

Teacher and Institutional Characteristics Affecting Teaching Practices in OBL: A Self-Determination Approach

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Abstract: In Flanders (Belgium), the rising popularity of online and blended learning in adult education requires a scientifically validated approach to the issue of quality of online and blended learning. In this research, we will focus on the teaching process in these environments, and how teacher and institutional factors affect teaching practices. Based on the Self-Determination Theory (SDT), we aim to analyse which and how these factors affect teaching practices within an online and blended learning (OBL) context. Furthermore, we add to the SDT conceptual framework a selective number of control variables such as perceived ICT competence and institutional innovation orientation in order to gain further insight into the teaching process. More specifically, we aim at answering the following research questions: (1) How is the satisfaction of psychological needs and motivation of teachers related to teaching practices?, (2) How is the institutional support related to the satisfaction of needs and motivation of teachers?, (3) Are there differences in the teaching practices of teachers in OBL and non-OBL environments?, and (4) How can these differences be explained? Data is collected by means of a cross-sectional survey among teachers in formal adult education. Research instruments have been selected from the SDT-literature with items on motivation, need satisfaction, need support, and teaching practices. Analyses will consist of (M)ANOVA, multivariate regression, exploratory and confirmatory factor analysis, and structural equation modelling. The findings will, firstly, help us direct our future research efforts. Specifically, in future studies we will investigate which and how specific teaching practices affect learner outcomes. In this respect, knowledge on potentially confounding factors is important. Secondly, findings will help to identify key teacher and institutional factors that affect teaching practices. As such, it can inform teachers, educational leaders, professional development designers and others on enhancing the quality of online and blended learning through teacher- and institution-level intervention.

Keywords: self-determination theory, blended learning, teacher characteristics, institutional characteristics, teaching practices

1. Introduction

In Flanders (Belgium), online and blended adult education is gaining in popularity. This is due to a combination of an increasing demand and the resulting favourable governmental subsidising arrangements. Both reasons are related to the specific characteristics of online and blended learning (OBL) environments, mainly flexibility, that make it more suitable for adult learners. However, the implementation of OBL in adult education poses specific challenges, not in the least for teachers. It asks for teaching practices unlike the ones in traditional face-to-face environments. In view of enhancing the quality of OBL environments, it is critical to investigate which specific teaching practices contribute to successful learning, how these teaching practices contribute to successful learning, and which factors affect the use of these teaching practices. Overall, we aim at furthering understanding in these issues. However, in the present study, the focus is on examining the factors affecting (self-perceived) teaching practices. More in particular, we intend to scrutinise the teacher and institutional characteristics that affect teaching practices.

Our approach is based on Self-Determination Theory (SDT; Deci and Ryan 1985; 2000), which posits that enhancing volitional behaviour is key to psychological growth, integrity and well-being. It identifies three psychological needs, namely *autonomy* (i.e., the need to experience agency over behaviour), *competence* (i.e., the need to feel apt in what we are doing) and *relatedness* (i.e., the need to feel valued by others). Secondly, the effect of psychological need satisfaction is mediated by motivation. SDT distinguishes between *autonomous motivation* (i.e., doing something out of volition), and *controlled motivation* (i.e., doing something out of external or internal pressure (Vansteenkiste et al. 2014)) and postulates that autonomous motivation is more beneficial because one is basically doing what he/she wants to be doing. Finally, SDT argues that social contexts can be conducive or unconducive to needs and motivation by providing support for the satisfaction of needs. More

specifically, social contexts that provide *autonomy-support* (i.e., enhance autonomy), *structure* (i.e., enhance competence) and *involvement* (i.e., enhance relatedness) will be more conducive for autonomous motivation (Skinner and Belmont 1993).

2. Research model

In the present study, we focus on the relationship between teacher characteristics, institutional characteristics and teaching practices. More in particular, we investigate which factors, both on the level of the teacher and the institution, affect teaching practices (Figure 1).

2.1 Teacher characteristics: Motivation and need satisfaction

In accordance with the SDT-framework, motivation, need satisfaction, but also a number of control variables are incorporated in our study. Studies have found teaching motivation to be a significant predictor of using need-supportive teaching practices (e.g., Pelletier et al. 2002; Roth et al. 2007). However, SDT postulates that autonomous motivation is furthered by the satisfaction of autonomy, competence, and relatedness. So, in order to grasp the rationale behind motivated behaviour, it is important to also grasp the satisfaction of needs.

Among the control variables, perceived ICT-competence is of specific interest. We investigate whether perceived ICT-competence impedes need satisfaction and motivation. Studies have found perceived ICT-competence to be correlated with the intention to use online learning in instruction (e.g., Valtonen et al. 2015). Furthermore, it is reasonable to hypothesise that, especially for teachers in OBL, perceived ICT-competence is a dimension of their perceived teaching-competence.

2.2 Institutional characteristics: need support

Need satisfaction and motivation can either be facilitated or hindered by the social context through need support (i.e., autonomy-support, structure and involvement). In other words, if teachers are to be motivated and satisfied in their needs, the social context has to support these needs. Studies on work settings have found need-support to be correlated with need satisfaction (e.g., Van den Broeck et al. 2008).

In studies conducted by Zhu and colleagues (e.g., Zhu and Engels 2013), it was found that school culture is correlated with the use of innovative teaching practices. So, besides need-support, the school's orientation towards innovation is possibly an important factor interfering with teachers' motivation and teaching practices.

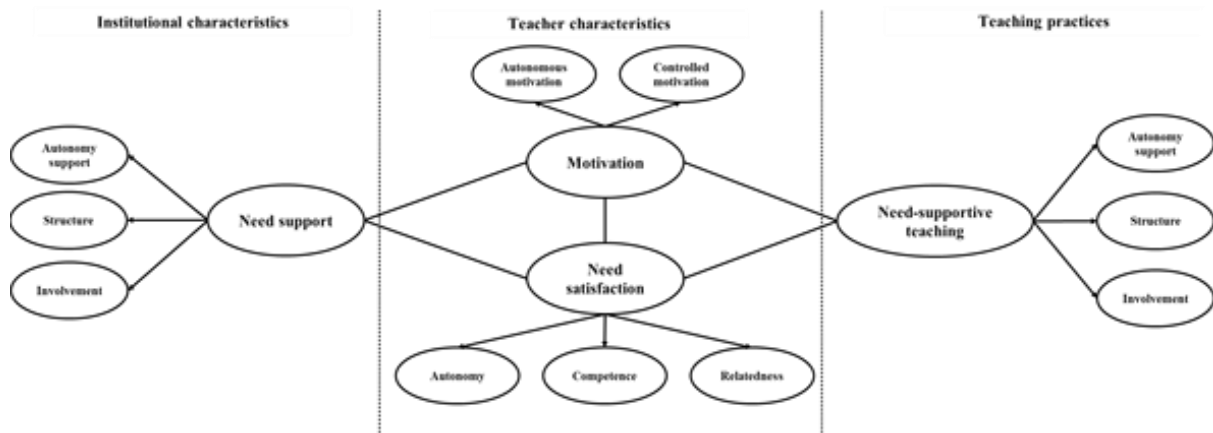


Figure 1: Research model

2.3 Teaching practices

Need-supportive teaching entails autonomy-support, structure, and involvement (Skinner and Belmont 1993). *Autonomy-support* is teaching that is supportive of the development of students' agency in learning, teaching that is supportive of students taking responsibility of their own learning. *Structure*, on the other hand, refers to teaching that facilitates the development of competence by giving information on desired outcomes and how to reach these, monitoring progress, and helping students reaching the objectives. Finally, *involvement* concerns the investment in interpersonal relationships between teachers and peers and peers mutually, and instils a sense of relatedness. Research has found need-supportive teaching to be correlated with, among others, students'

self-regulation (e.g., Vansteenkiste et al. 2012), students' motivation (e.g., Roth et al. 2007), and performance (Black and Deci 2000).

3. Research questions

- How is the satisfaction of psychological needs and motivation of teachers related to teaching practices?
- How is the institutional support related to the satisfaction of needs and motivation of teachers?
- Are there differences in the teaching practices of teachers in OBL and non-OBL environments?
- How can these differences be explained?

4. Research methodology

4.1 Research design and instruments

Data is collected by means of a cross-sectional survey among teachers in OBL and non-OBL environments (May – September 2015). We aim at an effective sample of 400 teachers stratified according to geography (provinces) and educational type (adult education with a focus on secondary, higher professional or teacher education), in order to have a representative sample of teachers in adult education.

Teaching practices are measured with an adapted version of the Teacher as a Social Context (TASC) questionnaire (Wellborn et al. 1988). The original instrument has been trimmed to 18 items in total, 6 per domain (i.e., autonomy-support, structure, and involvement) and adapted to fit our research context. To survey teachers' motivation, the Multidimensional Work Motivation Scale (Gagné et al. 2015) is used. This instrument contains 19 items. In order to assess teachers' need satisfaction, we use the Work-related Basic Need Satisfaction instrument (Van den Broeck et al. 2010). This instrument contains 18 items, 6 items per domain (i.e., autonomy, competence, and relatedness). Finally, to survey need support by the institution, a new instrument, based on the Work Climate Questionnaire (Baard et al. 2004) and TASC, has been developed. The instrument contains 24 items in total, 8 per domain (i.e., autonomy-support, structure, and involvement).

4.2 Analysis

The analyses will comprise several steps. In a first step, we will perform factor analyses, both exploratory and confirmatory, in order to investigate the validity of the research instruments. In a second step, analyses will consist of (M)ANOVA and multivariate regression in order to investigate the relationships among the different empirical concepts. In a final stage, analysis will consist of Structural Equation Modelling in order to test for theoretically implied relationships.

5. In conclusion

Overall, the aim of the research is to gain insight in which and how teaching practices affect learners outcomes in OBL environments. Therefore, in future studies, the focus will shift to the association between teaching and learner outcomes. However, findings from this study will give an understanding of relevant confounding factors (of the teaching process) to be integrated in future studies.

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