

On the determinants of (in)formal learning of teachers : A cross-sectional  
mixed-method study

## **Abstract**

Are our teachers able to keep up with changing insights and knowledge within their domain, are they ready for innovative didactical approaches and technological innovations? According to Dirk van Damme, The Head of the Centre for Educational Research and Innovation (CERI) of the OECD (2014) teachers in Europe do not show sufficient expertise to cope with these challenges. In other words, they have to learn to become better teachers. Given the dynamic environment of schools, investment in human capital is crucial and implies a strategic approach of supporting teachers' continuous professional development. The professional development is both formal and informal in nature, and research on teachers' informal learning is more limited (Hoekstra, Brekelmans et al., 2009). However, various studies suggest that informal learning is the most used type of learning in the workplace (e.g. Hicks, Bagg, Doyle & Young, 2007; Skule & Reichbron, 2002).

This study will investigate the teachers' (in)formal learning. Questionnaires will examine relations between teachers' learnings and their antecedents (e.g. perceived job security, learning climate, teachers' experience). Furthermore, interviews will examine the reason of these relations between the variables under study. A special focus will be placed on the characteristics of informal learning through different examples.

*Keywords: mixed-method research, teacher professional development, informal learning, learning and social interaction, SIG14 learning and professional development*

## **1. Aim of the study**

This study aims to explore the antecedents of teachers' formal and informal learning. Formal learning refers to structured training and traditional planned methods (Conlon, 2004), while informal learning can be defined as “any activity involving the pursuit of understanding, knowledge or skill which occurs outside the curricula of educational institutions, or the courses or workshops offered by educational or social agencies” (Livingstone, 1999; p. 2). In that way, informal learning can be defined as having two subdimensions: social (i.e. information, help and feedback exchange with colleagues; Froehlich, Beausaert, & Segers, 2015) and individual (e.g. reading, reflection; Clough, Jones, McAndrew & Scanlon, 2008). Examined antecedents are individual, such as teacher's professional years of experience, age and perceived job security; or contextual, such as school's socio-economic level, school's network and learning climate.

In the literature, it is argued that most effective learning takes place in a social context, on the workplace with colleagues (Froehlich et al., 2015). Therefore it is hypothesized that contextual antecedents will show stronger relationships with teachers' formal and informal learnings than individual antecedents. Next, exploratory interviews will show why teachers want to learn in their job. So far, most research did not make a clear distinction between different types of informal learning. Therefore, the present research project is quite innovative since it studies antecedents of both formal and informal learnings of teachers and makes the distinction between social and individual informal learning.

## 2. Method

Questionnaires will be collected from 200 primary and 200 secondary school teachers, in the French Community of Belgium.

Table 1 gives an overview of the variables and their measures.

Table 1. Variables and measures

| Variable                                            | Authors                                                                         | Example question                                                                                                                           |
|-----------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Formal learning                                     | e.g. Froehlich, Beausaert, Segers & Gerken (2014)                               | Number of hours and type of voluntary and mandatory training per year                                                                      |
| Informal learning                                   | Froehlich, Beausaert & Segers (2015)<br><br>+ New items for individual learning | I seek help upon my colleagues to deal with a problem<br><br>When I'm faced with a problem, I read to learn by my-self how to deal with it |
| Job security                                        | Adapted from Watt & Richardson (2007)                                           | My job as teacher will be a secure job                                                                                                     |
| Learning climate                                    | Tobin, Muller & Turner (2006)                                                   | In our school district, mistakes are seen as learning opportunities                                                                        |
| Socio-economic level of school and school's network | /                                                                               | What's the name of the school(s) where you work<br><br>N.B.: SE level and network are accessible by the school's name to the researcher    |
| Experience and chronological age                    | /                                                                               | Two open questions                                                                                                                         |

In order to test the hypotheses path analyses will be conducted in AMOS, version 16.0.

Interviews will be conducted with 50 primary and secondary school teachers, in the French Community of Belgium. Each semi-structured interview will last approximatively 50 minutes and are chosen to ease conversation through initial prompting questions. It will begin by a general introduction about research objectives, arrangement of the interview and clarification of the meaning of specific words (such as “job security”). Primary questions will be about teachers’ learning and the way they learn in their everyday work life: “How do you continue learning some parts of your job? By which mean?”. According to the answers, others guide-questions will be asked to conduct the interview. The interviews will go beyond statistics by looking into formal and informal learning and the reason why teacher use them. In addition, the characteristics of informal learning will be analyzed more precisely by studying different examples discussed by the interviewees.

### **3. Findings**

Questionnaires and interviews will be collected between December 2016 and March 2017. Data will be analyzed by April 2017. The results will be presented at the EARLI 2017 Conference.

### **4. Relevance and societal impact**

Today schools and their teachers have to deal with a variety of challenges. First, teachers need to adopt technological innovations such as smart boards. Second, didactical approaches as well as course manuals are evolving quickly since knowledge develops rapidly. Third, schools need to respond to accountability pressures from policy makers which affect teachers’ work. Additionally, nowadays, teachers are working longer and are more at risk of burnout than they

used to (Beausaert, Sierens, Soenens, & Dochy, 2009). Also the turnover rate of young teachers, leaving the teaching profession within the first five years of work is higher than ever (OECD, 2004). In order to be able to deal with these challenges, teachers have to learn and evolve in their work.

In this respect, learning can be seen as key to optimizing teachers' working life in the long run. In general, a distinction is made between formal and informal learning.

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