

Measuring Teachers-As-Learners' Digital Skills And Readiness to Study Online for Successful e-Learning Experience

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INTRODUCTION

We are living in the information society and digital competence is one of eight key competences for lifelong learning strategies (European Competence Framework); it is "both a requirement and right of citizens, if they are to be functional in today's society" [1].

The project "Competency based curriculum" is supported by the European Social Fund (ESF) and implemented by the National Centre for Education (NCE) of Latvia. E-learning course modules are to be developed and implemented for the professional development of all teachers in Latvia (pre-primary, primary, lower secondary and upper secondary school) [2]. These e-learning courses will be available as self-directed learning (SDL) courses.

Latvia is facing a challenge – lifelong learning participation rates are very low. According to Eurostat, in 2017 only 7.5% of Latvian adults (age 25–64) participated in any lifelong learning activity, compared to 10.9% in the EU as a whole [3].

For sustainability of the ESF "Competency based curriculum" project, it is important that all teachers take part in e-learning – NCE does not have sufficient funding to organize face-to-face training for more than 35,000 teachers in the country.

Hypothesis. The level of teachers-as-learners' readiness to study online varies significantly depending upon their demographic and professional characteristics – e-learning course design must be adapted to the learners' readiness level and skills to achieve the best possible completion rates.

There has been research on learners' readiness for online learning and on the assessment tools [4]. Teachers-as-learners are different from traditional students; research on teachers-as-learners in the online environment has been limited. [5]

MATERIALS AND METHODS

Theoretical sources and other available research on learners' readiness for online learning and teachers-as-learners were analysed. A self-evaluation survey was developed for teachers based on TOOLS [6] questionnaire. After exploring several options available, this tool was selected because it is open source and easy to replicate, scoring scheme and explanations were also available. According to the authors of TOOLS [7], the measure has a stable and simple structure, the criteria and construct have been validated, and test-retest reliability has been tested.

Teachers from 100 pilot schools in the ESF "Competency based curriculum" project were invited to take part in the survey in November 2018. Within one month, responses from 1092 teachers from all over the country, of all education levels and of all subject areas were received, collected using Microsoft Excel and processed with IBM SPSS® Statistics software Version 20 [8].

To analyse the data, several statistical techniques have been used: descriptive statistics, univariate analysis, T-test, Mann-Whitney test, One-way ANOVA, Post-hoc comparisons, Kruskal-Wallis test and others.

RESULTS

Five summarized variables out of six distributed normally (Kologomorov-Smirnov test <0.01); one summarized variable did not distribute normally.

Statistically significant differences were not found between genders in four of five summarized scores.

Statistically significant differences between subject areas of teachers were found.

Significant differences between age groups were found.

DISCUSSION

Designers of e-learning courses for teachers-as-learners should be mindful of the various levels of readiness for online learning and the various competences and skills of the learners.

Future work:

- Continue analysing the data in search of relationships between the readiness to study online and other professional characteristics of the teachers-as-learners;
- Analyse theoretical sources and other research about e-learning course customisation for teachers-as-learners.

CONCLUSION

This research adds to the theoretical framework of readiness for online learning, especially when analysing teachers-as-learners.

KEYWORDS

Adult learning, e-learning, readiness for online learning, online learning, teacher training, course design.

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