A survey of Russian and Kazakh university teachers' pedagogical conceptions, attitudes towards and skills in the use ICT-based learning tools

This survey was carried out in the spring of 2018 as part of the ERASMUS+ Capacity building project co-ordinated by Tampere University of Applied Sciences. The aim of the project is to develop online training modules for sustainable waste management in Russian and Kazakh universities by utilizing the best practices in Europe. The survey was launched before the participants had started planning their online courses. The original idea was to have one survey before and another one after the courses had been created.

The aim of this survey was twofold: 1) to gather information about the participants' online teaching experience and their expectations of the upcoming two-week pedagogical workshop in Tampere, Finland, and 2) to investigate their perceptions of online teaching and learning. The latter aim sought answers to two questions :
How do the participants perceive a successful online course?
What are roles of teacher and student in their imagined course?

Methodology
The data was gathered using a future prediction method with backcasting, where the participants were asked to imagine a time three years ahead when the project would be over and the online programme running successfully and in their answer to describe how this had been achieved. The instruction was the following:

> *I always receive good feedback on my web-based courses and feel that I succeed as an online teacher. I like to teach and facilitate learning online. Students get good results and there are hardly any drop-outs.*
>
> **Describe what must have happened for you to be in this situation three years from now. Use all the remaining space of this document.**

We received answers from 12 participants. Many of the participants did not follow the instruction of backcasting, but instead they described their thoughts on or experiences of online courses in general and/or their need for training. This might have been partly due to language and translation problems. The instruction was translated into Russian but the participants could answer either in English or in Russian. The Russian answers were then translated into Finnish. Thus some data was subjected to translation or interpretation errors in three languages; first in the translation of the instruction from English into Russian and then in the translation of their answers from Russian into Finnish.

Nevertheless, the data gave a clear idea of what the participants were expecting from the two-week pedagogical workshop as many of them discussed their training needs in their answers. To find answers to the two research questions the texts were content analyzed to find recurring themes in the texts. They may not all have followed the instruction but they all discussed online teaching and learning.

After finding the themes a structural analysis was carried out focusing on the verbs that were used in the texts to describe teachers and students actions. It was assumed that these action verbs would reveal something about the participants' perceptions of agency in an online course, that is if there were any differences between how students' actions and teachers' actions were described. The original idea had been to use Greimas' Actantial model for the structural analysis but due to possible translation difficulties this idea was abandoned. To carry out such an analysis would have required an absolute certainty that the expressions in the text were those that the writer had chosen and had not changed or been lost in translation. With verbs only this risk of misinterpretation was considered to be much lower.

Results

The four categories that emerged from the data were 1) participants' own learning needs, 2) materials and technology, 3) teachers' responsibilities, and 4) students' role.

The participants expressed a wish to learn more about online pedagogy and new approaches to teaching and learning, but even more so to learn to use new online tools.

I need to improve my knowledges and skills in using of modern educational technologies and tools.

I need a very purposeful training about what tools of the online learning tools set we can use.

Especially learning to prepare materials in a form of videos was considered important:

I need the the ability to shoot video, the ability to work with audio, the ability to create screencasts, the ability to mount video, audio, screencasts..

It is necessary to alternate the flow of information either verbally or visually, using images and graphs.

It was obvious that the participants had little experience of online teaching and learning but that they were aware of their learning needs and motivated to learn more. However, the above answers also show that the focus is on the content of the courses, the materials and the technology to deliver those materials. This is what often happens with first online courses (Mällinen 2007), teachers tend to transfer the traditional teacher-led classroom practices as such to an online environment. This is captured in one of the participants' description of their role now and in future online:

I can compare myself with theatric actor and I need to learn how to play in TV shows

As shown by previous studies (Mällinen 2007), the first online courses tend to become material heavy and technology led. Based on the participants' answers (see above) there seems to be a risk of this as well. The participants describe their responsibilities as teachers as having to prepare

video lectures, teaching materials, tasks for students and presentations. In addition, they see as their duty to constantly update the contents, give instant feedback and be always available for the students, and also market the courses.

I need to constantly update and develop the online course including presentations, self-study tasks, electronic innovations,...

I'm always available for students to give them answers to additional questions if students didn't find answers on my course.

The latter quote above suggests traditional knowledge delivery where the teacher has all the answers that students are to find. This perception of a teacher's role and responsibilities is also visible in the verbs that the participants chose to describe their actions in their future online courses. As teachers they *equip themselves with, prepare, answer, give, master, use, develop, create, choose, organize, update, compare, build, work, market, be, have, define, organize.* Apart from 'be' and 'have' all of these are action verbs describing concrete activities.

To describe students' role on their courses the participants used the following verbs: *communicate, must feel, continue, take, see, comment.* All in all, mentions about students were much fewer. Although 'communicate' conveys some student participation, overall the verbs are fewer and do not describe action as strongly. 'See' and 'take' could even suggest the intake of information or answering questions. In fact, the context of these verbs were to 'take a test' , 'to fill in a feedback questionnaire', 'to continue studying'.

One of the participants differed in their answers:

Students should actively participate in the process.

We should start with students' needs.

Students ought to know in which forums they could discuss

All of the above statements suggest perceiving students as actors in their own learning process, not merely recipients of information and knowledge.

In general the participants tended to focus more on what they as teachers should do to make their online courses successful, prepare good quality materials and deliver them with appropriate tools. The teachers rather than the students seemed to be the acting agents in most cases, being ' Sage on the Stage', instead of 'Guide on the Side' (quotes from Winter 1993). A successful online course seemed to be perceived as having the learning materials presented in various, interesting ways using modern technology and with tasks for students to solve, to which the teacher knows the right answers and is available to help.

Follow-up

The workshop in Tampere in October 2018 was informed by the survey results and attempted to offer what was expected, learning to make video recordings and to use various online tools, but

also what seemed to be needed, that is, contemporary understanding of teaching and learning, student-centred approaches and constructively aligned design (Biggs 1996) with an emphasis on students' role in the learning process. All of this was also much appreciated by the participants and good results were achieved.

At the moment the plans for the online courses are well on the way, the contents have been agreed on, and the learning objectives have become more concrete and measurable. Now is the time to try to ensure that traditional teacher-led classroom teaching is not transferred online but instead the joy of discovery, control and responsibility of learning are given to students themselves.

References

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