical change in their thinking during the research cycles. Although members of this group had good skills of using social media from the beginning some of them had a negative position towards using it in learning and teaching in the first narrative. In the second narratives the positions of these narrators had changed even to the extent that they were willing to facilitate other actors in the use of social media. The *Cynicals* seemed to have remained hostages in their narratives concerning social media in learning and teaching. They lacked the ability to use the affordances offered in the training. This resulted in stagnation in the development of their pedagogical thinking which remained rather traditional and teacher-centered.

The integration of social media into the implementation of the teacher training curriculum is seen vital in TAOKK, and this research provides new information and guidelines for the future development work.

References

- [1] OECD, "Programme for the International sssessment of Adult Competencies," 2013. [Online]. Available: <http://www.oecd.org/site/piaac>. [Retrieved 17 10 2013].
- [2] E. Commission, "Survey of Schools: ICT in Education. Benchmarking, Access, Use and Attitudes to Teachnology in Europe's Schools. Final Study Report.," 2013. [Online]. Available: <https://ec.europa.eu/digital-agenda/sites/digital-agenda/files/KK-31-13-401-EN-N.pdf>. [Retrieved 19 03 2014].
- [3] N. M. Consortium, "NMC horizon Report: 2013 Higher Education Edition," 2013. [Online]. Available: <http://www.nmc.org/publications/2013-horizon-report-higher-ed>. [Retrieved 19 03 2014].
- [4] J. Gibson, "The Theory of Affordances.," tekijä: Perceiving, acting, and knowing: toward an ecological psychology, Hillsdale, NJ., Lawrence Erlbaum, 1977, pp. 66-82.
- [5] D. Norman, The psychology of everyday things., New York: Perseus Books Group, 1988.