

## **Supporting the Professional Teacher**

**PDP design, support from the supervisor and  
organisational conditions**

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# Chapter 1

## General Introduction

## Introduction

In this 21st century, society has changed from a post-industrial society into a complex knowledge-based society that highly depends on the use of technology for communication and knowledge dissemination. Developing knowledge and expertise is essential for organisations to quickly respond to changes to compete with other organisations. These organisations need professionals who continuously develop themselves. Since the global knowledge society has implications for professionals in profit and non-profit organisations and institutions, schools cannot ignore these implications. The knowledge society makes high demands on educational quality, for example, applying different approaches to learning for diverse students, preparing them for lifelong learning, and using ICT technology (Darling-Hammond & Snyder, 2000; Fenwick, 2003; Martens, 2010; Runhaar, Sanders, & Yang, 2010). School organisations must therefore become professional organisations that promote and support the professional development of teachers (Guskey, 2000) and teachers themselves are expected to take charge of their own learning. As a consequence, school organisations need to invest in the professional development of teachers.

In the Netherlands, the government has developed several initiatives to promote teachers' development. The government introduced the Education Professions Act which states that employees in education have to maintain, develop and record their competences (Ministerie van Onderwijs, Cultuur en Wetenschap, 2005). Furthermore, a new job structure was introduced to provide teachers with more career opportunities and a better salary (Ministerie van Onderwijs, Cultuur en Wetenschap, 2007) and from 2012 teachers can apply for a grant to enhance professional development (Ministerie van Onderwijs, Cultuur en Wetenschap, 2010). Therefore, schools have to invest in their human resource development policy to maintain and stimulate the professional development of teachers by using instruments as qualification profiles, performance interviews, and Professional Development Plans (Landelijk Platform Beroepen in het Onderwijs, [LPBO] 2010).

For schools to become a professional organisation, time and effort needs to be invested to support teachers' learning processes according to recent insights on professional development (e.g. Burbank & Kauchak, 2003; Glazer & Hannafin, 2006; Kwakman, 2003), which means that they improve themselves, adjust their behaviour, and innovate. An instrument that may support these processes is the Professional Development Plan (PDP). This instrument enables teachers to take charge of their professional development by becoming aware of their current performance and formulating their own learning agenda (Beausaert, Segers, Van der Rijt, & Gijsselaers, 2011c). The use of a PDP to support teachers' professional development



in a sustainable way was the starting point for the research reported in this dissertation.

This general introduction starts with recent insights into professional development and how a PDP can support this development. Subsequently, the problem area is explained and we elaborate on our theoretical framework. This results in the formulation of research questions. Then, an overview of the chapters is provided in which we investigated these research questions and provide practical recommendations.

### **Recent insights into professional development**

Traditionally, teachers attend courses, training and conferences, and read professional magazines for their professional development. This kind of schooling is primarily characterised by transmission of knowledge and is intended to refresh and update existing knowledge and skills (Glazer & Hannafin, 2006; Kwakman, 2003). Recent insights on learning and professional development indicate that this kind of professional development does not meet expectations because it often does not take into account individual learning needs and the context in which teachers work. These insights emphasise that professional development should be continuous, deliberate and contextualised in the working practice (Flint, Kurumada, Fisher, & Zisook, 2011; Glazer & Hannafin, 2006; Kwakman, 2003).

First, it is argued that professional development is a continuous process (Scribner, 1999) in which a teacher seeks for possibilities to improve daily working practice (Fraser, Kennedy, Reid, & McKinney, 2007). Ever-changing requirements from society and ongoing developments, in for example the area of ICT, urge teachers to develop themselves continually (Kreijns, Vermeulen, Kirschner, Van Buuren, & Van den Acker, in press). Latest developments in educational science and practice require from teachers to innovate their lessons by differentiating between (groups of) students, using the latest ICT technology and using varying teaching methods to provide attractive education (Darling-Hammond & Snyder, 2000; Runhaar et al., 2010; Smylie, 1995). Continuous development is therefore not only desirable but it is a necessity.

Second, several authors argued that learning should have a pro-active character (Burbank & Kauchak, 2003; Hargreaves, 1994; Putnam & Borko, 2000). This learning is perceived as a deliberate learning process in which learning activities are undertaken intentionally to improve practice (Van de Wiel, Szegedi, & Weggeman, 2004). The concept of self-regulated learning depicts this deliberate learning as a cyclical process, in which learning goals are set and activities are planned to attain these goals (Imhof & Picard, 2009; Zimmerman, 2000). Reflection has an important role in this learning process. By reflecting a person thinks systematically about experiences

in order to gain a better understanding of his practice and to foresee possibilities for change and development (Mansvelder-Longayroux, 2006; Orland-Barak, 2005; Tigelaar, Dolmans, De Grave, Wolfhagen, & Van der Vleuten, 2006).

Third, researchers suggested that learning should be situated in the context and related to the working practice. Learning activities are more effective when they are characterised by clear links with daily practice in which problems, questions, and solutions are integrated (Brown, Collins, & Duguid, 1989; Glazer & Hannafin, 2006; Putnam & Borko, 2000). According to Kwakman (2003) school organisations have an important role in providing a rich learning environment for teachers; in order for teachers to learn in and from practice, the work environment should be facilitating and supporting (Hargreaves, 1994; Kwakman, 2003).

### **PDPs and portfolios**

Portfolios and PDPs are increasingly used as a tool for supporting self-regulating learning to promote development and growth (Zeichner & Wray, 2001). Portfolios are often used in educational settings in which they are introduced as an assessment tool to evaluate student teachers' performance, to support learning and reflection or career guidance (Mansvelder-Longayroux, Beijaard, & Verloop, 2007; Mittendorff, Jochems, Meijers, & den Brok, 2008; Wolf, 1989). In work settings, a PDP is a frequently used instrument. A PDP is that part of a portfolio in which teachers diagnose their performance, consider school's requirements and own interests, formulate learning goals and make a plan of action (Bullock, Firmstone, Frame, & Bedward, 2007; Evans, Ali, Singleton, Nolan, & Bahrami, 2002). A PDP can have several purposes including the assessment of teachers, the use as a showcase of competences and for promoting professional development (Beusaert, Segers, & Gijssels, 2011a; Smith & Tillema, 2003; Wolf & Dietz, 1998).

Research on PDPs emphasises the value of using a PDP for professional development. It makes teachers more aware of their performance, provides them focus and commitment to their learning (Austin, Marini, & Desroches, 2005; Fenwick, 2003) and promotes the dialogue between teachers and supervisors about professional development (Smith & Tillema, 2001). Often a PDP is part of a one-year cycle in which new goals and plans are formulated. After a year, these goals and plans are evaluated with a supervisor and new goals and plans are formulated. Though there is a distinction between PDP and portfolio the two terms are often used interchangeably in literature. In this dissertation we use the word PDP.

## Problem Description

Researchers often emphasise the value of using a PDP, though evidence on the effectiveness of using a PDP is scarce and ambivalent (Beausaert et al., 2011c; Driessen, Van Tartwijk, Van der Vleuten, & Wass, 2007). This implies that it is not self-evident that implementing a PDP will lead to successful professional development. Indeed, a number of studies showed mixed evidence regarding the PDPs' effectiveness and users' perspectives and attitudes towards making a PDP (Austin et al., 2005; Beausaert, Segers, & Gijsselaers, 2011b; Driessen, Van Tartwijk, Overeem, Vermunt, & Van der Vleuten, 2005). A PDP did not always have the effect it was aimed for. For instance, research by Mansvelder-Longayroux et al. (2007) and Orland-Barak (2005) showed that reflection written down in portfolios was merely focused on describing what teachers had done, instead of trying to understand what factors underlie their performance. Only when it is understood which factors underlie successful and unsuccessful performance it might lead to more meaningful goals and a plan of action which lead to improvement in practice. Additionally, Van Eekelen, Vermunt, and Boshuizen (2006) indicated that teachers have difficulty in formulating learning goals and plans of action.

These above mentioned studies suggest that guidance can be helpful for teachers in reflecting on performance, and formulating learning goals and plans of action (e.g. Driessen et al., 2007; Liu, 2009).

The implementation of a PDP in schools is often rather new and teachers might have their own beliefs about its usefulness for professional development (Kelchtermans, Ballet, Peeters, and Verckens (2009). Indeed studies revealed that some PDP-users were sceptical about its implementation (e.g. Austin et al., 2005; Leggett & Bunker, 2006). This could be explained by differences between teachers' beliefs about using such an instrument (Imhof & Picard, 2009). Also, the way organisations facilitate professional development and the use of a PDP might explain this sceptical attitude (Austin et al., 2005; Evers, 2012; Geijssels, Sleegers, Stoel, & Krüger, 2009; Hargreaves, 1994). We therefore investigated the beliefs of teachers regarding the use of a PDP for their professional development and the organisational conditions which might facilitate the use of a PDP.

## Theoretical Framework

Although previous research already pointed out that for an effective PDP some conditions should be met, such as guidance (Austin et al., 2005; Imhof & Picard, 2009; Smith & Tillema, 2003; Wade & Yarbrough, 1996), we especially aimed to focus on how support should be adjusted to become more effective. To improve

this support it is crucial to know more about the aspects in which teachers need guidance and to get a better grip on teachers' beliefs about using a PDP and how the school organisation can facilitate the use of a PDP. Therefore, in this dissertation we focus on:

- Guidance
- Teachers' beliefs about using a PDP
- Organisational conditions

The theoretical framework regarding these aspects is explained in the following subsections.

### **Guidance**

Several authors pointed out that it is important to have clear guidelines and support from a coach, supervisor or colleagues to help teachers in filling in a PDP (Driessen et al., 2005; Liu, 2009; Mansvelder-Longayroux et al., 2007). A coach, supervisor or colleagues can stimulate teachers to think more thoroughly about their performance and professional development process, to gain more insight and to become aware of the competences that need improvement (Bullock et al., 2007). A study of Austin et al. (2005) revealed, for example, that facilitated discussions with colleagues gave PDP users more insight into their professional development and the role of a PDP in that process.

To get the most out of this support it is important to investigate what elements should be included in a PDP, which guidelines are needed to support teachers and to find out the exact needs for guidance from a coach or supervisor.

### **Teachers' beliefs about using a PDP**

The guidance of teachers in using a PDP should be adjusted to their beliefs about using a PDP and their characteristics. These beliefs of teachers have not been systematically researched before although they might exert a great influence on teachers' choice to use a PDP or not to use a PDP and clarify the reasons for their choices. According to Kelchtermans, Ballet, Peeters, and Verckens (2009), teachers might have their own frame of reference that determines how they make sense and act on the school policy or development in work. Spillane, Reiser, and Reimer (2002) explained this sense-making as a comprehension process based on individual's prior knowledge, beliefs and experiences, the context in which the policy is implemented and the representation of the policy. They argue that people are willing to change, provided their knowledge and experiences do not interfere with the process of understanding the new policy. To understand the issues mentioned here we used the theory of planned behaviour (TPB; Ajzen, 1991; Fishbein & Ajzen, 2010) in our

research to identify teachers' beliefs about using a PDP and to reveal relevant individual characteristics. TPB is an often used cognitive behavioural model that is particularly oriented towards explaining, predicting and understanding people's intention to perform specific behaviour. With this model it is possible to identify the beliefs that determine the intention (e.g. willingness or reluctance) to perform a particular behaviour or not (Fishbein & Ajzen, 2010). In this dissertation the behavioural intention concerns the use of a PDP. The beliefs about using a PDP might in turn be dependent on teachers' characteristics, for example their motives to professionalize themselves (Mansvelder-Longayroux et al., 2007; Van Eekelen et al., 2006).

### **Organisational conditions**

Apart from the individual beliefs, knowledge and experience that determine how teachers make sense of using a PDP, the context in which it is implemented plays an important role as well. The context is a broad concept and includes the national and political context, the organisation and the department or team in which the teacher works (Spillane et al., 2002). This dissertation concentrates on the context of teachers, more in particular, the school environment, including management, the director and supervisor, and colleagues. On the organisational level, management determines the vision, policy and support. The way in which a policy is implemented has a profound influence on how teachers interpret the policy and act accordingly. For example, in a research of Wade and Yarbrough (1996), some student teachers were confused and frustrated about the implementation of a PDP because they misunderstood the purpose and the process of constructing a PDP.

### **Research questions**

The research presented in this dissertation focused on the following main research question:

*How can teachers be best supported when using a PDP in the context of professional development? (Practical recommendations are presented in Chapter 5)*

Considering the aspects formulated in the previous section (and which need attention to improve the support of the PDP), we formulated the following three research questions:

- 1: What is the effect of guidance on the quality of PDPs? (Chapter 2)

- 2: What groups of teachers with similar beliefs about using a PDP and characteristics can be identified? (Chapter 3)
- 3: Which organisational factors contribute to a successful implementation of a PDP? (Chapter 4)

## Structure of the Dissertation

To answer the above mentioned research questions, three explorative studies were conducted and presented in Chapter 2 to 4. The results of these studies were put together in the 5<sup>th</sup> Chapter and formed the basis for the formulation of a set of practical recommendations for schools when they implement a PDP and to support teachers in completing one.

Chapter 2 answers the first research question: *What is the effect of guidance on the quality of PDPs?* To that end, we provided more insight into the constituent elements of a PDP and studied the influence of guidance on the quality of a PDP. This study investigated whether teachers, who were guided, completed PDPs with a higher quality than teachers who were not guided. To answer the research question an assessment tool was developed to compare the quality of the PDPs of teachers who were guided (workshops) versus teachers who were not guided. The tool was based on the constituent elements of a PDP defined for this research. Although the results indicated that the guidance (i.e. the workshops) have led to higher quality PDPs, it became clear that only a small number of teachers completed the PDP. This was a trigger to find out more about what beliefs teachers have about using a PDP and how school organisations can promote and support the professional development when they use a PDP.

Chapter 3 gives the answer to the second research question: *What groups of teachers with similar beliefs about using a PDP and characteristics can be identified?* We explored teachers' beliefs about using a PDP and teachers' characteristics by conducting interviews with 41 teachers from five different schools. The interviews were qualitatively analysed to get a better understanding of teachers' beliefs and how these beliefs are related to their characteristics. Based on this analysis, clusters of teachers, with similar beliefs and characteristics, were identified so that interventions and guidance can be adjusted to these clusters. To elicit these clusters, a hierarchical cluster analysis was performed.

The third research question is answered in chapter 4: *Which organisational factors contribute to a successful implementation of a PDP?* We conducted a case study research by interviewing teachers, supervisors and management from seven school teams. Each school team was designated as one case. To identify the organisational factors that are important for a successful implementation we analysed the

cases on three types of organisational factors; implementation factors, social support factors, and vision and strategy. To determine how successful the cases were we arranged the cases from cases with mainly positive teachers to cases of teachers with more negative beliefs about using a PDP. Thus, we compared teachers with more positive beliefs with teachers having more negative beliefs to determine which factors might contribute to a successful implementation.

Chapter 5 introduces a systematic approach for supporting teachers' professional development by using a PDP. The aim of this chapter was to integrate the results of the previous chapters in a systematic way (in terms of practical recommendations) to support teachers' individual learning process by using a PDP. The chapter begins by describing the recent views on professional development that characterise the individual learning process. These views formed the starting point for developing an approach to support the individual learning process by using a PDP. Figure 1.1 shows the model we used to structure this approach. The inner level shows how the individual learning process is supported by a PDP design. The middle level represents the support from a supervisor. The outer level concerns organisational conditions essential for a successful PDP. When following these recommendations schools can create a learning environment and give teachers the opportunity to take charge of their development, improve their working practice and thereby contribute to school development.

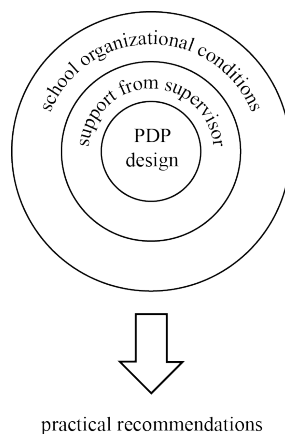


Figure 1.1 Three levels of support

Finally, Chapter 6 provides an overview of the main findings and a reflection on the conclusions regarding the main question; *How can teachers be best supported when using a PDP in the context of professional development?* It also presents theoretical and practical implications and directions for future research.

## References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Austin, Z., Marini, A., & Desroches, B. (2005). Use of a learning portfolio for continuous professional development: A study of pharmacists in Ontario (Canada). *Pharmacy Education*, 5(3/4), 175–181. doi:10.1080/15602210500282434
- Beausaert, S. A. J., Segers, M., & Gijsselaers, W. (2011a). Using a personal development plan for different purposes: its influence on undertaking learning activities and job performance. *Vocations and Learning*, 4(3), 231–252. doi:10.1007/s12186-011-9060-y
- Beausaert, S., Segers, M., & Gijsselaers, W. (2011b). The use of a personal development plan and the undertaking of learning activities, expertise-growth, flexibility and performance: the role of supporting assessment conditions. *Human Resource Development International*, 14(5), 527–543. doi:10.1080/13678868.2011.620782
- Beausaert, S., Segers, M. R., Van der Rijt, J., & Gijsselaers, W. H. (2011c). The use of Professional Development Plans (PDPs) in the workplace: A literature review. In P. Van den Bossche, W. Gijsselaers, & R. Milter (Eds.), *Building learning experiences in a changing world* (pp. 235–266). Dordrecht: Springer.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32–42. doi:10.3102/0013189X018001032
- Bullock, A., Firmstone, V., Frame, J., & Bedward, J. (2007). Enhancing the benefit of continuing professional development: a randomized controlled study of personal development plans for dentists. *Learning in Health and Social Care*, 6(1), 14–26. doi:10.1111/j.1473-6861.2007.00142.x
- Burbank, M. D., & Kauchak, D. (2003). An alternative model for professional development: Investigations into effective collaboration. *Teaching and Teacher Education*, 19, 499–514. doi:10.1016/S0742-051X(03)00048-9
- Darling-Hammond, L., & Snyder, J. (2000). Authentic assessment of teaching in context. *Teaching and Teacher Education*, 16(5), 523–545. doi:10.1016/S0742-051X(00)00015-9
- Driessen, E. W., Van Tartwijk, J., Overeem, K., Vermunt, J. D., & Van der Vleuten, C. P. M. (2005). Conditions for successful reflective use of portfolios in undergraduate medical education. *Medical Education*, 39(12), 1230–1235. doi:10.1111/j.1365-2929.2005.02337.x
- Driessen, E., van Tartwijk, J., van der Vleuten, C., & Wass, V. (2007). Portfolios in medical education: why do they meet with mixed success? A systematic review. *Medical Education*, 41(12), 1224–1233. doi:10.1111/j.1365-2923.2007.02944.x
- Evans, A., Ali, S., Singleton, C., Nolan, P., & Bahrami, J. (2002). The effectiveness of personal education plans in continuing professional development: an evaluation. *Medical Teacher*, 24(1), 79–84. doi:10.1080/00034980120103478
- Evers, A. (2012). *Teachers' professional development at work and occupational outcomes: An organisational and task perspective* (Unpublished doctoral dissertation). Scientific Centre for Teacher Research of Open University, Heerlen.
- Fenwick, T. J. (2003). Professional Growth Plans: Possibilities and Limitations of an Organizationwide Employee Development Strategy. *Human Resource Development Quarterly*, 14(1), 59–77. doi:10.1002/hrdq.1050
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior*. New York: Psychology press.
- Flint, A. S., Kurumada, K. S., Fisher, T., & Zisook, K. (2011). Creating the perfect storm in professional development: the experiences of two American teachers and a university research team. *Professional Development in Education*, 37(1), 95–109. doi:10.1080/19415250903425502
- Fraser, C., Kennedy, A., Reid, L., & McKinney, S. (2007). Teachers' continuing professional development: contested concepts, understandings and models. *Journal of In-Service Education*, 33(2), 153–169. doi:10.1080/13674580701292913



- Geijssel, F., Slegers, P., Stoel, R., & Krüger, M. (2009). The effect of teacher psychological and school organizational and leadership factors on teachers' professional learning in Dutch schools. *The Elementary School Journal*, 109(4), 406–427. doi:10.1086/593940
- Glazer, E. M., & Hannafin, M. J. (2006). The collaborative apprenticeship model: Situated professional development within school settings. *Teaching and Teacher Education*, 22(2), 179–193. doi:10.1016/j.tate.2005.09.004
- Guskey, T. (2000). *Evaluating professional development*. Thousand Oaks: Corwin press.
- Hargreaves, D. (1994). The new professionalism: The synthesis of professional and institutional development. *Teaching and Teacher Education*, 10(4), 423–438. doi:10.1016/0742-051X(94)90023-X
- Imhof, M., & Picard, C. (2009). Views on using portfolio in teacher education. *Teaching and Teacher Education*, 25, 149–154. doi:10.1016/j.tate.2008.08.001
- Kelchtermans, G., Ballet, K., Peeters, E., & Verckens, A. (2009). Goede praktijkvoorbeelden als hefboom voor professionalisering? Een explorerend onderzoek naar determinanten en kritische kenmerken. [Good examples from practice as a leverage for professional development? An exploratory study into determinants and relevant characteristics]. *Pedagogische Studiën*, 86(3), 161–184.
- Kreijns, K., Vermeulen, M., Kirschner, P. A., Van Buuren, H., & Van den Acker, F. (in press). Adopting the integrative model of behavior prediction to explain teachers' willingness to integrate ICT in their pedagogical practices: A perspective for research on teachers' ICT usage in pedagogical practices. *Technology, Pedagogy and Education*.
- Kwakman, K. (2003). Factors affecting teachers' participation in professional learning activities. *Teaching and Teacher Education*, 19(2), 149–170. doi:10.1016/S0742-051X(02)00101-4
- Landelijk Platform voor Beroepen in het Onderwijs [National Platform for Professions in Education]. (2010). *Bekwaamheidseisen in de school [Competences in the school]*. Retrieved from: <http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2010/07/19/bekwaamheidseisen-in-de-school-op-weg-naar-versterking-beroepskwaliteit-leraren.html>
- Leggett, M., & Bunker, A. (2006). Teaching portfolios and university culture. *Journal of Further and Higher Education*, 30(3), 269–282. doi:10.1080/03098770600802297
- Liu, P. (2009). Portfolio development for in-service teachers to learn the new Chinese language teaching pedagogy in Hong Kong primary schools. *Professional Development in Education*, 35(2), 195–210.
- Mansvelder-Longayroux, D. D. (2006). *The learning portfolio as a tool for stimulating reflection by student teachers* (Doctoral dissertation). Retrieved from <https://openaccess.leidenuniv.nl>.
- Mansvelder-Longayroux, D., Beijard, D., & Verloop, N. (2007). The portfolio as a tool for stimulating reflection by student teachers. *Teaching and Teacher Education*, 23(1), 47–62. doi:10.1016/j.tate.2006.04.033
- Martens, R. L. (2010). *Zin in onderzoek. Docentprofessionalisering*. Oratie. Heerlen: Open Universiteit in the Netherlands.
- Ministerie van Onderwijs, Cultuur en Wetenschap [Ministry of Education, Culture, and Science]. (2005). *Blijf groeien. Wet op Beroepen in het Onderwijs [Keep learning]. Education Professions Act*. Retrieved from <http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2005/10/14/blijf-groeienwet-op-de-beroepen-in-het-onderwijs.html>.
- Ministerie van Onderwijs, Cultuur en Wetenschap [Ministry of Education, Culture, and Science]. (2007). *Actieplan. Leerkracht van Nederland [Action plan. Teacher of the Netherlands]*. Retrieved from <http://www.rijksoverheid.nl/documenten-en-publicaties/brochures/2007/11/23/brochure-actieplan-leerkracht-van-nederland.html>
- Ministerie van Onderwijs, Cultuur en Wetenschap [Ministry of Education, Culture, and Science]. (2010). *Nota werken in het onderwijs 2011. [Memo working in education 2011]*. Retrieved from <http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2010/09/21/nota-werken-in-het-onderwijs-2011.html>.

- Mittendorff, K., Jochems, W., Meijers, F., & den Brok, P. (2008). Differences and similarities in the use of the portfolio and personal development plan for career guidance in various vocational schools in The Netherlands. *Journal of Vocational Education and Training*, 60(1), 75-91.
- Orland-Barak, L. (2005). Portfolios as evidence of reflective practice: What remains "untold." *Educational Research*, 47(1), 25-44. doi:10.1080/0013188042000337541
- Putnam, R. T., & Borko, H. (2000). What Do New Views of Knowledge and Thinking Have to Say About Research on Teacher Learning? *Educational Researcher*, 29(1), 4-15. doi:10.3102/0013189X029001004
- Runhaar, P., Sanders, K., & Yang, H. (2010). Stimulating teachers' reflection and feedback asking: An interplay of self-efficacy, learning goal orientation, and transformational leadership. *Teaching and Teacher Education*, 26(5), 1154-1161. doi:10.1016/j.tate.2010.02.011
- Scribner, J. P. (1999). Professional Development: Untangling the influence of work context on teacher learning. *Educational Administration Quarterly*, 35(2), 238-266. doi:10.1177/0013161X99352004
- Smith, K., & Tillema, H. (2001). Long-term Influences of Portfolios on Professional Development. *Scandinavian Journal of Educational Research*, 45(2), 183-203. doi:10.1080/00313830120052750
- Smith, K., & Tillema, H. (2003). Clarifying different types of portfolio use. *Assessment & Evaluation in Higher Education*, 28(6), 625-648. doi:10.1080/0260293032000130252
- Smylie, M. A. (1995). Teacher learning in the workplace: Implications for school reform. In T. R. Guskey & M. Huberman (Eds.), *Professional development in education* (pp. 92-113). New York: Teachers college press.
- Spillane, J., Reiser, B., & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research*, 72(3), 387-431. doi:10.3102/00346543072003387
- Tigelaar, D., Dolmans, D., De Grave, W., Wolfhagen, I., & Van der Vleuten, C. (2006). Portfolio as a tool to stimulate teachers' reflections. *Medical Teacher*, 28(3), 277-282. doi:10.1080/01421590600607013
- Van Eekelen, I., Vermunt, J., & Boshuizen, H. (2006). Exploring teachers' will to learn. *Teaching and Teacher Education*, 22(4), 408-423. doi:10.1016/j.tate.2005.12.001
- Van de Wiel, M., Szegedi, K., & Weggeman, M. (2004). Professional learning: Deliberate attempts at developing expertise. In H. Boshuizen, R. Bromme, & H. Gruber (Eds.), *Professional learning: Gaps and transitions on the way from novice to expert* (pp. 181-206). Dordrecht: Kluwer.
- Wade, R. C., & Yarbrough, D. B. (1996). Portfolios: A tool for reflective thinking in teacher education? *Teaching and Teacher Education*, 12(1), 63-79. doi:10.1016/0742-051X(95)00022-C
- Wolf, D. (1989). Portfolio assessment: Sampling student work. *Educational Leadership*, 46(7), 35-39.
- Wolf, K., & Dietz, M. (1998). Teaching portfolios: Purposes and possibilities. *Teacher Education Quarterly*, 25(1), 9-22.
- Zeichner, K., & Wray, S. (2001). The teaching portfolio in US teacher education programs: What we know and what we need to know. *Teaching and Teacher Education*, 17(5), 613-621. doi:10.1016/S0742-051X(01)00017-8
- Zimmerman, B. J. (2000). Attaining self-regulation. A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeichner (Eds.), *Handbook of self-regulation* (pp. 13-39). San Diego, CA: Academic Press

## Chapter 2

# Teachers' professional development: an analysis of the use of Professional Development Plans in a Dutch school

Professional development of teachers has become an essential condition in today's knowledge-based society to sustain the quality of teaching. Therefore, the Dutch government promotes this professional development. As a result, Professional Development Plans (PDPs) are increasingly used to stimulate and support the professional development of teachers. A PDP is used to encourage teachers' professional development and structure their development path in terms of learning goals and plans of action. However, it cannot be taken for granted that teachers will formulate high-quality PDPs on their own. Previous research suggests that guidance<sup>1</sup> is important in supporting teachers' development. This study examined the effects of guidance on the quality of PDPs. An experimental group of Dutch teachers from a school for secondary vocational education was offered a series of workshops whereas the control group did not have such guidance. Both groups had to fill out a simple structured PDP. To determine the quality of the PDPs, an assessment tool was developed. The results suggest that guided teachers are more capable of identifying their strengths and in formulating learning goals. The guided teachers' PDPs also showed more consistency. No differences were found regarding the action plans which teachers described.

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<sup>1</sup> In this chapter, the term guidance is used instead of support. In the other chapters, we preferred the term support.

## Introduction

In the Netherlands, the educational labour market is challenged by quantitative as well as qualitative shortages (Ministerie van Onderwijs, Cultuur en Wetenschap, 2007). Therefore, the Dutch government introduced the Education Professions Act in 2004 (wet op Beroepen In het Onderwijs, BIO). According to this law, teachers are obligated to maintain and develop their professional abilities and record the process in a portfolio. On the basis of this law, the Dutch foundation for the quality of teachers (Stichting Beroepskwaliteit Leraren, SBL) defined a list of competences that are needed in the teacher profession. These competences serve as a frame of reference for the professional development of teachers (Ministerie van Onderwijs, Cultuur en Wetenschap, 2005). Moreover, the government argued that to achieve high-quality education schools need a solid personnel policy. This policy is monitored by the Education Inspectorate (Ministerie van Onderwijs, Cultuur en Wetenschap, 2007).

Therefore, schools have to invest in their policy to maintain and stimulate the professional development of teachers by using instruments like qualification profiles, performance interviews and personnel dossiers (Landelijk Platform van Beroepen in het Onderwijs [LPBO] 2010). One of these instruments is the Professional Development Plan (PDP). A PDP is a section of a teacher's portfolio that is used to structure the professional development trajectory in terms of learning goals and action plans. Generally, the PDP is part of a cycle in which teachers have a performance interview, have to make a PDP, and receive feedback to determine whether they have maintained and developed their abilities. Use of a PDP means that the teacher and superior file agreements on the professional development of the teacher. The goals for professional development that are filed are based on a strengths and weaknesses analysis of the performance of the teacher in relation to the expectations of the school organisation.

In this article, we start with an overview of current approaches to professional development. It is argued that a PDP, which promotes the responsibility of teachers for regulating their own professional development, would fit with these approaches to professional development. However, it cannot be taken for granted that teachers will formulate high-quality PDPs on their own. In general, teachers have difficulty with defining learning goals (Van Eekelen, Vermunt, & Boshuizen, 2006). Therefore it is interesting to study how teachers can be guided in directing and planning their professional development with a PDP.

To investigate the effects of guidance, we conducted an explorative study in a secondary vocational school in which teachers had to fill out a PDP. We expected that if teachers were offered guidance while making a PDP, then this would improve

the quality of their PDP formulations. To determine the quality of the PDPs, the literature was explored to identify the prerequisite elements of a high-quality PDP.

### **Current approaches of professional development**

Despite the high expectations and demands of the teaching profession, teachers rarely invest much time in self-development (Verloop, 2003). When they do, they usually attend courses, training and conferences, and sometimes read professional magazines. This kind of schooling is predominantly characterized by transmission of knowledge and is intended to refresh and update existing knowledge and skills. Current educational insights reveal that this method of professionalization is not entirely fulfilling expectations, as retention rates are low (Kwakman, 2003; Glazer & Hannafin 2006). One reason is that these programs and courses often do not take into account individual learning needs and the actual context in which teachers work (Flint, Kurumada, Fisher, & Zisook, 2011). Therefore, professional development of teachers should take advantage of new educational insights, which indicate that professional development is a continuing process of seeking possibilities to improve daily working practice (Fraser, Kennedy, Reid, & McKinny, 2007). These learner-centered approaches suggest it is important that the teacher is an active learner who identifies and acts in response to his/ her individual needs. For example, Minott (2010) argued that professional development depends on taking initiative as a teacher to reflect on one's own work practice and improve teaching. The ever-changing requirements of society and the school organisation urge teachers to continuously improve their competencies. Another changing perspective on professional development suggests that learning activities should preferably be situated and meaningful, implying that they should be embedded in the regular work context (Hargreaves, 1994; Wolf & Dietz; 1998; Kwakman, 2003; Verloop, 2003; Merink, Meijer, & Verloop, 2007). Learning activities are more effective when they are characterized by clear connections with daily practice in which problems, questions, and solutions are integrated (Brown, Collins, & Duguid, 1989; Glazer & Hannafin, 2006).

### **Self-regulated learning**

The aforementioned researchers have stressed the importance of being an active learner whose learning is to a high degree regulated by the learner himself/herself. Self-regulated learning is at the root of taking charge of one's own learning whereby goals are set and learning activities are planned. According to Zimmerman (2000), self-regulated learning consists of three phases: planning, monitoring and evaluation. During the planning phase, individuals set a goal to define what they want to

achieve. A goal determines the direction in which an individual wants to develop and provides at the same time a standard for evaluating progress (Latham & Locke, 1991). In addition, individuals define strategies to accomplish the goal. Subsequently, the teachers perform tasks that involve the accomplishment of the goals and during this phase, they monitor their actions. After performing the tasks, the evaluation phase starts in which the learner reflects on whether the goals have been accomplished, which strategies were used and which of them were effective. Based on this evaluation, new learning goals are set (Zimmerman 2000). Nonetheless, this learning is not self-evident. Research by Van Eekelen et al. (2006) revealed that not all teachers self-regulate their learning; that is, plan their learning according to the phases described by Zimmerman (2000).

### **E-portfolios with a Professional Development Plan section**

Portfolios are increasingly being used as a tool for supporting self-regulated learning to promote development and growth (Zeichner & Wray, 2001) in education or at work (Smith & Tillema, 2001; Tigelaar, Dolmans, De Grave, Wolfhagen, & Van der Vleuten, 2006; Mansvelder-Longayroux, Beijaard, & Verloop, 2007). A portfolio is 'a collection of evidence in relation to learning that provides evidence of someone's knowledge, skills and dispositions' (Wray, 2007, p. 1139). A portfolio can be used for different reasons; for example, for assessments or to show competence but also to promote professional development (Loughran & Corrigan, 1995, Wolf & Dietz, 1998; Smith & Tillema, 2001; Zeichner & Wray, 2001). Several authors have also written about the potential use of learning portfolios to stimulate reflective thinking and improve practice (Wade & Yarbrough, 1996; Orland-Barak, 2005, Tigelaar et al., 2006; Liu, 2009). Literature on written reflection (in portfolios) often defines reflection as a process in which one systematically thinks about experiences in order to gain better understanding of working practice and to foresee possibilities for change and development (Wade & Yarbrough, 1996; Orland-Barak, 2005, Mansvelder-Longayroux et al., 2007; Postholm, 2008). Hence, to improve their practice, teachers should understand their current functioning by reflecting on their work experiences (Wade & Yarbrough, 1996; Minott, 2010). Writing down their reflections stimulates a teacher to examine educational practice more deeply. A teacher relives work experiences, makes sense of it, and develops new understandings. Based on these new understandings a teacher can formulate new insights for future action (Wade & Yarbrough, 1996). In other words, a portfolio stimulates teachers to rethink their functioning and provides the opportunity to formulate new goals for professional development and improve their working practice.

In a portfolio, Zimmerman's cyclical learning process of planning, monitoring, evaluating and reflecting can be documented and made explicit. It gives teachers

responsibility for a self-regulated learning process in which they monitor their own learning. It also provides teachers with an opportunity for dialogue about performance and learning with colleagues and supervisors. Moreover, when teachers make their (workplace) learning trajectories explicit, this enables discussion about professionalization and the quality of the profession in the school organisation (Smith & Tillema, 2001).

Research on portfolios, however, indicates that although portfolios do promote professional development, this cannot be taken for granted. Indeed, research by Van Eekelen et al. (2005) revealed that teachers still experience difficulties in formulating learning goals and action plans. Teachers find it difficult to formulate specific learning goals that have a clear relation to their pedagogical practices. Moreover, studies that investigated the use of portfolios in educational settings emphasize that for successful use certain conditions should be met. For example, clear guidelines, coherent structure and support by a coach, supervisor or peers are needed to support professional development (Tigelaar et al., 2006; Driessen, Tartwijk, Van der Vleuten, & Wass, 2007; Mansvelder-Longayroux et al., 2007). In addition, although Liu (2009) found that teachers were more conscious of their learning process and were encouraged to reflect on their previous practice by filling in a portfolio, the study also indicated that teachers needed help from a tutor or coach to reflect more effectively. By being stimulated to think more thoroughly about their functioning and professional development process, teachers should gain greater insight and become aware of their competencies that need improvement (Bullock, Firmstone, Frame, & Bedward, 2007).

The PDP is that part of a portfolio in which professional development is planned. By filling out a PDP, teachers have to consider which learning goals are important to them (Bullock et al., 2007) and plan activities for accomplishing these learning goals for the next year. After a year it is evaluated whether the professional learning activities have indeed been performed and have led to the accomplishment of the formulated goals.

To summarize, a PDP is integrated in the e-portfolio to support teachers in planning their professional development. Research (for example, Mansvelder-Longayroux et al., 2007) suggests that guidance is a success criterion for teachers when using PDPs. In our study the effects of guidance on the quality of PDPs were explored. The following section explains what is meant by 'higher quality'.

### **Constituent elements of a Professional Development Plan**

Identifying the constituent elements of a PDP is a prerequisite for knowing how to structure a PDP and how to support the process of developing it. However, there is a lack of literature about developing good PDPs that illuminates the constituent

elements that build up the PDP. Therefore, literature on different research topics related to formulating learning goals and professional development (of teachers) has been used to construct a set of those elements.

According to Kwakman (2003), professional development can be considered as workplace learning, and workplace learning is conceptualized as participation in professional learning activities. In order to define relevant learning activities for professional development, teachers should determine what they want to achieve. Teachers should clearly relate participation (in selected professional activities) to desired outcomes in their working practice.

First, before determining their goals, they should reflect on their functioning by diagnosing their performance in daily practice to discover possible causes of weaknesses and strengths (Korthagen, 1998; Tillema & Smith, 2000). In the literature, different types of reflection are described. In general, reflection can range from more descriptive reflection, which means that reflection is a report of experiences, to more critical reflection in which teachers explore reasons and factors that play a role in their functioning (Hatton & Smith, 1995; Orland-Barak, 2005; Lyle & Hendley, 2007). Mansvelder-Longayroux et al. (2007) explored types of reflection in learning portfolios of student-teachers and operationalized the concept into different learning activities. They distinguished between meaning-oriented learning activities and action-oriented learning activities. Meaning-oriented learning activities are geared 'to the understanding of underlying processes that can play a role in action in teaching practice' (Mansvelder-Longayroux et al., 2007, p. 55). Examples of meaning-oriented learning activities are examining what factors play a role in a particular difficult situation, and why a particular approach did not work. In contrast, action-oriented learning activities lead to awareness of what someone has done to improve performance immediately, but not necessarily the understanding of the underlying processes that influenced the performance.

Second, Latham and Locke (1991) argued that a learning goal should be specific enough to make clear what effective performance means. A vague, 'I'll-do-my-best' goal does not clarify when that goal is reached. Moreover, in the Netherlands, when learning goals are formulated they should match the competences defined by the Dutch foundation for the quality of teachers (Stichting Beroepskwaliteit Leraren). This Dutch foundation established a list of requirements in terms of seven competences (e.g. pedagogical competence or interpersonal competence) that are needed by the teaching profession (Ministry of Education, Culture, & Science, 2005). School organisations can use these competences for their personnel policy and teachers can use them as a framework for their professional development. For this reason, we adopted the competence approach to describe how teachers want to develop themselves. In general, competences are defined as integrated sets of knowledge, skills and attitudes that are needed to perform competent professional behaviour



within a range of relevant job situations (Lizzio & Wilsson, 2004; Baartman, Bastiaens, Kirschner, & Van der Vleuten, 2007). This definition implies that being competent means that a person has the potential to perform particular behaviour (Pantic & Wubbels, 2010). The competences teachers develop should be relevant for their functioning and the questions and problems they encounter (Brown et al., 1989). In the present research, we stimulated teachers to relate their development to their own work practice, because it is important that teachers not only learn the necessary knowledge and skills but also know how to apply what has been learned. In other words, a competent person should be able to apply knowledge and skills in situations in the context of his or her work (Sultana, 2009). Thus, teachers should also make clear in which job situations they will demonstrate improved competence.

Third, after teachers have formulated their goals, they should formulate an attainable and specific plan of action to accomplish these goals. A specific plan consists of successive steps coupled with a schedule that makes clear at what time something has to be done. Learning activities are more effective when they succeed each other and show coherence with each other to accomplish a goal (Meirink et al., 2007). By setting time limits for activities, people work harder to accomplish a (difficult) goal (Latham & Locke, 1991).

According to the above literature, the constituent elements of a PDP are divided into three main categories: diagnosis of functioning; learning goals; and action plans.

A diagnosis of functioning is divided into strengths and weaknesses. These strengths and weaknesses are described in terms of competences which a teacher possesses or does not possess. To make these competences less general, they should be described in terms of knowledge, skills and attitude. For example, if a teacher describes that she or he lacks interpersonal competences then this statement is a general description of a weakness, but when the teacher describes that he or she lacks specific knowledge and skills to provide student feedback, it is clearer what knowledge, skills and/or attitudes he or she actually lacks. Besides that, describing job situations in which a teacher is not able to perform well can help the teacher in exploring possible reasons that play a role in these situations. Based on this exploration, he or she can determine what knowledge, skills or attitudes need to be improved. In the current example, the teacher can describe a situation in which he or she was not satisfied with the way she or he had given feedback on the presentation of a student.

Learning goals are formulated in terms of competence growth and results. Teachers should clarify what competences they want to develop that are necessary to perform competent behaviour. Again, teachers should describe this competence

growth in terms of knowledge, skills or attitudes they need to develop to show competent behaviour in a particular job situation.

The part in which teachers describe their plan of action should include what learning activities teachers are planning to perform and in what timeframe. A plan of action should include different and successive steps in performing learning activities to accomplish a goal.

Based on the above-mentioned constituent elements we developed a category system that represents what should be present in a high-quality PDP (Figure 2.1).

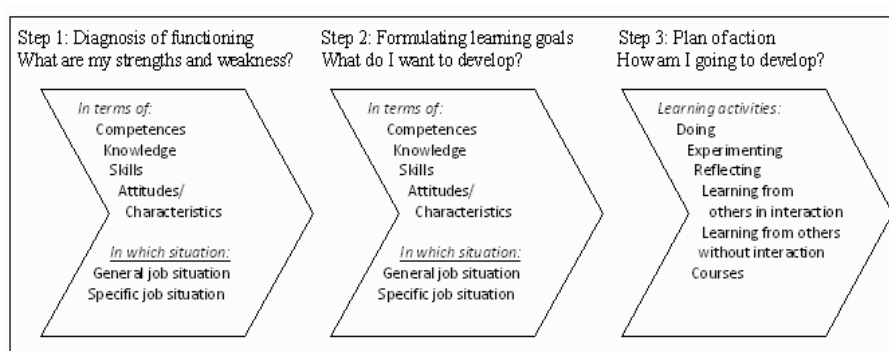


Figure 2.1. Category system of the constituent elements of a PDP

## Present study

The present study focused on the effects of guidance on the quality of the PDP. The study aimed to answer the question of whether guided teachers produce higher quality PDPs than unguided teachers. We were interested in the following three qualities of the PDP:

- (1) Completeness of the PDP: the degree to which PDPs are filled out according to the developed category system.
- (2) Consistency of the PDP: the degree to which the contents of the PDPs are consistent. In other words, the degree to which the action plan corresponds to the learning goals and the described diagnosis of functioning.
- (3) The meaning-orientedness of the diagnosis of strengths and weaknesses: the extent to which the description of the diagnosis of strengths and weaknesses is meaning-oriented; that is, whether teachers describe factors that underlie their performance.

The results related to the first two effects (i.e. completeness and consistency) are presented in this article.

We expected the following:

- (1) That the PDPs of guided teachers are completed more thoroughly regarding the developed category system (Figure 2.1) than the PDPs of unguided teachers.
- (2) That the PDPs of guided teachers are more consistent than the PDPs of unguided teachers.

## **Method**

### **Context**

The study was conducted at a Dutch school for secondary vocational education. The school revised its personnel policy by developing a procedure for supporting teachers' development and assessing their competence. The policy documents showed that the procedure takes four years, in which teachers fill out a questionnaire about their work activities, make a PDP and have development interviews and performance interviews with a supervisor. The aim of a PDP as part of the procedure is to support and stimulate the competence development of teachers.

### **Participants**

Although all teachers were obliged to fill out a PDP, teachers did not find this burdensome. In fact, it was completely up to them whether they used the PDP or not. Also, attendance at the workshops, the form of guidance that was chosen for this study, was entirely voluntary. In our study we constructed two groups of teachers: those who followed the workshops (designated as guided teachers; they formed the 'experimental' group) and those who filled out a PDP without support by the workshops (designated as unguided teachers; they formed the 'control' group'). Of the 21 guided teachers, 19 teachers completed a PDP (10 males, nine females). Of the teachers who did not participate in the workshops, only six teachers (five men, one woman) finalized their PDP. These teachers were designated as the control group. The PDPs of the unguided teachers were retrieved from a database of the Human Resources department. From this database, six PDPs were included and used for the research. The teachers who filled out these PDPs were not guided by workshops or a coach. We realize that the situation was not ideal for constructing experimental and control groups, but there were no other possibilities in this school.

## Materials

*Simply structured Professional Development Plan.* All teachers were offered a simply structured PDP. The form was a 'structured-by questions' template that aimed to support the teacher in making clear how they wanted to develop in their work. The questions focused on: qualities and strengths within professional situations; plans for the future; learning goals; and action plans.

*Guidance.* A series of four workshops was developed. The workshops were based on relevant job situations that teachers encounter in their pedagogical practice, and the competences that teachers should have to perform competent behaviour in their daily work. The four sessions focused on the different sections of the PDPs, respectively: personal qualities and motives related to their work, analyzing job situations related to the competences, formulating learning goals and making an action plan.

## Procedure

The workshops were delivered between April 2008 and September 2008. Workshops were provided for the guided teachers who were divided into two groups for practical reasons. The first group of teachers worked in the same department (catering industry) and the second group of teachers was from different departments. During the workshops, the teachers were given information and exercises regarding making a PDP. Teachers could also write down their experiences and learning points in a temporary PDP. They had the opportunity to interact with the mentor and their colleagues about the PDP. Apart from the workshops, participants could also consult a coach for additional guidance.

The unguided PDPs were retrieved from a database of the department of Human Resources in which PDPs of all employees of the school were filed. In this database, six PDPs were filed and retrieved.

## Analysis

The analysis of the teachers' PDPs was aimed at comparing the quality of the PDPs from the guided teachers with those from the unguided teachers. A top-down strategy consisting of five phases was used to analyze the PDPs (Miles & Huberman, 1994). The categories to which the content of the PDPs was assigned in the analysis were drawn from the literature on professional development and learning goals (for example, Latham & Locke, 1991; Mansvelder-Longayroux et al., 2007).

In the first phase, a conceptually-ordered matrix based on the category system was developed to analyze the data (Miles & Huberman, 1994). The category system

(Figure 2.1) consisted of four main categories: strengths regarding functioning; weaknesses regarding functioning; learning goals; and action plans.

In the second phase, the PDPs were read to obtain a broad view about how they might be categorized according to the category system. This categorization was critically discussed by the authors to enhance the quality of the research, and therefore, has face validity.

In the third phase, the first five PDPs were read again and fragments were distinguished and labeled with a code by the first author and a colleague researcher. The labeling was discussed to enhance clarity about recognizing and labeling fragments with a certain code. Furthermore, the reliability was checked by dividing agreements by the total number of allocated codes (84%).

During the fourth phase, the resulting codes of the PDPs were put into the matrix to perform a within-case analysis. This gave an overview of which categories were filled out in the PDPs. Tables 2.1 and 2.2 provide an example of a matrix describing the strengths and learning goals. The matrices were analyzed for consistency; for example, whether the formulated learning goals corresponded to the diagnosis of functioning as described in the PDP.

In the final phase, the PDPs of the guided teachers were compared with the PDPs of the unguided teachers. As already mentioned, we focused only on the results of the analysis for completeness and consistency of the PDPs. We compared all main categories, except for the weaknesses part which the control group was not required to complete. The PDP form they received from the Human Resources department did not include this category.

With respect to the completeness analysis, the PDPs of the guided teachers were compared with the PDPs of the unguided teachers for the number of filled-in categories and number of items described per category. The Mann–Whitney U test was employed in this analysis.

With respect to the consistency analysis, the PDPs of the guided teachers were compared with the PDPs of unguided teachers for consistency. To make a comparison between the two groups, a qualitative analysis was conducted in which the cases were ordered according to their consistency. Miles and Huberman (1994) refer to this procedure as ordering cases through summed indices.

First, the consistency was determined within the four main categories; strengths, weaknesses, learning goals and action plans. For each category, the content of the PDP was scored for the degree of consistency. Before scoring all of the PDPs the first author discussed with a colleague-researcher how the PDPs should be scored for consistency. The categories were scored as not consistent, poorly consistent, moderately consistent or highly consistent. A category was scored as not consistent when there was no content or when the content was very diverse. When the different elements within a category showed much coherence it was scored as

highly consistent. We ordered the PDPs from the guided teachers and the unguided teachers from high consistency to low consistency. With this ranking we could determine whether the PDPs of the guided teachers would be more apparent in the top rankings and whether the PDPs of unguided teachers would be more apparent in the lower rankings.

Table 2.1. Example 1 of a part of a matrix which displays the strengths of one participant divided into the different categories

Diagnosis of functioning					
Strengths					
Competence	Knowledge	Skills	Attitudes	General job situation	Specific job situation
Interpersonal		Building a good working relationship with students	Positive mentality	Individual conversations with students	
Pedagogical		Involving less motivated students Providing direct and good feedback	Empathy for students	During lessons	During practical lessons

Table 2.2. Example 2 of a part of a matrix which displays the learning goals of one participant divided into the different categories

Learning goals					
Competence	Knowledge	Skills	Attitudes	General job situation	Specific job situation
Interpersonal	Conversation skills	Applying conversation skills Using a conversation structure, including time management		Conversations with students (discipline/bad news) Conversations with parents During lessons	
Cooperation with the environment	Knowledge of important organisations Social map of the school				

Competence	Knowledge	Skills	Attitudes	General job situation	Specific job situation
Pedagogical	Learning and behavioural problems Asking different sort of questions	Dealing with learning and behavioural problems Making students understand their behaviour and giving them support Asking questions			
Reflection and development	Knowing how to gain more self-confidence		Being self confident		
Didactical	Examination	Taking care of variation (variety) in didactical competence		During lessons	

Second, the consistency between the categories was determined. The emphasis of this analysis was on the consistency between strengths, weaknesses, learning goals and action plans. Performing learning activities is meaningful when they serve a learning goal in terms of improved competencies that are needed in relevant job situations (Baartman et al., 2007). To formulate meaningful learning goals, teachers should be aware of their strengths and weaknesses in their functioning (Korthagen, 1998; Mansvelter-Longayroux et al., 2007) and base their learning goals on the competencies that need improvement (Bullock et al., 2007). Therefore, the analysis of weaknesses should be consistent with the learning goals and action plans which a teacher formulates. The analysis was done at two levels; consistency between two and three of the four categories. The consistency between the categories was scored as not consistent, poorly consistent, moderately consistent or highly consistent. The PDPs were ordered from highly consistent to poorly consistent. Table 2.3 provides an example of the ordering of PDPs according to their consistency in analysis of weaknesses (column A2), learning goals (column B) and action plans (column C).

Table 2.3. Example of ordering cases according to their consistency in their analysis of weaknesses, learning goals and action plans (column A2+B+C)

Case	Consistency					
	<i>Within categories</i>				<i>Between categories</i>	
Participant	A1	A2	B	C	B+C	A2+B+C
6G	++	—	++	++	++	++
9G	—	+	—	+	++	++
12G	—	—	+	+	++	++
2G	++	—	+	—	++	+
18G	—	+	+	—	++	+
7G	—	+	+	+	++	+
5G	+	++	+	—	—	+
11G	+	+	+	—	++	+

Note: Ordering of the eight most consistent participants (from high to moderate consistent). G = Guided. A1 = Analysis of strengths; A2 = Analysis of weaknesses; B = Learning goals; C = Plans of action. — = Not consistent; — = Low consistent; + = Moderate consistent; ++ = High consistent

## Results

### *Completeness*

The first part of the analyses concerns the degree to which the categories of the PDPs were completed. We expected that the PDPs of the guided teachers would be more complete than the PDPs of the unguided teachers.

Diagnosis of functioning.

Strengths. The guided teachers group (median = 4.0) described significantly more categories than the unguided teachers group (median = 2.5) concerning their strengths,  $U = 15.50$ ,  $p < 0.05$ ,  $r = -0.55$ . Guided teachers (median = 23.0) also described more items within these elements than the unguided teachers (median = 7.0),  $U = 9.00$ ,  $p < 0.05$ ,  $r = -0.61$ .

Formulating learning goals.

The guided teachers group (median = 4.0) also described more categories concerning their learning goals than the other group (median = 2.5),  $U = 29.50$ ,  $p < 0.05$ ,  $r = -0.37$ . The number of items that guided teachers (median = 14.0) formulated within these categories did not differ significantly from the number of items of unguided teachers (median = 7.0) formulated,  $U = 42.00$ , not significant,  $r = -0.19$ .

Action plan.

All teachers, except for one, formulated learning activities to reach their goals. The guided teachers (median = 7.0) did not formulate more learning activities than the unguided teachers (median = 7.5),  $U = 52.50$ , not significant,  $r = -0.19$ . Only one



teacher in the guided teachers group reported a timeframe for planning the learning activities. Three teachers in the unguided teachers group mentioned a timeframe, although this timeframe was vague: often they planned an activity in the range of a few months to a year. Not one teacher included a specific plan in terms of different steps and activities that succeeded each other to accomplish a goal.

These results show that the guided group was more complete in describing strengths and the formulation of learning goals than the unguided group. However, no difference was found between the number of learning activities described and a specific action plan was often lacking.

### Consistency

It was expected that guided teachers would be more consistent than unguided teachers. Results regarding the consistency within the categories and between these categories are presented in this section (Table 2.4).

Table 2.4. Degree of consistency of the participants from the guided and unguided groups between and within the categories

Consistency	Condition							
	<i>Between categories</i>				<i>Within categories</i>			
	A2 + B + C		B + C		A1, A2, B, C		A1, B, C	
	G	U	G	U	G	U	G	U
High	3		11	1	4		3	1
Moderate	8		1	2	5		8	2
Low	5	1	5	1	7	1	6	1
No	3		2	2	3		2	2

Note. All guided teachers filled in all categories. One unguided teacher filled in all categories. Five unguided teachers filled in all categories except for the analysis of weaknesses. n (guided) = 19. n (unguided) = 6. A1 = Analysis of strengths; A2 = Analysis of weaknesses; B = Learning goals; C = Plans of action. G = Guided group; U = Unguided group.

The consistency between the performance diagnosis, learning goals and action plans is most interesting. Unfortunately, the PDP form implemented by the Human Resources department for the unguided teachers did not include a section on 'weaknesses', although one teacher from the unguided group still mentioned some weak points in their functioning. The other teachers from this group should at least be consistent in their description of learning goals and plans of action.

The qualitative analysis made clear that 11 of the 19 (57.9%) guided teachers were moderately to highly consistent when describing their weak points, learning goals and action plans. This means that a small majority of the guided teachers were more consistent between these three categories.

Considering the consistency between learning goals and action plans and taking into account the unguided teachers, 12 of the 19 (63.6%) guided teachers and three

of the six (50%) unguided teachers were moderately to highly consistent in describing their learning goals and action plans. Slightly more teachers from the guided group were more consistent, whereas teachers in the unguided group did not differ in consistency.

The consistency within the categories varied between the PDPs. When including the category 'analysis of weaknesses', nine (47.3%) teachers in the guided group were moderately to highly consistent and 10 (52.6%) teachers were poorly to not consistent. The categories of teachers in the unguided group who described some weak points were poorly consistent. When the category of 'analysis of weaknesses' was excluded, the consistency within the categories was moderate to high for 11 (57.9%) teachers of the guided group and three (50%) teachers of the unguided group, while the PDPs of eight (42.1%) guided teachers and three (50%) unguided teachers showed poor to no consistency.

The PDPs of the guided group tended to be more consistent between and within the different categories.

## Discussion

It cannot be taken for granted that teachers will make high-quality PDPs on their own. Making a PDP is a learning process in itself and guidance can support the teacher in doing this task in a more systematic, goal-directed manner. However, we must be aware that a PDP is a means to an end, and thus we must avoid the PDP becoming a goal in itself. The aim of the PDP is that teachers are stimulated and supported in thinking critically about their professional development and can plan their professional development in a goal-directed manner. Moreover, by making professional development explicit, the learning process and results can be monitored and evaluated, and discussion in professional organisations about the quality of the teaching profession can be facilitated.

The study presented in this article focused on support for teachers while making a PDP. Teachers were offered workshops to help them proceed to the cyclical learning process (for example, Zimmerman, 2000). It was investigated whether teachers who were supported by these workshops developed PDPs of higher quality than teachers who were not supported. In particular, we explored whether the PDPs of guided teachers were completed more thoroughly and more consistently regarding the developed category system (Figure 2.1) than the PDPs of unguided teachers.

Our results revealed that the guided teachers were indeed elaborating more on their diagnosis of strengths. They also elaborated more on their learning goals regarding the different categories, such as competence and job situations. However,

we did not find a significant difference regarding the action plans teachers formulated. The guided and unguided teachers did not differ in the number of learning activities they reported. Besides that, a specific plan in terms of successive steps and a corresponding timeframe to accomplish a goal was often lacking. With regard to the consistency of the PDPs, the PDPs of the guided teachers were more consistent, but overall the PDPs varied from high consistency to low consistency.

From our findings, we may tentatively conclude that the workshops helped the teachers in structuring their thoughts about their functioning and their learning goals in terms of competences that are relevant for their job situations. Our future analyses should reveal whether the PDPs of guided teachers are more meaning oriented. A meaning-oriented diagnosis of strengths and weaknesses in performance is more specific when teachers make clear which job situations are difficult or easy and which lack of knowledge, skills or attitude plays a role in those situations.

### **Limitations**

This research has a number of limitations. First, teachers were not randomly chosen. Although the school required all teachers to fill out their PDPs, only a few of them actually did so. There were no consequences for teachers when they did not meet the requirement to make a PDP. As a result, the sample size is relatively low, especially regarding the control group. Moreover, the teachers from the experimental group could apply for the workshops on a purely voluntary basis. Consequently, the sample size could not be compiled randomly. The teachers who did fill out the PDP might have been more faithful or motivated to make a PDP. This motivation for making a PDP might have had an influence on the quality of the PDP compared with a situation in which teachers only made a PDP because they were obliged to make one.

Second, the small sample size prevents us from drawing too general conclusions regarding the teacher population. In the future, research should include more participants to make a solid comparison between guided and unguided teachers. Moreover, the research was performed in only one Dutch school for secondary vocational education. In order to generalize the results to other school types, the research should be extended to include schools for primary education and other secondary schools.

### **Implications**

Previous research emphasized that guidance is an important condition in making a PDP/portfolio (for example, Driessen et al., 2007; Mansvelder-Longayroux et al.,

2007). This guidance is needed to support teachers in formulating specific learning goals and action plans and to stimulate teachers in reflecting in a meaning-oriented way. The results of this study supported the suggestion that guidance supports teachers in formulating learning goals. Further analyses should reveal whether this guidance actually promotes more meaningful reflection. Moreover, a theoretical framework that describes which elements are important for a high-quality PDP was presented. The elements of this theoretical framework can be used to improve structured PDP formats.

Although we realize that our results were gathered from a relatively small sample, we assume that other schools which implement a PDP can learn from our experiences by taking into account the following recommendations. Guidance by workshops in which teachers were stimulated to think about their job situations and competences certainly helped them in diagnosing their performance and formulating concrete learning goals. However, the results indicated that the quality of the action plans could be improved. These results imply that guidance could focus more on the consistency of teachers' diagnosis of their functioning, and the formulation of learning goals and action plans. Teachers should be stimulated to make it clearer (to themselves) why they want to perform particular learning activities. For example, they could be asked why a formulated plan of action corresponds partly or not at all with the formulated learning goals. Additionally, teachers need extra support in formulating a specific action plan in which professional learning activities succeed each other to attain the desired learning goal.

### **Future research**

The workshops are very time-consuming for school organisations to support all teachers, and for teachers themselves. Embedding more guidelines and support into a PDP would be more efficient for the school and the teacher. Therefore, future research should concentrate on embedding most of the support in an online PDP, so to make the face-to-face guidance less intensive. In other words, we will use highly structured PDPs.

Moreover, the results also suggest that the school probably did not consider the conditions that are needed to foster successful usage of PDPs in the organisation. In the researched school, PDPs were obligatory but not many teachers made use of them. This lack of enthusiasm could be owed to the way in which the PDP was introduced. It was not introduced clearly, there was minimal guidance and control over the process. Most supervisors of the teachers did not see the necessity for and did not actively support the making of the PDP. Other research in schools shows that the policy on these matters often remains on paper and practical implementations in daily practice are minimal or lag behind (Landelijk Platform voor

Beroepen in het Onderwijs, 2010). Therefore, we believe that schools should carefully consider how to implement Human Resource Development interventions so that they are experienced as meaningful instead of something that stays on paper and does not have an effect on the professional development of teachers. Other important questions should also be considered. Is it clear in the organisation what a PDP is aiming for? Are supervisors prepared for evaluation interviews with teachers who make a PDP? Is the school a professional organisation in which the performance and professional development of teachers are part of the discussion and valued? Is the professional development embedded in and related to team and school development? Does the school facilitate professional learning activities? The research presented in Chapter 4 focuses on conditions that are necessary for embedding PDPs in schools is needed to reveal how this could proceed successfully.

In addition, this project did not take into account characteristics and dispositions of teachers that could influence the decision to make a PDP and the way teachers filled out a PDP. It would be interesting to elaborate on how these factors play a role in the process of making a PDP. What makes teachers decide to make a PDP or not? What kind of beliefs do teachers hold to their professional development? Do they feel confident and competent in making a PDP? Are teachers open to new experiences? Do teachers see a potential use for the PDP in their professional development? These questions are addressed in the following chapter.

## References

- Baartman, L. K. J., Bastiaens, T.J., Kirschner, P.A., & Van der Vleuten, C.P.M. (2007). Evaluation assessment quality in competence-based education: a qualitative comparison of two frameworks. *Educational Research Review*, 2(2), 114–129.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32–42. doi:10.3102/0013189X018001032
- Bullock, A., Firmstone, F., Frame, J., & Bedward, J. (2007). Enhancing the benefit of continuing professional development; a randomized controlled study of personal development plans for dentists. *Learning in Health and Social Care*, 6(1), 14–26. doi:10.1111/j.1473-6861.2007.00142.x
- Driessen, E., Tartwijk, J., Van der Vleuten, C., & Wass, V. (2007). Portfolios in medical education: why do they meet with mixed success? A systematic review. *Medical Education*, 41(12), 1224–1233. doi:10.1111/j.1365-2923.2007.02944.x
- Flint, A.S., Kurumada, K.S., Fisher, T., & Zisook, K. (2011). Creating the perfect storm in professional development: the experiences of two American teachers and a university research team. *Professional Development in Education*, 37(1), 95–109. doi:10.1080/19415250903425502
- Fraser, C., Kennedy, A., Reid, L., McKinney, S. (2007). Teachers' continuing professional development: contested concepts, understandings and models. *Professional Development in Education*, 33(2), 153–169. doi:10.1080/13674580701292913
- Glazer, E. M., & Hannafin, M. J. (2006). The collaborative apprenticeship model: situated professional development within school settings. *Teaching and Teacher Education*, 22(2), 179–193. doi:10.1016/j.tate.2005.09.004
- Hargreaves, D. H. (1994). The new professionalism: the synthesis of professional and institutional development. *Teaching and Teacher Education*, 10(4), 423–438. doi:10.1016/0742-051X(94)90023-X
- Hatton, N., & Smith, D. (1995). Reflection in teacher education: towards definition and implementation. *Teaching and Teacher Education*, 11(1), 33–49. doi:10.1016/0742-051X(94)00012-U
- Korthagen, F. (1998). Leren reflecteren: naar systematiek in het leren van je werk als docent [Learning to reflect: towards systematic learning on the job as a teacher]. In: L. Fonderie and J. Hendriksen (Eds.), *Begeleiden van docenten, reflectie als basis voor de professionele ontwikkeling in het onderwijs [Coaching teachers, reflection as the basis for professional development in education]*. (pp. 43-56) Baarn: Nelissen.
- Kwakman, K. (2003). Factors affecting teachers' participation in professional learning activities. *Teaching and Teacher Education*, 19(2), 149–170. doi:10.1016/S0742-051X(02)00101-4
- Landelijk Platform voor Beroepen in het Onderwijs [National Platform for Professions in Education]. (2010). *Bekwaamheidseisen in de school [Competences in the school]*. Retrieved from <http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2010/07/19/bekwaamheidseisen-in-de-school-op-weg-naar-versterking-beroepskwaliteit-leraren.html>.
- Latham, G. P., & Locke, G. A. (1991). Self-regulation through goal-setting. *Organisational Behaviour and Human Decision Processes*, 50(2), 212–247.
- Liu, P. L. (2009). Portfolio development for in-service teachers to learn the new Chinese language teaching pedagogy in Hong Kong primary schools. *Professional Development in Education*, 35(2), 195–210.
- Lizzio, W., & Wilson, K. (2004). Action learning in higher education: an investigation of its potential to develop professional capability. *Studies in Higher Education*, 29(4), 469–488. doi:10.1080/0307507042000236371
- Loughran, J., & Corrigan, D. (1995). Teaching portfolios: a strategy for developing learning and teaching in preservice education. *Teaching and Teacher Education*, 11(6), 565–577. doi:10.1016/0742-051X(95)00012-9
- Lyle, S., & Hendley, D. (2007). Can portfolios support critical reflection? Assessing the portfolios of schools liaison police officers. *Professional Development in Education*, 33(2), 189–207.

- Mansvelder-Longayroux, D. D., Beijaard, D., & Verloop, N. (2007). The portfolio as a tool for stimulating reflection by student teachers. *Teaching and Teacher Education*, 23(1), 47–62. doi:10.1016/j.tate.2006.04.033
- Meirink, J. A., Meijer, P., & Verloop, N. (2007). A closer look at teachers' individual learning in collaborative settings. *Teachers and Teaching: Theory and Practice*, 13(2), 145–164. doi:10.1080/13540600601152496
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis*. Thousand Oaks, CA: Sage.
- Ministerie van Onderwijs, Cultuur en Wetenschap [Ministry of Education, Culture, and Science]. (2005). *Blijf groeien. Wet op Beroepen in het Onderwijs [Keep learning. Education Professions Act]*. Retrieved from <http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2005/10/14/blijf-groeienwet-op-de-beroepen-in-het-onderwijs.html>.
- Ministerie van Onderwijs, Cultuur en Wetenschap [Ministry of Education, Culture, and Science]. (2007). *Actieplan. Leerkracht van Nederland [Action plan. Teacher of the Netherlands]*. Retrieved from <http://www.rijksoverheid.nl/documenten-en-publicaties/brochures/2007/11/23/brochure-actieplan-leerkracht-van-nederland.html>.
- Minott, M. A. (2010). Reflective learning as self-directed professional development: building practical or work-related knowledge. *Professional Development in Education*, 36(1–2), 325–338. doi:10.1080/19415250903457547
- Orland-Barak, L. (2005). Portfolios as evidence of reflective practice. what remains 'untold'. *Educational Research*, 47(1), 25–44. doi:10.1080/0013188042000337541
- Pantic, N., & Wubbels, T. (2010). Teacher competencies as a basis for teacher education. Views of Serbian teachers and teacher educators. *Teaching and Teacher Education*, 26(3), 694–703. doi:10.1016/j.tate.2009.10.005
- Postholm, M. B. (2008). Teachers developing practice: reflection as key activity. *Teaching and Teacher Education*, 24(7), 1717–1728. doi:10.1016/j.tate.2008.02.024
- Smith, K. & Tillema, H. (2001). Long-term influences of portfolios on professional development. *Scandinavian Journal of Educational Research*, 45(2), 183–203. doi:10.1080/00313830120052750
- Sultana, R. G. (2009). Competence and competence frameworks in career guidance: complex and contested concepts. *International Journal for Educational and Vocational Guidance*, 9, 15–30. doi:10.1007/s10775-008-9148-6
- Tigelaar, D. E. H., Dolmans, D. M. H., De Grave, W. S., Wolfhagen, I. H. A. P., & Van der Vleuten, C. P. M. (2006). Portfolio as a tool to stimulate teachers' reflections. *Medical Teacher*, 28(3), 277–282. doi:10.1080/01421590600607013
- Tillema, H. H. & Smith, K. (2000). Learning from portfolios: differential use of feedback in portfolio construction. *Studies in Educational Evaluation*, 26(3), 193–210.
- Van Eekelen, I. M., Vermunt, J. D., & Boshuizen, H. P. A. (2006). Self-regulation in higher education teacher learning. *Higher Education*, 50(3), 447–471. doi:10.1016/j.tate.2005.12.001
- Verloop, N. (2003). De leraar [The teacher]. In: N. Verloop and J. Lowyck (Eds.), *Onderwijskunde [Educational science]*. (pp. 195–248). Groningen: Wolters-Noordhoff.
- Wade, R. C., & Yarbrough, D. B. (1996). Portfolios: a tool for reflective thinking in teacher education? *Teaching and Teacher Education*, 12(1), 63–79. doi:10.1016/0742-051X(95)00022-C
- Wolf, K., & Dietz, M. (1998). Teaching portfolios: purposes and possibilities. *Teacher Education Quarterly*, 25(1), 9–22.
- Wray, S. (2007). Teaching portfolios, community, and pre-service teachers' professional development. *Teaching and Teacher Education*, 23(7), 1139–1152.
- Zeichner, K., & Wray, S. (2001). The teaching portfolio in US teacher education programs: what we know and what we need to know. *Teaching and Teacher Education*, 17(5), 613–621. doi:10.1016/S0742-051X(01)00017-8

Zimmerman, B. J. (2000). Attaining self-regulation. A social cognitive perspective. In: M. Boekaerts, P.R. Pintrich, and M. Zeichner (Eds.), *Handbook of self-regulation*. (pp. 13–39). San Diego, CA: Academic Press.



## Chapter 3

# Teachers' beliefs about using a Professional Development Plan

Professional Development Plans (PDPs) have recently been introduced in Dutch schools to support teachers' professional development. However, some teachers may doubt the usefulness and purpose of PDPs and this might influence their reactions to its introduction. Using Fishbein and Ajzen's theory of planned behaviour framework, the current study explored teachers' characteristics, outcome, normative and efficacy beliefs which are related to the intention to use a PDP. Clusters of teachers with similar characteristics and beliefs were identified to design specific interventions for these clusters. Semi-structured interviews were conducted to reveal these beliefs and characteristics for the population of teachers working in schools where using a PDP was mandatory. The results showed that most teachers had a positive attitude towards using a PDP. However, because using a PDP was mandatory for all teachers, they felt pressured to make one. Otherwise it would not be their priority because of their high workload.

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This chapter is based on:

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## Introduction

Professional Development Plans (PDPs) are increasingly used to promote teachers' professional development. A PDP helps teachers to structure their professional development in terms of learning goals and plans of action. Moreover, teachers are expected to be more proactive in their professional development (Imhof & Picard, 2009; Tigelaar, Dolmans, De Grave, Wolfhagen, & Van der Vleuten., 2006b). A PDP can also form a basis for a critical dialogue between teachers and supervisors (Beausaert, Segers, & Gijssels, 2011b; Fenwick, 2003).

Whilst literature emphasized the value of using a PDP, it also showed mixed evidence regarding its effectiveness (e.g. Austin, Marini, & Desroches, 2005). Furthermore, views of users about the value of using a PDP varied (e.g. Imhof & Picard, 2009). The implementation of a PDP in an organization is often a top-down process that might influence its acceptance by teachers (Fullan, 2001), especially if one considers that the use of PDPs in Dutch schools is rather new. Teachers might have their own beliefs about the usefulness and purpose of PDPs and these beliefs might determine how teachers act on this introduction (Fishbein & Ajzen, 2010; Spillane, Reiser, & Reimer, 2002).

The current study explored teachers' outcome, normative and efficacy beliefs about completing a PDP and the characteristics of teachers that might influence these beliefs. The characteristics include years of experience and teachers' motives to develop themselves. We aimed to identify clusters of teachers with similar beliefs. With this knowledge, the guidance of teachers can be improved and adjusted to clusters of teachers with similar beliefs about completing a PDP.

## Research on Professional Development Plans

A portfolio can be used in several professional settings. In work settings, PDPs are used to assess competences or to promote professional development (Beausaert, Segers, Van der Rijt, & Gijssels, 2011c; Zeichner & Wray, 2001). In educational settings, portfolios are used by (student) teachers to support them in reflecting on their performance, planning their learning and showing their competences (e.g. Wade & Yarbrough, 1996; Wolf & Dietz, 1998). A portfolio includes a collection of evidence of performance and development and is directed by personal learning goals (Smith & Tillema, 2001). In our study we focus on the part of the portfolio which is designated as a Professional Development Plan (PDP), where teachers reflect on their past performance, formulate learning goals to improve their performance and formulate plans of action to achieve their goals (Bullock, Firmstone, Frame, & Bedward, 2007; Evans, Ali, Singleton, Nolan, & Bahrami, 2002). While the primary purpose of a PDP is to promote professional development, it may have

several other purposes at the same time (Imhof & Picard, 2009), such as promoting dialogue between teachers and supervisors (Beusaert et al., 2011c; Smith & Tillema, 2001). In schools, the PDP is also instrumental in giving form to the cycle in which teachers get a development and/or performance interview, update the PDP, and receive evaluations from their supervisor, colleagues and students. For practical reasons, we refer to PDPs when reporting results of studies on PDPs and portfolios as they are often referred to in the same literature.

#### *Value of using a PDP*

Several studies emphasized the value of a PDP. The questions and activities in a PDP support reflection and promote greater self-awareness and insight. Writing down learning goals provides learners with focus and commitment to their professional development. Teachers can document how they learn and develop themselves (Austin et al., 2005; Imhof & Picard, 2009; Smith & Tillema, 2001). Moreover, discussing professional development with a supervisor provides an opportunity to align individual learning goals with school goals and motivates teachers to professionalize themselves (Van Eekelen, Boshuizen, & Vermunt, 2006). Several studies revealed that participants valued using a PDP. They found it useful for planning development (Bullock et al., 2007) and becoming aware of performance, and it enhanced their knowledge and skills (Evans et al., 2002; Tigelaar, Dolmans, De Grave, Wolfhagen, & Van der Vleuten, 2006a; Wade & Yarbrough, 1996).

However, despite these benefits, the process of implementing PDPs is often complex and results of studies revealed that the effectiveness of the PDP differed, for example regarding the amount of learning activities. Effects were measured on various aspects of professional development (e.g. Beusaert et al., 2011b; Driessen, Van Tartwijk, Van der Vleuten, & Wass, 2007). These aspects include the amount of learning activities (Austin et al., 2005; Bullock et al., 2007), improved performance and expertise growth (Beusaert, Segers, & Gijssels, 2011a; Tigelaar et al., 2006a), increased awareness (Evans et al., 2002) and reflection (e.g. Mansvelder-Longayroux, Beijaard, & Verloop, 2007; Orland-Barak, 2005). Several studies also revealed that users were sceptical about the excessive time it cost and that they doubted the relevance for their own learning needs (Austin et al., 2005; Leggett & Bunker, 2006).

Research explained these mixed findings and views as follows. When users think that the focus of a PDP is on promotion, instead of development, it can prevent them from reflecting critically on their performance and mentioning opportunities for learning (Imhof & Picard, 2009; Leggett & Bunker, 2006). Unclear purpose and guidelines for using a PDP led to frustration and misunderstanding (Austin et al., 2005; Smith & Tillema, 2003). These mixed views can also be explained by individual differences. Research by Imhof and Picard (2009) revealed that teachers with

a strong proactive attitude regarding professional development found the PDP more useful than teachers with a weak proactive attitude. Wade and Yarbrough (1996) found that some students acknowledged that they learned from the reflection, while other students were frustrated because they didn't know how to deal with a PDP. Some studies reported that the positive findings they found could be biased by having a self-selected group of PDP users who might already be enthusiastic and motivated (Bullock et al., 2007; Evans et al., 2002).

### **Implementing Professional Development Plans**

The previous section made it clear that implementing a PDP is complex. Implementing a PDP introduces a new approach for organizing professional development in schools. Fullan (2001) and Maurer (2002) argued that implementing a new policy or approach does not automatically mean that teachers act in the same way as management intended. Although teachers and management share the same goal, improving quality of education, they can have different views on how this goal should be accomplished (Leggett & Bunker, 2006). According to Kelchtermans, Ballet, Peeters and Verckens, (2009), teachers have their own frame of reference that determines how they make sense of and act on changes in policy or development at work. Spillane et al. (2002) explained that sense-making is a comprehension process based on individual's prior knowledge, beliefs and experiences, the context in which the policy is implemented and the representation of the policy.

Our study focused on how teachers made sense of the implementation of a PDP and an interview cycle. To investigate this issue we focused on their beliefs about using a PDP and analysed how these beliefs relate to teachers' characteristics. This knowledge can provide input to improve the communication (Fishbein & Capella, 2006) about the PDP and the guidance for using a PDP by adjusting it to these beliefs.

In order to explore teachers' beliefs about a PDP, a model is needed that explains why people decide to perform particular behaviour. We used the theory of planned behaviour (TPB; Ajzen, 1991; Fishbein & Ajzen, 2010) because it is a well-known model in the domain of health science to predict and understand people's intention to perform a behaviour. TPB is explained in the next section in which using a PDP is the researched behaviour.

### **Theory of planned behaviour**

Theory of planned behaviour (see Figure 3.1) assumes that people's decision to perform behaviour is reflected in their intention. The intention to perform the behaviour is influenced by three primary determinants or psychosocial variables,

which are based on beliefs people have about particular aspects of the behaviour (Fishbein & Ajzen, 2010; Kreijns, Vermeulen, Kirschner, Van Buuren, & Van den Acker, in press). These variables are attitude, subjective norm and perceived behavioural control (PBC). Attitude is the overall feeling of favourableness or unfavourableness towards using a PDP, for instance believing that completing a PDP is useful. Subjective norm concerns the perception of whether important others think one should or should not complete a PDP. For example, teachers perceive that their direct supervisor thinks that they should complete a PDP. PBC refers to the perceived ease or difficulty of using a PDP; that is, do teachers think that they are able to complete a PDP, taking into account the factors that might facilitate or inhibit this?

Each of these three variables, in turn, is based on the underlying beliefs people have about using a PDP. Attitudes are based upon beliefs about consequences (i.e. they are outcome beliefs) of using a PDP and their evaluation. For example, completing a PDP will lead to more insight into teachers' learning needs. Normative beliefs determine the subjective norms people have, encompassing beliefs about whether important others (e.g. school staff, colleagues and students) think that one has to perform or not perform the target behaviour weighed against the individual's motivation to comply. Efficacy beliefs determine perceived behavioural control and concern factors that are likely to facilitate or inhibit the behaviour, and how they can be overcome. For example, filling in a PDP requires that teachers get the necessary tools and facilities, such as access to school policy plans to align personal development with school development.

Theory of planned behaviour takes into account the uniqueness of each behaviour and that different populations of teachers may have different outcome, normative and efficacy beliefs. For instance, senior teachers may have a negative attitude about the PDP as they have never used one during their long careers but are forced by their superiors to use one, whereas beginning teachers may be enthusiastic as they have already become acquainted with the PDP during their preparation and, thus, know its advantages (e.g. Mansvelder-Longayroux et al., 2007). Hence, to change behaviour it is important to consider the particular population and the kinds of underlying beliefs they have (Fishbein & Capella, 2006). For example, an intervention for senior teachers should orient towards an attitude change so that they no longer feel pressured by their superiors as the use of PDP becomes internalized.

Figure 3.1 depicts a number of distal variables (i.e. background variables) that influence the intention via the proximal variables (i.e. the psychosocial variables). The distal variables encompass teacher characteristics and school organizational factors. In this chapter we focus on teacher characteristics and teachers' outcome, normative and efficacy beliefs. The school organizational variables are examined in Chapter 4.

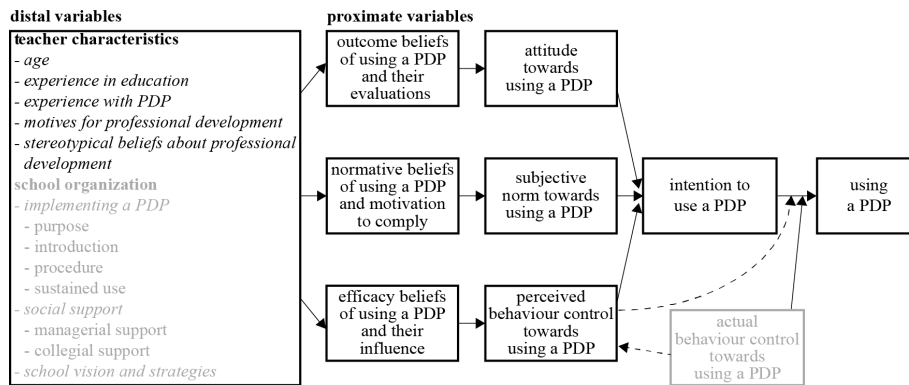


Figure 3.1 Theory of Planned Behaviour applied to using a PDP

\* School organizational factors and actual behaviour control were not included in this study

### Teacher characteristics

Teacher characteristics are age, years of experience in education, experience with a PDP, motivation for professional development, and general beliefs about professional development. All these variables related to teacher characteristics (Smith & Tillema, 2001; Van Eekelen et al., 2006) might affect the outcome, normative and efficacy beliefs and through them the intention to use a PDP for professional development. For example, a teacher may think things are working fine as they are and not see a need to professionalize. This teacher probably does not perceive the PDP as a valuable instrument.

### Current study

Whereas most research on TPB uses self-reporting questionnaires (e.g. Fishbein and Cappella, 2006), we, in contrast, conducted interviews to increase insight into the beliefs teachers have about using a PDP (Merriam, 2009). To uncover a range of possible beliefs (i.e. the outcome, normative and efficacy beliefs), we interviewed 41 teachers from five different schools. The interviews aimed to provide answers to the following questions:

1. What are teachers' beliefs regarding using a PDP?
2. What teacher characteristics influence beliefs regarding using a PDP?
3. What groups (i.e. clusters) of teachers with similar beliefs and characteristics can be identified?

We applied qualitative and quantitative analyses to explore teachers' beliefs and characteristics (Miles & Huberman, 1994; Namey, Guest, Thairu, & Johnson,

2007) in order to identify different clusters of teachers to determine how specific interventions for these clusters can be designed.

## **Method**

### **Context**

The Dutch government initiated the Education Professions Act which prescribed that teachers in primary and secondary schools should file their development in a dossier (Ministerie van Onderwijs, Cultuur en Wetenschap, 2010). As a result, many Dutch schools invested in their human resource development policy by introducing a new job structure, implementing PDPs and other similar instruments.

For our study, two primary and three secondary schools dispersed over the Netherlands were approached as they had already implemented a PDP in their professional development cycle. The requirements of the government were similar for both school types. Teachers from these schools could express their beliefs based on the experiences they had with completing a PDP. These experiences may go back from one to five years depending on when the school had implemented a PDP-based professional development cycle.

### **Participants**

Forty-one teachers (12 primary school and 29 secondary school teachers) participated in the study. Sixteen of the participants were male and 25 female. The mean age of the participants was 39.1 ( $sd = 11.1$ ) and the mean years of experience 13.7 ( $sd = 10.2$ ).

### **Instruments**

The data collection was based on a semi-structured interview approach. The interviews were held from November 2010 until January 2011.

#### *Teacher interview*

The first part focused on demographic data: age, and years of experience in education. Teachers were also asked to describe the steps they had to take to complete a PDP.

The second part of the interview focused on teachers' beliefs about using a PDP. They were asked to explain their most important reason for using a PDP. The interview proceeded by examining the psychosocial variables and exploring the

underlying outcome, normative and efficacy beliefs in line with TPB; that is, the questions referred to:

- Attitude and outcome beliefs focusing on advantages and disadvantages
- Subjective norm and normative beliefs focusing on social pressure
- PBC and efficacy beliefs focusing on confidence in completing a PDP

The third part of the interview explored the teacher characteristics: motives for professional development, general beliefs about professional development and prior experience with a PDP.

### **Procedure**

The interview questions were practised with colleagues and one teacher. The interview protocol was adjusted based on their feedback.

To ensure having a range of different teachers regarding age and PDP-related beliefs, teachers were selected by the school principle as she or he knew the teachers personally. The interviews lasted between 20 and 60 minutes. All the interviews were recorded, transcribed and analysed.

### **Analysis**

We conducted qualitative and quantitative analyses. An exploratory analysis was first performed to elicit teachers' outcome, normative and efficacy beliefs and the teachers' characteristics. To identify clusters of teachers with similar beliefs, a hierarchical cluster analysis was performed (Miles & Huberman, 1994; Namey et al., 2007). Non-parametric tests were used to determine whether the teachers' characteristics differed between the clusters and were related to teachers' beliefs.

First, transcripts of the interviews were coded in NVivo version 9 by the researcher and a colleague who was ignorant of the research but received training on how to code the interview fragments; these interview fragments were extracted from the interview data by the researcher. The coding process was iterative, indicators and their interpretations were discussed, and ambiguous interview fragments were excluded from coding. This process was stopped until a satisfactory intercoder reliability according to Landis and Koch (1977) was achieved; we achieved a Cohen's Kappa of .71, which is 'substantial'.

The second step comprised identifying clusters of similar teachers. To that end, three main clusters were formed based upon what teachers had said about the most important reason they had to complete the PDP. These reasons were that 1) it was mandatory, 2) though it was mandatory it also had clear advantages, and 3) it had clear advantages, and completing the PDP was not seen as an obligation at all. Sub-clusters were further identified using SPSS version 19 hierarchical cluster analy-



sis. Hierarchical cluster analysis is an explorative methodology that is used to find clusters of similar observations in a data set (Guest & McLellan, 2003). Input for this analysis is a proximity matrix in which the rows and columns represent the teachers, and the content of the cells the 'distance' between the participants. The proximity matrix is calculated by SPSS (prior to the actual hierarchical cluster analyses) based on the responses of the participants regarding the three variables attitude, subjective norm and perceived behaviour control (PBC). In particular, teachers' responses to attitude were divided into negative (1), neutral (2) and positive (3). Responses to subjective norm were divided into high pressure (1), low pressure (2) and no pressure (3). Reactions to PCB were summarized as difficult (1), neutral (2) and easy (3). The resulting clusters were presented in a conceptually ordered matrix (Miles & Huberman, 1994) in which the responses of teachers on all variables were summarized per cluster and per variable (see Appendix 1).

The last step was to determine whether the teachers' individual characteristics had an influence on the beliefs teachers had. The Kruskal-Wallis test was conducted to analyse whether the teachers' characteristics differed between the clusters and the psychosocial variables attitude, subjective norm and PBC. The Jonckheere-Terpstra test was used to determine whether these differences had a meaningful order: for example, senior teachers had a more negative attitude than younger teachers.

## Results

The results are presented according to the three research questions. The first section explains results regarding teachers' beliefs about using a PDP. The second section describes the teacher characteristics that might influence teachers' beliefs. The last section presents the clusters of teachers. Appendix 1 can be consulted for a complete overview of teachers' responses on the different variables.

### Proximal variables

Figure 3.2 provides a summary of how all participants responded to the questions related to the psychosocial variables. Participants differed on the most important reason for completing a PDP. Almost half of the interviewed participants indicated that they completed a PDP because it had advantages for them. Five participants felt pressured to complete one, but mentioned that the PDP had advantages for them. Sixteen participants completed a PDP because it was mandatory.

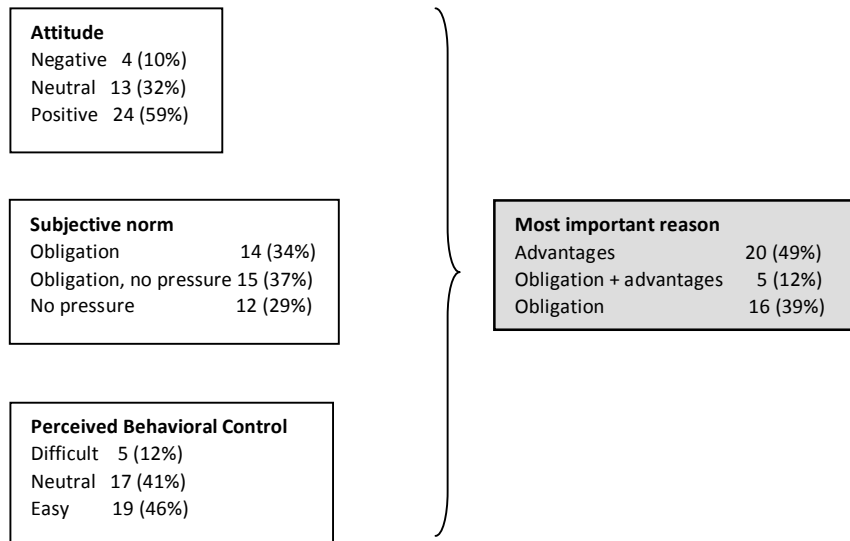


Figure 3.2 Overview of responses on most important reason, attitude, subjective norm and perceived behavioural control expressed with percentages of the total sample

### Attitude and outcome beliefs

Twenty-four participants were positive about completing a PDP. Thirteen participants were neutral. They argued that it was useful to develop yourself but doubted the value of the PDP in this process. Four participants were negative: they thought it was superfluous and did not see advantages for themselves.

All participants, except for one, mentioned advantages. Thirty-four participants considered the PDP as an instrument that supports their development. By filling in a PDP, they took time to reflect on their performance and formulate learning goals. Ten participants used the PDP for their career, to reflect on their ambitions or to attain a higher salary scale. Nine participants found it valuable for their supervisor, to discuss their development and make arrangements. The PDP also made it possible to make themselves visible in the organization, receive appreciation for performance, and improve the quality of education.

Thirty-one participants mentioned disadvantages. The main disadvantage was the lack of time and the extra work it cost. Some participants experienced completing a PDP as a waste of time. Other disadvantages were comments on the format: for example, it was too rigid and leading. Some participants claimed that the PDP should include an assessment and more opportunities for growth in salary and responsibilities. Other participants thought that completing a PDP was not necessary

because professional development was already occurring, it did not match their professional development or they thought that they were already performing well.

### **Subjective norm and normative beliefs**

The teachers were asked whether they felt pressured to complete a PDP. Twenty-nine participants explicitly mentioned that it was mandatory. Yet 15 of them did not feel pressure in completing one. Twelve participants felt no pressure at all and six of them completed a PDP for themselves.

Participants were asked for persons who would think that it was important to fill in a PDP. These persons were the educational inspector, the board and management of the school, the direct supervisor, colleagues, students and parents. The direct supervisor and management were mentioned most, whereas students and parents were mentioned less. Two participants thought that nobody cared whether they completed a PDP or not. Teachers had the following beliefs about why these persons would think that it was important: completing a PDP is good for the development and well-being of teachers, and it improves the quality of education. Moreover, they thought that it provided the direct supervisor with an opportunity to prepare the development interviews and that it led to a pleasant and learning team.

### **Perceived behavioural control and efficacy beliefs**

Most participants thought that completing a PDP was not too difficult. Nineteen participants said that it was easy, 17 participants were neutral and five participants found it difficult. Beliefs about what was difficult or easy differed. Some participants thought that it was difficult to formulate goals, whereas others thought that it was easy to formulate learning goals. The same applied to other parts of completing a PDP: formulating strengths and weaknesses, making plans of action and describing competences.

### **Teacher characteristics**

To answer the second research question, we analysed whether age and years of work experience related to the clusters and/or psychosocial variables. As well as that, we analysed the motives teachers had to develop themselves and their past experience with using a PDP.

Age and years of work experience differed significantly between the main clusters regarding the most important reason to complete a PDP, respectively  $H(2) = 7.21, p < .05$  and  $H(2) = 7.33, p < .05$ . A significant trend showed that teachers who completed a PDP because of its advantages were younger and had less experience

than the teachers who did so because it was mandatory, respectively  $J = 346$ ,  $z = 2.39$  and  $J = 330$ ,  $z = -1.99$ .

Years of work experience differed significantly regarding attitude,  $H(2) = 7.74$ ,  $p < .05$ . Teachers who had less work experience were more positive than teachers with more experience,  $J = 135$ ,  $z = -2.45$ .

Four categories of motives for professional development were found based on teachers' responses: no motives for development, career, profession and challenge. It was possible for the responses of one participant to be related to more than one category. For example, a participant could answer that he or she wanted to be challenged in his or her work (challenge) and provide good lessons (profession).

The results indicated that 30 participants were motivated to do their job well. They wanted to be up to date and provide good education for the students. Twenty-nine participants were motivated to challenge themselves and learn more. Eight participants had career motives including growth in salary and responsibilities. Five teachers had no motive to develop themselves. Their concern was to earn a salary or they had no ambitions.

Fifteen participants had no experience with using a PDP. Eight participants had experience with performance interviews. Twenty-three teachers had completed a PDP in a former job, for their study or as a supervisor.

## Clusters

As mentioned before, we first divided the participants into three main clusters based on the most important reason for completing a PDP: advantages; obligation and advantages; obligation. We then explored the main clusters with hierarchical cluster analysis. Although it was not possible for all clusters, because teachers' responses varied on all three psychosocial variables, we tried to form homogenous clusters; that is, we aimed for a balance between not having too many clusters and still having meaningful clusters with enough similarity between the participants (Norusis, 2011). Using this principle, seven sub-clusters were formed. Figures 3.3, 3.4 and 3.5 show the dendrograms resulting from a hierarchical cluster analysis using the variables attitude, subjective norm and perceived behavioural control. The thick line in Figures 3.3, 3.4 and 3.5 indicates the point where the clusters were formed. The dendrogram has to be read from left to right. For example, Figure 3.3 shows that at the leftmost point, at zero, each participant corresponds exactly to one cluster. The rightmost point, at 25, shows two clusters into which the participants can be divided. The thick line was drawn between 15 and 20, indicating that we found three interpretable clusters.

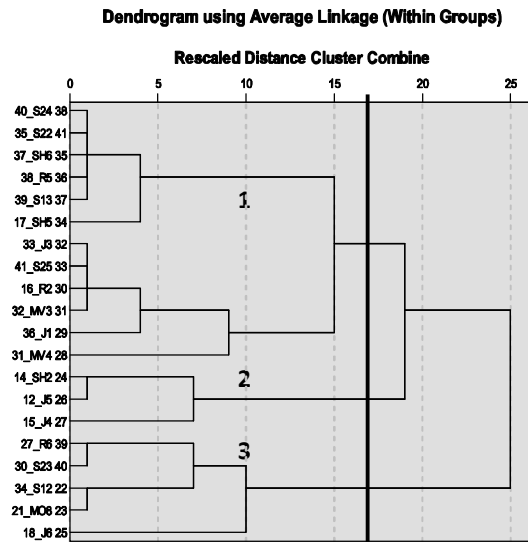


Figure 3.3 Dendrogram of hierarchical cluster analysis 'advantages' with three sub clusters. The vertical axis shows the participants

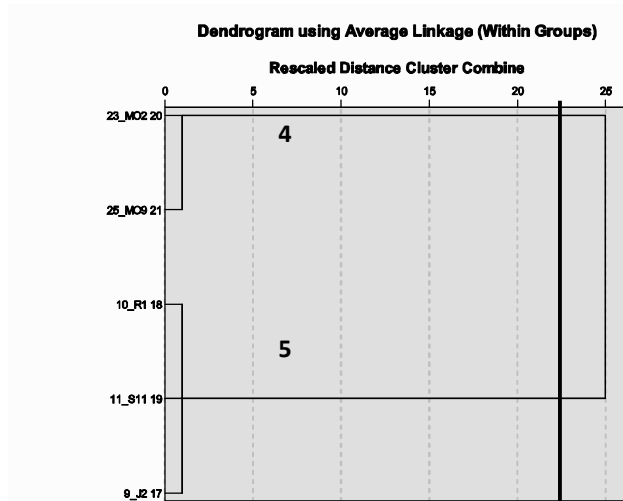


Figure 3.4 Dendrogram of hierarchical cluster analysis 'obligation and advantages' with two sub clusters. The vertical axis shows the participants

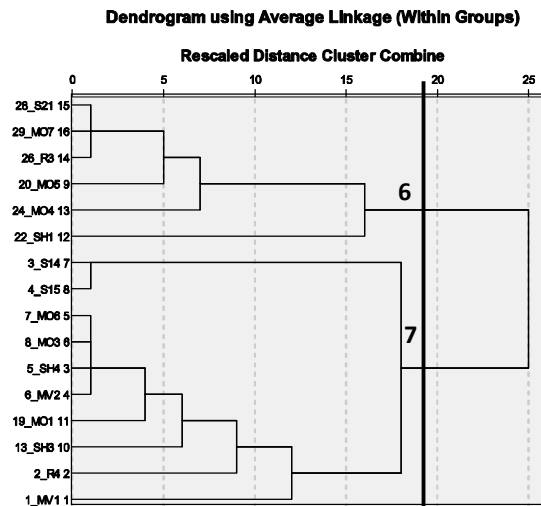


Figure 3.5 Dendrogram of hierarchical cluster analysis ‘obligation’ with two sub clusters. The vertical axis shows the participants

The main cluster ‘advantages’ (20 participants) was further divided into three sub-clusters. The main cluster ‘obligation and advantages’ (five participants) and the main cluster ‘obligation’ (16 participants) were each divided into two sub-clusters. Some clusters remained rather small. For example, the second main cluster included only five participants who filled in a PDP because it was mandatory and it had advantages for them. The clusters ranged on a continuum of clusters from teachers who completed a PDP because of the advantages, had a positive attitude and did not feel pressured, to clusters with teachers who felt pressured and had a neutral to negative attitude (see Appendix 1). The third variable, PBC, did not seem to have any influence on the clustering: most participants felt competent to complete a PDP. Participants who found it difficult were divided between the clusters. Years of work experience differed significantly between the clusters,  $H(6) = 14.64$ ,  $p < 0.05$ , whereas age and motives for professional development did not differ between the clusters. We now discuss each cluster in more detail.

#### *Cluster one*

This cluster included 12 participants who were positive about completing a PDP and felt no pressure. Some participants said that they completed a PDP for themselves.

E\_F, a 34-year-old female teacher, was one of the teachers of this cluster. She had a positive attitude because according to her it was good to formulate learning goals for the future and have a discussion with the direct supervisor. She said:

As a teacher you are the king or queen and nobody watches you, nobody says I think you teach very well. You only get feedback from students or when a colleague watches your lessons because of intervention or he or she accidentally needs scissors or something like that. Conversations are about the subject matter, not about how I function. I think it is very important to have such conversations from time to time.

The PDP was also useful for her to show her performance and how she developed herself to meet the necessary requirements for a higher position. She did not feel pressured because the PDP also benefited herself, the supervisor, management and colleagues. According to her, you had to take time to fill in the PDP. It is very important to look forward to what you want to achieve and learn.

#### *Cluster two*

Cluster two had five participants who completed a PDP because of its advantages. This cluster differed from cluster one regarding subjective norm. Although they completed a PDP mainly for its advantages, they admitted that it was mandatory. Three of them, however, said that they did not feel pressured.

One of these teachers was R\_G, a 22-year-old female teacher. Although filling in a PDP was an obligation and she felt urged to make one, the PDP supported her professional development. She argued that it was important to keep on learning when finishing formal education: "in order to differentiate, you have to be steady in front of the class. It is something you learn after initial education and that is what I want to learn now." From her education, she was used to writing down the activities she did for work and to reflect on these activities. Using a PDP supported reflection on work and future goals. She was motivated to learn and to be challenged in her job "to raise the standards for myself".

#### *Cluster three*

The three participants within this cluster completed a PDP because it benefited them. Their attitude was, however, neutral. They emphasized that completing a PDP had advantages and disadvantages and they were rather neutral about using a PDP. According to them, it focused too much on the future instead of on their current performance, and it took time. Completing a PDP was mandatory for them, but they felt no pressure.

L\_B was a 26-year-old male teacher. The PDP provided him with an opportunity to discuss possibilities for development and to come to mutual agreements with the supervisor. The supervisor clarified his or her expectations of his performance and he explained his demands and wishes regarding his career. However, he felt pressured by the organization to do extra things, for example to follow courses:

I am happy that I graduated from school, that I can just work, earn money and have time to do other things. I am satisfied with the situation as it is... actually the conversation made me feel pushed to do other things.

#### *Cluster four*

The two teachers in this cluster completed a PDP because it was required, but they also argued that it was important for their professional development.

B\_A was a 35-year-old male teacher. Using a PDP supported him in becoming aware of his performance and being result-oriented. However, the emphasis should be more on supporting personal development instead of professional development. According to him, a teacher can determine very well what is good for his or her profession, even if the school organization does not agree. He argued that the school should encourage teachers to use each others' expertise. His motive for professional development was the necessity to be up to date, especially regarding digital resources:

I think that students can learn more individually than they do now; individual learning is possible with new digital tools. It is a big challenge to use these. If I do not follow these developments, I will miss the train in five years.

#### *Cluster five*

The three teachers in this cluster completed a PDP because it had advantages and it was mandatory. They had a neutral attitude. According to them, it was good to be aware of performance and to work on career. However, they doubted the value of the PDP for their professional development.

One of these participants was F\_K, a 49-year-old male teacher. Using a PDP was mainly valuable for his career, to attain a higher salary scale. The PDP showed what he had accomplished. He found it meaningful to discuss strengths and weaknesses with his direct supervisor. However, writing things down could be interpreted in the wrong way and used against him:



I think it is important to have a relation of trust. This relation of trust can easily be affected...at the moment that something is written down, and it is wrongly interpreted or used, there is not much you can do.

He believed that the management attached importance to PDPs because they wanted to know how teachers performed to determine whether a teacher was qualified for a higher function. The teacher himself was motivated to stay up to date, be challenged and have pleasure in his work, but he did not believe that the PDP supported him in his professional development.

#### *Cluster six*

The most important reason to complete a PDP for these six participants was the obligation. Despite the obligation, most of them felt no pressure and they were positive about completing a PDP. Three participants believed that it was not very important for management that teachers completed a PDP.

One of the participants of this cluster was M\_J, a 54-year-old female teacher. She perceived the PDP as an instrument to reflect, formulate goals, and make clear how the goals are attained. It should not, however, be too leading and become a dogma. As a former supervisor she was familiar with supporting employees in their professional development and with the kind of questions that were posed in the PDP: "if you have done this before, it becomes easier. At some point, you understand how you perform; you have received enough feedback from others about your strengths and weaknesses." Regarding her professional development, she was mainly busy with doing research. That was something she really enjoyed, being curious and making progress by doing research.

#### *Cluster seven*

This cluster included ten participants who completed a PDP because it was mandatory, though four participants felt no pressure. Almost all the participants had a neutral to negative attitude. Some of the participants found it a waste of time, and didn't see the value for their professional development. They also had the impression that it had no priority for the management.

J\_K was a 56-year-old male teacher. He perceived filling in a PDP as a waste of time. For him, the PDP was just a format:

Nowadays, things are all about the form, it is not about the content of something. You do it right when you just complete a PDP and make it

look like a particular format. It is not necessary for me to complete a PDP. I think I am reasonably capable enough to reflect.

He thought that he couldn't write down what he wanted and chose to do that in another way. Despite these comments, he was motivated to do his job well and keep himself up to date to teach students well. When it is necessary to discuss something with his supervisor this can be done without using a PDP and having a development interview.

## Discussion

In line with Spillane et al. (2002) and Kelchtermans et al. (2009), we believe that teachers' beliefs, their characteristics and the environment determine how they act on a policy or development. For example, a study of Beausaert et al. (2011a) revealed that if an employee perceives the PDP as a learning tool it has a positive effect on undertaking learning activities, and expertise growth. In two studies in the medical field (Bullock et al., 2007; Evans et al., 2002), the participants were positive about using a PDP, while in a study by Austin et al. (2005), pharmacists were less motivated and more frustrated about using a PDP as they found it time-consuming and not valuable for their professional development. These studies suggested that the beliefs people had determined how they reacted to the implementation of a PDP. As these beliefs have not been systematically researched before, it is important to explore these beliefs to clarify what underlies teachers' decision to use a PDP.

This study aimed to explore teachers' beliefs about using a PDP and the characteristics that might influence these beliefs. The following section first discusses the first and second research question together by connecting the beliefs teachers have about using a PDP to their characteristics. The headings of the subsections are based on typical statements that teachers made during the interviews. Subsequently, the clusters resulting from the teachers' beliefs are discussed. Based on these results, recommendations are formulated for adjusting interventions to particular beliefs and characteristics of groups of teachers.

### Teachers' beliefs related to their characteristics

#### *PDP as an instrument for development*

Two other studies showed that when teachers perceive the PDP as a learning tool (Beausaert et al., 2011a), and when they are oriented towards learning and development, they are more positive about and successful in completing a PDP (Imhof &

Picard, 2009). This study confirmed the relations between the purpose of a PDP, motive for development and attitude regarding a PDP. Most teachers were positive about using a PDP and saw the tool as supportive of their development. Most teachers also wanted to develop themselves, provide good education and be challenged throughout their teaching career. Although the instrument was not used for assessment and promotion purposes, some teachers used a PDP to show their competences to apply for a high salary scale. Yet, not every participant was convinced about the usefulness of the PDP, especially the more experienced teachers who had a more negative attitude. Some of them said that they were still meeting the standards. They were improving themselves anyway, and when it was necessary they contacted their supervisor immediately and did not wait for the development interview.

#### *PDP as another thing that we have to do*

Although most teachers were positive about using a PDP, most teachers regarded it as something extra. Also, some teachers, who found it important to think about their development, experienced it as extra work due to high workload. This is in line with other research which also indicated that some users found it a time-consuming task (Austin et al., 2005). Despite this obligation and extra work, many teachers felt no pressure to make one. This might indicate that when teachers get used to completing a PDP it becomes part of their job, like marking exams.

#### *Completing a PDP is not too difficult*

Most teachers did not feel it was difficult to complete a PDP. Difficulties that were mentioned included reflection on learning and formulation of learning goals. However, there were no quality standards for completing a PDP. Teachers could complete the form according to their own insights, which made it not too difficult.

### **Clustering**

This study identified three main clusters and seven sub-clusters. Most differences appeared between sub-clusters one and seven (see Appendix 1). Cluster one included teachers who had a firm positive attitude towards the PDP. They were eager to learn and saw the PDP as advantageous for supporting their professional development, while teachers from cluster seven had a neutral to negative attitude and only completed a PDP because it was required. In between, clusters included participants who doubted the usefulness of a PDP. The main clusters differed in the teacher characteristic work experience. Teachers who completed a PDP because of its advantages had less work experience than teachers who filled in a PDP because it was obligatory. This might be due to the fact that teachers with less work experi-

ence finished their education recently, during which they probably used instruments for reflection and development (Mansvelder-Longayroux et al., 2007). This might have influenced their attitude positively and made them more aware of its advantages.

### **Limitations**

Because our aim was to conduct an explorative study we interviewed participants instead of using questionnaires. Because interviewing is a time-consuming research activity, a relatively small group of teachers was included. It was therefore not possible to generalize the results to a greater population. However, we involved a sample of teachers with different beliefs by interviewing teachers from different schools, and of different age and experience. Because most teachers were assigned to participate in the research, teachers were selected who differed regarding these characteristics and we did not have a bias of having only motivated teachers.

Due to the small sample and open-ended character of the interviews it was not possible to measure correlations between different variables to determine which variables relate to each other. However, by using in-depth interviews, we gained more insight into the beliefs of teachers regarding the use of a PDP, which provides more direction for implementing a PDP successfully.

### **Practical implications for interventions**

Based on the results, we propose some guidelines to adjust interventions to groups of teachers. In this study, it was clear for most teachers that the purpose was to promote professional development and not to formatively assess teachers for higher salary scales. This might had a positive effect on teachers who feel more safe to reflect on themselves (Imhof & Picard, 2009; Leggett & Bunker, 2006). However, some teachers saw the advantage of using the PDP for their career and to attain a higher salary scale. It is, therefore, important to be clear about the ownership of the PDP and give teachers the opportunity to decide whether they want to use it for their career.

In addition, attention should be paid to the meaning of a PDP for teachers' professional development. Some teachers, especially from clusters six and seven, said that the PDP did not match their professional development. They found the PDP an inflexible tool which did not address their everyday learning or they did not see the necessity to formulate learning goals. It is therefore important to discuss the meaningfulness of a PDP and to make it clear that it is used to support self-regulated learning. To address teachers' comments on the PDP as a 'snapshot' and

inflexible tool, the supervisor and teacher should take the initiative in discussing their development during the year.

Another recommendation is that management should show commitment to the use of PDPs. Some teachers, especially teachers who were neutral and negative, thought that the PDP did not have priority for management and this might have influenced how they acted on using a PDP.

In line with other research (Leggett & Bunker, 2006), a common and important criticism by the teachers was the time it took to fill in a PDP, especially when they experienced high workload. Filling in a PDP costs time, especially when wanting to do it right, resulting in more understanding of one's own performance and meaningful learning goals. To relieve this feeling of extra workload, it is recommended to embed completing a PDP in the working practice, for example by arranging sessions in which teachers get time and support to complete a PDP. When the PDP is not integrated in teachers' practice it remains something extra to their work (Imhof & Picard, 2009).

Teachers differed in the difficulties they experienced with completing a PDP. Some teachers were eager to take up challenges and develop themselves; they knew what they wanted to achieve. In contrast, other teachers found it more difficult to formulate learning goals or did not have the ambition to develop themselves. It is important that teachers are supported (Beusaert et al., 2011a; Mansvelder-Longayroux et al., 2007). This support should not only aim to support critical reflection; this study made it clear that it is also necessary to pay attention to differences in beliefs and skills between teachers. The direct supervisor who is responsible for the development interviews should become aware of these differences and adjust their support to it. In particular, teachers who have more work experience, but have less experience with PDPs, should get more attention to become accustomed to reflecting and to directing their professional development.

### **Future research**

In this study, we conducted a first exploration into identifying clusters of teachers with similar beliefs by seeking patterns in the conceptually ordered matrix of the participants' responses. We used hierarchical clustering as an objective and explorative methodology to identify clusters. Future research with a larger sample should examine the differences between the clusters in more detail, for example by developing a questionnaire based on the theory of planned behaviour. Future research should also include schools in which it is not mandatory to complete a PDP. This research only includes schools in which it was mandatory, which probably had a great influence on teachers' intention and decision to complete a PDP. When there is more variability in intention to complete a PDP, it is possible, especially when

using questionnaires, to validate the TPB model and measure relations between the dependent variable intention and the other variables. This study focused primarily on teachers' beliefs and their characteristics, whereas organisational conditions might influence teachers' beliefs about completing a PDP as well. These organisational conditions are addressed in the following chapter.

## References

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Austin, Z., Marini, A., & Desroches, B. (2005). Use of a learning portfolio for continuous professional development: a study of pharmacists in Ontario (Canada). *Pharmacy Education*, 5(3/4), 175–181. doi:10.1080/15602210500282434
- Beausaert, S., Segers, M., & Gijssels, W. (2011a). The use of personal development plans and the undertaking of learning activities, expertise-growth, flexibility and performance: the role of supporting assessment conditions. *Human Resource Development International*, 14(5), 527–543. doi:10.1080/13678868.2011.620782
- Beausaert, S., Segers, M., & Gijssels, W. (2011b). The Personal Development Plan Practice Questionnaire: the development and validation of an instrument to assess the employee's perception of personal development plan practice. *International Journal of Training and Development*, 15(4), 249–270. doi:10.1111/j.1468-2419.2011.00375.x
- Beausaert, S., Segers, M., Van der Rijt, J., & Gijssels, W. (2011c). The use of personal development plans in the workplace: a literature review. In P. van den Bossche, W. Gijssels, & R. Milter (Eds.), *Building Learning Experiences in a Changing World. Advances in Business Education and Training III* (pp. 235–265). Dordrecht: Springer.
- Bullock, A., Firmstone, V., Frame, J., & Bedward, J. (2007). Enhancing the benefit of continuing professional development: a randomized controlled study of personal development plans for dentists. *Learning in Health and Social Care*, 6(1), 14–26. doi:10.1111/j.1473-6861.2007.00142.x
- Driessen, E., Van Tartwijk, J., Van der Vleuten, C., & Wass, V. (2007). Portfolios in medical education: why do they meet with mixed success? A systematic review. *Medical Education*, 41(12), 1224–1233. doi:10.1111/j.1365-2923.2007.02944.x
- Evans, A., Ali, S., Singleton, C., Nolan, P., & Bahrami, J. (2002). The effectiveness of personal educational plans in continuing professional development: an evaluation. *Medical Teacher*, 24(1), 79–84. doi:10.1080/00034980120103478
- Fenwick, T. (2003). Professional growth plans: possibilities and limitations of an organization-wide employee development strategy. *Human Resource Development Quarterly*, 14(1), 59–77. doi:10.1002/hrdq.1050
- Fishbein, M., & Ajzen, I. (2010). *Predicting and Changing Behavior: The Reasoned Action Approach*. New York: Psychology Press.
- Fishbein, M., & Cappella, J. N. (2006). The role of theory in developing effective health communications. *Journal of Communication*, 56(1), 1–17. doi:10.1111/j.1460-2466.2006.00280.x
- Fullan, M. (2001). *The New Meaning of Educational Change*. New York: Teachers College Press.
- Guest, G., & McLellan, E. (2003). Distinguishing the trees from the forest: applying cluster analysis to thematic qualitative data. *Field Methods*, 15(2), 186–201. doi:10.1177/1525822X03015002005
- Imhof, M., & Picard, C. (2009). Views on using portfolio in teacher education. *Teaching and Teacher Education*, 25, 149–154. doi:10.1016/j.tate.2008.08.001
- Kelchtermans, G., Ballet, K., Peeters, E., & Verckens, A. (2009). Goede praktijkvoorbeelden als hefboom voor professionalisering? Een explorerend onderzoek naar determinanten en kritische kenmerken. [Good examples from practice as a leverage for professional development? An exploratory study into determinants and relevant characteristics]. *Pedagogische Studiën*, 86, 161–184.
- Kreijns, K., Vermeulen, M., Kirschner, P. A., Van Buuren, H., & Van den Acker, F. (in press). Adopting the integrative model of behavior prediction to explain teachers' willingness to integrate ICT in their pedagogical practices: A perspective for research on teachers' ICT usage in pedagogical practices. *Technology, Pedagogy and Education*.
- Landis, J.R., & Koch, G.G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33(1), 159–174.

- Leggett, M., & Bunker, A. (2006). Teaching portfolios and university culture. *Journal of Further and Higher Education*, 30(3), 269–282. doi:10.1080/03098770600802297
- Mansvelder-Longayroux, D. D., Beijaard, B., & Verloop, N. (2007). The portfolio as a tool for stimulating reflection by student teachers. *Teaching and Teacher Education*, 23(1), 47–62. doi:10.1016/j.tate.2006.04.033
- Maurer, T. J. (2002). Employee learning and development orientation: toward an integrative model of involvement in continuous learning. *Human Resource Development Review*, 1 (1), 9–44. doi:10.1177/1534484302011002
- Merriam, S. B. (2009). *Qualitative Research and Case Study Applications in Education*. San Francisco, CA: Jossey-Bass.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis*. Thousand Oaks, CA: SAGE Publications.
- Ministerie van Onderwijs, Cultuur en Wetenschap [Ministry of Education, Culture, and Science]. (2010). *Nota werken in het onderwijs 2011 [Memo working in education 2011]*. Retrieved from <http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2010/09/21/nota-werken-in-het-onderwijs-2011.html>
- Namey, E., Guest, G., Thairu, L. & Johnson, L. (2007). Data reduction techniques for large qualitative data sets. In G. Guest, & K. MacQueen (Eds.), *Handbook for Team-based Qualitative Research* (pp.137–162). Lanham, MD: Altamira Press.
- Norusis, M. J. (2011). *IBM Statistics 19 Advanced Statistical Procedures Companion*. Retrieved from [http://www.norusis.com/pdf/SPC\\_v19.pdf](http://www.norusis.com/pdf/SPC_v19.pdf).
- Orland-Barak, L. (2005). Portfolios as evidence of reflective practice: what remains “untold”. *Educational Research*, 47(1), 25–44. doi:10.1080/0013188042000337541
- Smith, K., & Tillema, H. (2001). Long-term influences of portfolios on professional development. *Scandinavian Journal of Educational Research*, 45(2), 183–203. doi:10.1080/00313830120052750
- Smith, K., & Tillema, H. (2003). Clarifying different types of portfolio use. *Assessment and Evaluation in Higher Education*, 28(6), 625–648. doi:10.1080/0260293032000130252
- Spillane, J. P., Reiser, B. J., & Reimer, T. (2002). Policy implementation and cognition: reframing and refocusing implementation research. *Review of Educational Research*, 72(3), 387–431. doi:10.3102/00346543072003387
- Tigelaar, D. E. H., Dolmans, D. H. J. M., De Grave, W. S., Wolfhagen, I. H. A. P., & van der Vleuten, C. P. M. (2006a). Participants’ opinion on the usefulness of a teaching portfolio. *Medical Education*, 40(4), 371–378. doi:10.1111/j.1365-2929.2006.02414.x
- Tigelaar, D. E. H., Dolmans, D. H. J. M., De Grave, W. S., Wolfhagen, I. H. A. P., & van der Vleuten, C. P. M. (2006b). Portfolio as a tool to stimulate teachers’ reflections. *Medical Teacher*, 28(3), 277–282. doi:10.1080/01421590600607013
- Van Eekelen, I. M., Boshuizen, H. P. A., & Vermunt, J. D. (2005). Self-regulation in higher education teacher learning. *Higher Education*, 50, 447–471. doi:10.1007/s10734-004-6362-0
- Wade, R. C., & Yarbrough, D. B. (1996). Portfolios: a tool for reflective thinking in teacher education? *Teaching and Teacher Education*, 12(1), 63–79. doi:10.1016/0742-051X(95)00022-C
- Wolf, K., & Dietz, M. (1998). Teaching portfolios: purposes and possibilities. *Teacher Education Quarterly*, 25, 9–22.
- Zeichner, K., & Wray, S. (2001). The teaching portfolio in US teacher education programs: what we know and what we need to know. *Teaching and Teacher Education*, 17(5), 613–621. doi: 10.1016/S0742-051X(01)00017-8



## Chapter 4

### **Implementing PDPs in Dutch schools: Organisational conditions and lessons learned**

Current insights on professional development of teachers indicate that teachers should take charge of their learning. Moreover, school organisations should become professional organisations in which such development is promoted. Professional Development Plans are implemented more and more to support this development. However, studies showed mixed evidence regarding the PDPs' effectiveness. The use of PDPs in school organisations is rather new and it is not self-evident that teachers perceive and act on this implementation as it was aimed for. Teachers might have their own beliefs about the purposes and usefulness of using a PDP. The school organisational context in which the PDP is implemented might influence teachers' beliefs and a successful implementation. The aim of the current study was to elicit which organisational factors influence teachers' beliefs and are important for a successful implementation. Based on interviews with teachers, supervisors and directors, we qualitatively analysed seven cases on the school organisational level. Results indicated that especially the clarity of the procedure, support from the direct supervisor, and the way school goals relate with individual goals made a difference between the more successful and the less successful cases.

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This chapter is based on:

Janssen, S., Kreijns, K., Bastiaens, T., Stijnen, S., & Vermeulen (submitted). Implementing PDPs in Dutch schools: Organisational conditions and lessons learned.

## Introduction

This study focuses on the use of professional development plans (PDPs) to promote professional development. A PDP seems to be a well suited instrument to promote professional development according to new insights. Since the '90s many authors argued that the work environment should be arranged to promote professional development according to these new insights (e.g. Geijsel, Slegers, Stoel, & Krüger, 2009; Hargreaves, 1994; Smylie, 1995). Teachers should be proactive and self-direct their development, critically reflect on their performance, experiment and innovate (Burbank & Kauchak 2003; Range, Scherz, Holt, & Young, 2011; Smylie, 1995). This self-regulated learning is important for the ability of a school organisation to adapt and learn to face new challenges (Fenwick, 2003).

A PDP is used more and more to promote professional development in school organisations (Zeichner & Wray, 2001). The PDP is the part of a portfolio in which teachers formulate learning goals and plans of action. It supports teachers in reflecting on their performance and learning and in taking responsibility for directing their development (Bullock, Firmstone, Frame, & Bedward, 2007; Evans, Ali, Singleton, Nolan, & Bahrami, 2002; Smith & Tillema, 1998). It also provides the school and teachers an opportunity for having a dialogue about performance and learning with colleagues and supervisors to reconcile school development goals and individual learning goals (Beausaert, Segers, & Gijsselaers, 2011b).

However, using a PDP effectively to promote professional development of teachers and school development requires changes in the school organisation. The introduction and implementation of the PDP should be done thoroughly (Austin, Marini, & Desroches, 2005) to create a culture of professional development in which dialogue about professional development is encouraged. Therefore, a new vision on professional development and leadership linked to this vision is needed. School organisations should support teachers' professional development and provide necessary facilitations. Teachers themselves have to take responsibility for their own learning and development and thereby improve their performance. To attain this, it is important that management and teachers acquire new beliefs and perform other behaviour regarding professional development (Vanderlinde, Van Braak, & Dexter, 2012).

Although literature describes this idealized picture of how professional development should be organized and the role of a PDP in promoting teachers' development, reality is often different. Several studies showed mixed evidence regarding the use of PDPs (Beausaert, Segers, & Gijsselaers, 2011a; Driessen, Van Tartwijk, Van der Vleuten, & Wass, 2007). Some of these studies suggested that some organisational conditions were not fulfilled and they emphasized the importance of embedding the PDP in an organisation (Austin et al. 2005; Driessen et al. 2007; Imhof &

Picard, 2009). Moreover, in practice, PDPs are often implemented top down which is not always welcomed by teachers as they did not have a voice in this decision. Its success, therefore, largely depends on how it is implemented and supported, how teachers perceive using a PDP and act on it (Fullan, 2001; Spillane, Reiser, & Reimer, 2002).

The study presented in the previous chapter focused on teachers' beliefs and their characteristics. In this study, we researched how the PDP was implemented and supported in Dutch school organisations. More specifically, we investigated which organisational factors were important for a successful implementation and influence teachers beliefs and dispositions about the PDP. In the following sections we first describe the PDP. We then elaborate on the organisational factors that were examined. Subsequently, the theory of planned behaviour (TPB) is considered which was used to research teachers' beliefs and dispositions.

## **Theoretical framework**

### **Professional Development Plans**

In educational settings, portfolios are commonly used for student teachers to support them to reflect on their performance, plan their learning, or show this as a proof of their competence (Knoepfel & Logan, 2011; Mansvelter-Longayroux, Beijard, & Verloop, 2007; Wade & Yarbrough, 1996; Wolf & Dietz, 1998). In contrast, in work settings, PDPs are often used. A PDP focuses on the part of a portfolio in which teachers reflect on their performance, in terms of strengths and weaknesses, formulate learning goals and make action plans (Bullock et al., 2007; Evans et al., 2002; Janssen, Kreijns, Bastiaens, Stijnen, & Vermeulen, 2012). After a year, the teacher and management may evaluate in a development interview whether the professional learning activities have been performed and have led to the accomplishment of the formulated goals.

Several studies emphasized the value of using a PDP. Benefits are, for example, that a PDP promotes reflection, provides teachers focus and commitment regarding their development and provides an opportunity for aligning individual goals with school goals (Austin et al., 2005; Imhof & Picard, 2009; Smith & Tillema, 2001; Van Eekelen, Vermunt, & Boshuizen, 2006). However, PDPs are not always received positively as some studies showed that users have different views on its usefulness (Austin et al., 2005; Beausaert et al., 2011a). Teachers who were positive found it useful for planning their development (Bullock et al., 2007), becoming aware of their performance (Tigelaar, Dolmans, De Grave, Wolfhagen, & Van der Vleuten, 2006; Wade & Yarbrough, 1996) and enhancing their knowledge and skills (Evans et

al., 2002). While users with a negative view were often sceptical about the excessive time it cost and doubted the value and relevance for their own learning needs (Austin et al., 2005; Leggett & Bunker, 2006).

These mixed views (Beausaert et al., 2011a; Driessen et al., 2007) could partly be explained by the degree to which the organisational conditions were fulfilled. For instance, if the use of the PDP is focused on promotion, instead of development, it can prevent teachers to critically reflect on their performance and mention few opportunities for learning. They might want to present themselves in a positive way and are not open for learning (Imhof & Picard, 2009; Leggett & Bunker, 2006). In addition, unclear purpose and guidelines which provide insufficient information might lead to frustration and misunderstanding, especially when PDP users have no experience with using a PDP and are not sure about how to complete one (Austin et al., 2005; Smith & Tillema, 2003; Wade & Yarbrough, 1996).

These results suggest that the views users have about using a PDP partly depend on organisational conditions. Optimizing these conditions and influencing these views are key for a successful implementation. In the next section we elaborate on organisational factors that are important to promote a successful use of PDPs on schools.

### **Organisational factors**

Because literature on the use and effects of PDPs is scarce, it might not provide a complete picture of all relevant factors. We, therefore, also included factors that, according to research on organisational factors and professional development, promote professional development. The organisational factors were divided in implementation factors, social support factors and school vision and strategy.

#### *Implementation factors*

*Purpose of implementing a PDP.* The purpose of implementing a PDP might influence how users experience completing a PDP. According to literature, the implementation in organisations and education may have several purposes (Smith & Tillema, 2003; Wolf & Dietz, 1998; Zeichner & Wray, 2001). In general, these purposes can be arranged in two groups. The first group includes developmental and learning purposes, for example, the PDP aims to promote learning and ownership over learner processes. The second group includes promotion and selection purposes, for example, the purposes are to present someone's competences and readiness for a certification or job. A study of Beausaert et al. (2011b) revealed that when the PDP is implemented and perceived as a learning tool, teachers are far more likely to be positive about using a PDP. It is, therefore, to be expected that

teachers have more positive dispositions in cases in which the PDP is implemented to support professional development.

*Introduction of the PDP.* A new policy or development introduced in a school requires a school vision and a strategy and planning of how the PDP should be implemented. Such a process can be very top-down. That is, management implements and prescribes how the PDP should be used. This contrasts Fullan's (2001) idea that implementing a new policy in a complex environment takes time. A change process evolves over time and is dependent on the activities and beliefs of persons involved. To increase the chance that teachers adopt the PDP as an instrument for self-regulated learning, management can choose to involve team leaders and teachers in developing, revising and implementing the process and instruments (Vanderlinde et al., 2012).

Furthermore, the process of introducing a PDP in the school must be explained. Earlier studies showed that unclear purpose and guidelines to complete a PDP lead to frustration and misunderstanding (Austin et al., 2005; Smith & Tillema, 2003; Wade & Yarbrough, 1996). It is important that management explains the rationale and benefits of using a PDP, the procedure for filling in a PDP and its content (Imhof & Picard, 2009; Spillane et al., 2002). Besides that, it should be made clear that the PDP is an instrument that enables teachers to take charge of what they want to attain in their development.

*Procedure.* Often the PDP is part of a trajectory in which teachers complete a PDP, get a development and/ or performance interview, update the PDP, and receive evaluations from their supervisor, colleagues and students to determine whether they developed their abilities. Often, management determines how the trajectory is formalized. For example, how many development and/ or performance interviews take place and with whom, how feedback on teachers' performance is organized and whether the trajectory finishes with an assessment interview.

*Sustained use.* According to Tillema and Smith (2001), sustained use leads to a better use of the benefits of a PDP. Wade and Yarbrough (1996) found, for example, that many student teachers, who had never been exposed to PDPs before, were unsure of the purpose and they did not know how to create one. It will take time for them to be familiarized with a PDP and acquire the necessary skills. People who made a PDP before have a better understanding about the concept and know what can be expected from them. Sustained use therefore might increase understanding about the PDP and its utilities.

#### *Social support factors*

Literature on professional development and PDPs indicated that support from management and colleagues is important for teachers to participate in learning activities and promote professional growth (Austin et al., 2005; Geijsel et al., 2009; Kwakman,

2003; Range et al., 2011). Maurer (2002) argued that emphasizing and supporting growth and self-development by supervisors and colleagues encourage teachers to engage in learning activities and develop themselves. A study of Mittendorff, Jochems, Meijers, & den Brok (2008) showed that in case the PDP was used as a basis for (career) dialogue, students were more likely to value the PDP and to reflect and think of future ambitions. Also, research from Bullock et al. (2007) showed that support in making a PDP helped dentists to identify learning needs and plan professional learning activities that were more related to these needs.

Regarding managerial support, several studies indicated that transformational leadership contributes to the professional development of teachers. This leadership style characterizes itself by communicating a clear and inspiring vision, listening to teachers and taking the ideas and beliefs of teachers seriously and stimulating and supporting teachers' development by discussing learning goals, stimulating experimentation with new methods and providing feedback. Moreover, supervisors should discuss individual goals and school goals to reconcile teachers' goals and needs with school's organisational goals and mission (Geijsel et al. 2009; Runhaar, Sanders, & Yang, 2010). For this leadership style, it is important to create an open and trustful climate to promote teachers' professional development (Fenwick, 2003; Geijsel et al., 2009). Also Range et al. (2011) indicated that trust is important for creating organisations in which teacher development is valued.

Supervisors should have the necessary competences to support teachers' development and guide them in using a PDP. They should be competent in guiding teachers in using a PDP and be prepared for supporting teachers' reflection, providing feedback and stimulating them to make specific plans of action (Beusaert et al. 2011b). Moreover, they must be willing to take time to support teachers and be convinced that the PDP is a useful instrument for organizing professional development (Darling-Hammond & Snyder, 2000; Imhof & Picard, 2009).

Regarding collegial support, several studies showed that this support is important for professional development (Evers, 2012; Hargreaves, 1994; Van der Heijden, 2003). Burbank and Kauchak (2003) emphasized the importance of collaborating because the context of classrooms and schools is complex. Inquiry of it should be done together to encourage reflective inquiry. Support of colleagues consists of diverse factors, they can be supportive by discussing learning goals and each others working practice, conducting peer observations, exchanging information or providing feedback (Amrein-Beardsley & Osborn Popp, 2012; Geijsel et al., 2009; Maurer, 2002; Smith & Tillema, 2001).

#### *School vision and strategy*

Having a vision and learning goals for the school or team and connecting this with individual goals is another factor that promotes professional development, and

consequently completing a PDP (Hargreaves, 1994; Van Eekelen et al., 2006). Geijsel et al. (2009) found in their study that the internalisation of school goals into personal goals affects participation in learning activities regarding new developments positively. It encourages teachers to become aware of desired future states and corresponding actions and it helps teachers to deal with rapid changes in education. In support of this, Garet, Porter, Desimone, Birman, and Yoon (2001) concluded from their study that coherence in learning activities between teachers promote change and development in teaching practice.

### **Theory of planned behaviour**

In the previous section, we listed a number of organisational factors that might influence a successful implementation of the PDP. In the following section, we elaborate on the beliefs and dispositions teachers have about using a PDP. Although teachers and management share the same goal - improving quality of education - they can have different views on how this goal, organising professional development, should be accomplished (Leggett & Bunker, 2006). According to Kelchtermans, Ballet, Peeters, and Verckens (2009), teachers have their own frame of reference that determines how they make sense and act on changes in policy or development at work.

In order to investigate teachers' beliefs and associated dispositions about using a PDP, a model is needed which explains why people decide to perform particular behaviour. We used the theory of planned behaviour (TPB; Ajzen, 1991; Fishbein & Ajzen, 2010) because it is a proven model in the domain of health science to predict and understand people's intention to perform particular behaviour. TPB includes variables that directly influence behaviour – hence, they are designated as proximal variables – and variables that indirectly, through the proximal variables, influence the behaviour – hence, they are designated as distal variables. The distal variables include the organisational variables, whereas the proximal variables include teachers' dispositions and beliefs about the behaviour (Kreijns, Vermeulen, Kirschner, Van Buuren, & Van den Acker, in press). The organisational factors that were included are described in the previous section and are depicted in Figure 4.1.

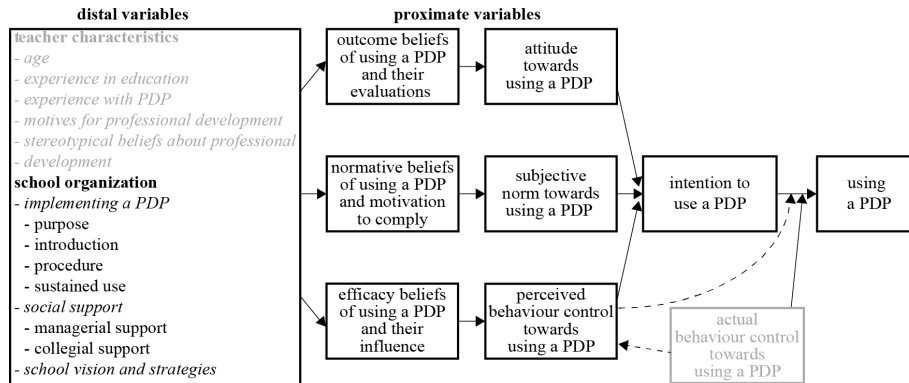


Figure 4.1 Theory of Planned Behaviour

TPB (see Figure 4.1) assumes that people's decision to perform or not to perform the behaviour is reflected in their intention. The intention to perform the behaviour, here using a PDP, is based on dispositions and beliefs people have about particular aspects of the behaviour (Kreijns et al., in press; Rhodes, Blanchard, & Matheson, 2006). In general, intention is determined by three proximal variables which are attitude, subjective norm and perceived behavioural control (PBC). These three proximal variables form the dispositions each teacher may have with respect to using a PDP. Attitude is the overall feeling of favourableness or unfavourableness towards performing the behaviour. Subjective norm concerns the perception whether important others think one should or should not perform the behaviour. For example, teachers perceive that their direct supervisor thinks they should complete a PDP. PBC refers to the perceived ease or difficulty of performing the behaviour. That is, do teachers believe they are able to complete a PDP even if there are factors that might obstruct this activity.

Each of the three dispositions, in turn, is based on the underlying beliefs people have about using a PDP. Attitudes are based upon beliefs about the consequences of using a PDP and their evaluation (e.g., using a PDP is useful, which is important). Normative beliefs determine the subjective norms people have, encompassing beliefs about whether important others (e.g., school staff, colleagues, and students) think that one has to perform or not to perform the target behaviour weighted by the individual's motivation to comply. Efficacy beliefs about factors that are likely to inhibit the behaviour and how they can be overcome influence the degree of perceived behavioural control.



## Method

### Context

The Dutch government has taken several interventions that aim to influence the human resource development policy of schools. Amongst them are 1) the Education Professions Act, which requires from teachers to file their professional development activities in a dossier, 2) a new job structure which opens the possibility for more career opportunities for teachers and 3) a grant for schooling (Ministerie van Onderwijs, Cultuur en Wetenschap, 2010). As a result, Dutch schools invested in their human resource development policy by introducing a new job structure, implementing PDPs and other similar initiatives. The current study is conducted at two primary schools and three secondary schools that have implemented PDPs and required from teachers to complete a PDP. The schools are dispersed over the Netherlands.

### Research question

To better understand how all the organisational factors interrelate, we conducted a multiple case study research (Merriam, 2009). A case study is suitable when the aim of research is to explore possible relations between variables in a specific context (Yin, 2003). To uncover a range of possible dispositions and settings we interviewed teachers, supervisors and management from five different schools thereby distinguishing seven cases. Researching different schools made it possible to compare differences in the way the PDP is implemented and how teachers are supported by management and colleagues in using a PDP and how this influences teachers' dispositions. With this approach we aimed to answer the following research question: *Which organisational factors contribute to a successful implementation of a PDP?*

### Participants

Forty-one teachers participated in the study, 12 teachers from two primary schools and 29 teachers from three secondary schools. Sixteen of the participants were male and 25 female. The average age of the participants was 39.1 (SD = 11.1) and the average years of experience was 13.7 (SD = 10.2). In addition to the teachers, directors, a human resources manager and supervisors were interviewed. Table 4.1 provides an overview of the cases and participants. Case one and two were two teams from one secondary school. Case three and four were two different primary schools. Case five was a secondary school. Case six and seven were two departments on two locations from one secondary school.

Table 4.1 Overview of cases and participants

Case	School type	Teachers	Age	Other participants
		n (man, woman)	<i>M (SD)</i>	Position (man, woman)
1	Secondary school 1, team 1	5 (1, 4)	39.2 (11.0)	1 director (m)**, 1 supervisor (m)
2	Secondary school 1, team 2	5 (4, 1)	41.2 ( 9.6)	1 director (m)**, 1 supervisor (m)
3	Primary school 1	6 (0, 6)	32.8 (8.9)	1 assistant-director (w)
4	Primary school 2	6 (0, 6)	42 (10.9)	1 assistant-director (w)
5	Secondary school 2	6 (3, 3)	35.5 (12.8)	1 director (m), 2 supervisors (m)*
6	Secondary school 3, department 1	4 (3, 1)	48.3 (9.2)	1 hr manager (w)**, 1 supervisor (w)*
7	Secondary school 3, department 2	9 (5, 4)	38.4 (12.5)	1 hr manager (w)**, 1 supervisor (w)*

\*The interviewed supervisors were not the immediate supervisors of the interviewed teachers, \*\*The interviewed director or HR manager were the same person from the same school

### Instruments

The data collection was based on a semi-structured interview approach and included teacher-, supervisor- and director interviews. The interviews were held from November 2010 till January 2011. The teachers' interviews were structured on the base of the TPB model (Ajzen, 1991; Fishbein & Ajzen, 2010) and aimed to elicit the beliefs and dispositions of teachers about using a PDP and on how the PDP was implemented in their schools. The first set of questions focused on demographic data: age, and years of experience in education. Teachers were also asked to describe the steps they had to take to complete a PDP. The second part of the interview focused on the dispositions of teachers about using a PDP. They were first asked to describe their most important reason for using a PDP. The interview proceeded by exploring the dispositions regarding TPB. Questions were asked about teachers' attitude (their opinion about using a PDP), subjective norm (the degree to which they felt pressure) and PBC (degree to which they found using a PDP difficult or easy). The third part of the interview explored relevant organisational factors from the teachers' point of view. The questions were about the procedure exploited, the support teachers received, and more specifically the support from their immediate supervisor with whom they discussed their PDP, and whether their goals were linked with school goals.

The interview for the school director consisted of twelve open questions. The questions were about the following issues: 1) the implementation process: the aim, how and when the PDP was implemented, 2) the support provided by the school

organisation for teachers using a PDP and their professional development and 3) the goals of the school.

The interview for the immediate supervisor – either the team leader or adjunct director – started with asking them about the implementation process in the school and in the team. Subsequently they were asked how they were prepared for guiding teachers, how they guided teachers, the goals of the team and their attitude towards supporting teachers in using a PDP.

### **Procedure**

The interview questions were first tested with research colleagues and one teacher. The interview protocol was adjusted based on their feedback. The school directors or human resources manager of the secondary schools were first interviewed about the implementation. During this meeting, arrangements were made for interviewing the teachers. The teachers from the secondary schools were appointed by the principal or HR manager. To have a range of different teachers, teachers were selected based on difference in age and view on using a PDP. The teachers from the primary schools were selected based on practical reasons; they were interviewed when the classes they taught had gym class. All participants were informed about the aim of study and the prospective benefits. The interviews were conducted by the same researcher and lasted between 20 and 60 minutes. All interviews were recorded, transcribed and analysed.

### **Analysis**

The first step of the analyses consisted of coding the interviews of the teachers and measuring the intercoder-reliability with the qualitative data analysis program NVivo 9. Using the TPB framework, six interviews of the teachers were coded by one researcher and discussed for further refinements with a colleague researcher. This resulted in a coding book which included the TPB model and the codes with an explanation of the codes and some examples. This coding book was used to determine the intercoder-reliability between two coders; the researcher and a colleague of the researcher, and to code the interviews. The colleague received a training in which the coding book and the procedure of coding the interviews was explained. After the training, both researcher and colleague coded one interview independently of each other. The results of the coding were discussed to reach an understanding. This process was repeated until the researcher and colleague agreed on the labelling of the fragments. Fragments that remained ambiguous were deleted. Two other interviews were then divided in fragments suitable for coding and used to measure the actual intercoder reliability. The intercoder reliability between the

coders was expressed by Cohen's Kappa = 0.71 and is "substantial" according to Landis and Koch (1977).

The coding of the interviews were put into a conceptually ordered matrix (Miles & Huberman, 1994). The rows of the matrix correspond to TPB variables of interest (e.g., the dispositions attitude, subjective norm, and PBC) and the columns of the matrix correspond to the seven cases and consider teachers' responses. The cells of the matrix were filled in by the labelled fragments. For each of the dispositions we divided the responses in three categories. Teachers' responses to attitude were either negative, neutral or positive; responses to subjective norm were either high pressure, low pressure, or no pressure. Reactions to PBC were summarized as either difficult, neutral or easy.

Second, the interviews of the directors and supervisors were analysed according to the organisational factors that were established in the theoretical framework (organisational factors). The interviews of the supervisors and directors were analysed with NVivo 9. The coded fragments were also put into a conceptually ordered matrix. This time, the rows of the matrix represent the organisational factors (e.g., the organisational factors managerial and collegial support), the columns represent the seven cases but now directors and supervisors are considered. The cells are filled with the fragments. Because we had few interviews (11 persons were interviewed) and the codes were rather straightforward (e.g. aim of implementing a PDP or trajectory) the coding for reliability was checked by a colleague. The colleague read the whole matrix and determined whether the fragments were labelled with the correct code.

Third, the two matrices were combined into one matrix to get an overview of the three dispositional variables and the organisational factors of each case. This matrix summarized all responses of all cases and was used to analyse differences and similarities between the seven cases by a within and cross-case analysis (Miles & Huberman, 1994). The matrix is presented in Table 4.2. The columns represent the seven cases and the rows represent the teachers dispositions and the organisational variables. The cells provide a summary per variable and per case. The table is discussed in the following section.

Table 4.2 overview of the seven cases, teachers' dispositions (attitude, subjective norm, PBC) and the organisational factors

Case	2 (n = 5)	3 (n = 6)	7 (n = 9)	5 (n = 6)	4 (n = 6)	1 (n = 5)	6 (n = 4)
<i>Attitude</i>	Positive	Neutral and positive	Neutral and positive	Neutral and positive	From negative to positive	From negative to positive	From negative to positive
<i>Subjective norm</i>	'Obligation, no pressure' and 'no pressure'	'Obligation no pressure' and 'no pressure'	'Obligation' and 'obligation, no pressure'	From 'obligation' to 'no pressure'	From 'obligation' to 'no pressure'	From 'obligation' to 'no pressure'	'Obligation' and 'no pressure'
<i>PBC</i>	Easy and neutral	From difficult to easy	Easy and neutral	From difficult to easy	Easy and neutral	Easy	Neutral and difficult
<i>Purpose of implementing a PDP</i>	+ development + used by teachers for career	+ development + school related development	+ development + School/ team development + personal investment	+ development + quality of education	+ development	+ development + used by teachers for career	+ development
<i>Introduction</i>	Top down + pilot/ evaluation with supervisors and teachers	Top down + meeting + workshops for teachers and supervisors	Top down + workshops for teachers and supervisors	Top down + meeting + workshop - not introduced by all supervisors	Top down + meeting + workshops	Top down + pilot/ evaluation with supervisors and teachers	Top down +/- central meeting - not introduced by all supervisors
<i>Clarity of procedure*</i>	+	+	+/- (next meeting)	+/-	+	+	- unclear follow up
<i>Sustained use</i>	+ since 4 years	+/- 3 years, direct supervisor was temporary absent	+/- since a half to 2 years	+/- since one year	+ since 3 years	+ since 4 years	+/- since one year

Case	2 (n = 5)	3 (n = 6)	7 (n = 9)	5 (n = 6)	4 (n = 6)	1 (n = 5)	6 (n = 4)
<i>Support by management/director</i>	No direct support Monitors process	Yearly meeting about process with supervisors Sometimes performance/ development inter-views	Advises	Monitors process	Yearly meeting about process with supervisors Sometimes performance/ development inter-views	Monitors process	Advises
<i>Support by direct supervisor</i>	+ open, collegial + regular inter-views + sparring partner + knowledge of 'human nature' + informal support	+ good communication + close monitoring + with attention + class visitation - absence of direct supervisor	+ intensive experience with PDP during courses + used to work with a PDP + informal support - no informal support	+ concerned + positive + easy access - no informal support - discussing career	+ regular inter-views + class visitation + meeting for exchanging PDPs - no informal support - short inter-views - unclear whether it is found important	+ cares for well being + regular inter-views - no 'informal' support - difficult to support experienced teachers - no interview for one teacher	+ open, easy communication + informal support from one supervisor - difficult to make concrete goals - no interview for one teacher
<i>Support by colleagues</i>	- not about PDP	+/- sometimes about PDP with direct colleagues + open communication	+ mainly during meetings + about education, development - PDP is individual/ confidential	- not about PDP - difficult to fill in feedback + professional development, development of department	+/- sometimes with direct colleagues	- not about PDP + projects, subject-matter, professional development	- not about PDP + about education

Case	2 (n = 5)	3 (n = 6)	7 (n = 9)	5 (n = 6)	4 (n = 6)	1 (n = 5)	6 (n = 4)
<i>Linking individual goals with school goals</i>	+ goals are clear +/- not consequently linked to PDP	+ vision and goal developed together +/- not consequently linked to PDP	- abstract vision + goals within development groups - not linked to PDP	+ clear goals + teachers agree with the goals - not linked to PDP	+ vision and goals are clear +/- not consequently linked to PDP	- unclear school goals + clear team goals - not linked to PDP	+ clear vision - abstract goals - not linked to PDP
<i>Facilitating factors</i>	Student questionnaires PDP-program	Feedback of supervisor/colleagues	PDP (examples) Meetings Feedback	Feedback of colleagues and students	Interviews Class visits	Student questionnaires PDP program Development interview	Time PDP (examples)
<i>Constraining factors</i>	Time No colleague consultation	Time/ workload	Workload PDP is laborious Time of meeting	PDP form Colleague-assessment Workload	Time/ workload No money for schooling	Subjective feedback of colleagues	PDP format Time No interview age

## Results

By comparing the cases using the matrix we found successful and less successful cases regarding the organisational factors in relation to teachers' dispositions about using a PDP. The organisational factors were measured from the viewpoint of teachers, the direct supervisor(s) and (adjunct) director of the school to get a more complete picture of how it is perceived by the different stakeholders. For example, from the director's point of view it might be evident that the purpose of implementing a PDP is to promote teachers' professional development, while this might not be clear for teachers.

To get a good understanding of which factors influenced teachers' dispositions, we arranged the seven cases from cases in which teachers had more negative dispositions to cases in which teachers had mostly positive dispositions. To make this ordering, each cell of the matrix was coloured from light to dark grey. Light grey indicates a positive stance, for example all teachers of a case had a positive attitude, or the direct supervisor supported teachers in completing a PDP. We then considered whether the organisational factors related to the dispositions.

Based on this matrix (Table 4.2), we first explain the factors that were invariant between cases. Second, the cases are described and characterized. We begin with the case in which teachers had negative dispositions, and end with the case in which teachers had more positive dispositions. Subsequently, the cases were compared with each other to examine which factors led to positive dispositions of teachers.

### Similarities between the cases

The cases did not differ regarding the organisational factors: purpose of implementing the PDP and support from management and colleagues.

#### *Purpose*

All schools had the same purpose, namely promoting the professional development of teachers. More specifically, directors and direct supervisors formulated the following purposes; improve teachers' competences, stimulate teachers to stay up-to-date, link personal development to team and school development, support supervisors in the performance interviews, and improve the quality of education.

#### *Social support from management*

The directors of the secondary schools did not provide direct support for teachers. They initiated and introduced the PDP and monitored the process. Only the directors of the two primary schools were involved by having a performance and a de-



velopment interview with the teachers. These schools were rather small compared to the secondary schools and the directors or adjunct-directors were also responsible for having those interviews.

#### *Support from colleagues*

In all cases there was almost no support from colleagues. Despite that some schools facilitated some collegial support by arranging meeting for exchanging ideas for learning goals or by implementing questionnaires for collegial feedback, teachers mostly argued that a PDP is something individual and confidential. They said that they did not ask for or provide their colleagues with support in using a PDP.

#### **Differences between cases**

In this section, we explain the ordering of the cases. The seven cases were divided in three groups in which teachers had similar dispositions. First, case four, one and six are described. Teachers of these cases had more negative dispositions and felt more pressure to use a PDP. Then cases three, seven and five, which included more neutral teachers, are explained. Finally, we elaborated on case two which stood out compared to the other cases, because all teachers in this case had positive dispositions and felt less pressure to complete a PDP.

#### *Cases four, one and six*

The first group of cases were case four (six teachers), one (five teachers) and six (four teachers). Teachers from these cases had more negative dispositions towards using a PDP. Even though teachers' attitude ranged from negative to positive most of them felt pressured to complete one.

The PDP in these cases was introduced one to four years ago. The introduction was conducted top down by management by meetings or workshops. The introduction within case one was extended with a pilot. This pilot provided the opportunity for supervisors and teachers to try things out and evaluate the procedure.

Case four, one and six worked with a 3-year cycle. Case four had three development and performance interviews each year and an assessment interview after three years. Case one and six had one development and performance interview each year and after three years an assessment.

The teachers from these cases were less satisfied with the social support from the supervisor. The support they received was mainly done by the direct supervisor during formal interviews. In case four teachers were more supported by the supervisor because besides the interviews she visited their classes and gave feedback. Nevertheless, the teachers felt that they were not supported informally; the inter-

views they had with the supervisor were rather short and it was unclear for them whether management found it important that they completed a PDP.

Although teachers from case one experienced that the supervisor cared for their wellbeing and was consequent on having the development interviews regularly, they felt less supported by him. The supervisor was rather young and inexperienced. Especially the older teachers of his team found that he could not support them in their development because he was, in their opinion, less experienced as a teacher and team leader.

Although teachers from case six experienced open and easy communication and informal support within the teams, they were not satisfied with the support for using a PDP. The supervisor mentioned that she found it difficult to make specific agreements with teachers about which competence they want to develop further. Teachers themselves mentioned that the PDP was not discussed in detail. It was regarded as a formality. Also, development interviews were not planned on a regular base and it was unclear when and how the cycle would proceed. One teacher even did not have a meeting about his filled in PDP.

#### *Case three, seven and five*

Case three (six teachers), seven (nine teachers) and five (six teachers) form the next group of three cases. These cases were similar regarding teachers' attitude toward using a PDP and subjective norm. The cases included teachers who were positive to neutral about using a PDP and who felt more pressured to use a PDP because it was mandatory. The PDP was also implemented top down in these cases. The implementation was performed by meetings and workshops in which teachers got an explanation about how to fill in a PDP.

The procedure used differed between these cases. The PDP in case three was introduced for three years now. This school worked with a 3-year cycle, with three development and performance interviews each year and after three years an assessment. Case seven also had a 3-year cycle, with one development and performance interview in the first year, an evaluation in the second year and an assessment in the last year. Case five had a 5-year cycle, which started with a development interview, an evaluation after two years, and after five years a performance interview. Though these procedures seemed to provide structure, it was not clear for everyone. Supervisors and teachers from case seven and five were unsure about when and whether the next interview would take place.

Teachers from cases three and seven were rather positive about the supervisors' support. The supervisors within these cases characterized themselves with providing more support and attention for the PDP and teachers' development. The supervisor of case three had much experience with guiding teachers and she regu-

larly spook with the teachers and knew how they performed because she used to visit their classes before the development interview.

The supervisor of case seven was experienced as she used a PDP herself and had followed various management courses. She found the PDP and interviews with teachers very valuable; 'nice to have conversations with teachers, to stimulate and support them, to give them some thoughts to their talents and to let them be proud of what they are planning to do'.

The teachers characterized the two supervisors of case five as concerned, positive and they were accessible for questions. However, two supervisors who were interviewed within this case were unsure about the usefulness of completing a PDP by teachers and having the interviews. They made a distinction between three groups of teachers for which the PDP was needed or not needed. The following citation of one of the supervisors clarified this:

I do not have to talk with a teacher who performs very well, who develops continuously. Now and then, he or she informs me about his or her performance to keep me up-to-date. For such a teacher, I wonder, whether it is necessary to burden him or her with this amount of extra work? For a colleague who is not aware about the PDP's value, I am not convinced that he or she sees the light after a development interview. However, the PDP can be a solution for a colleague who needs direction.

#### *Case two*

As can be seen from the matrix in Table 4.2, case two (five teachers) included teachers who were most positive and felt no pressure to complete a PDP. The PDP was introduced four years ago. During the implementation process, management involved direct supervisors and teachers by conducting a pilot before implementing the PDP for the entire school. The pilot provided the opportunity to try things out and evaluate the procedure for improvements. The procedure consisted of a 3-year cycle in which the development and performance interviews succeeded each other. The direct supervisors invited teachers for the interviews and sent them an e-mail with a link to the PDP form and questionnaires for getting feedback from colleagues and students.

Case two especially distinguished itself from the other cases regarding support from the direct supervisor, because the teachers were very positive about their direct supervisor. The supervisor and teachers mentioned that there was a culture of open communication and trust. The teachers regarded their supervisor as a spar-

ring partner with a good judgement of human nature. He adjusted his support to the needs of the teachers and provided them with relevant feedback.

### **Facilitating and constraining factors**

Finally, we asked the teachers what facilitated them in completing a PDP and what factors constrained them. Many teachers mentioned that the feedback they got from students, for example a student questionnaire, helped them in completing a PDP. Some teachers also said that feedback from colleagues supported them. In one case teachers were supported in time by meetings in which they could fill in a PDP.

Although some teachers thought that feedback of colleagues supported them, they argued that the feedback questionnaires of colleagues were subjective, and thus were not supporting. According to them, colleagues could not fill in these forms correctly because they never visited their classes and therefore they cannot provide objective feedback on their performance. Another often mentioned disabling factor was time. Most teachers experienced a high workload and they had little time for completing a PDP.

### **Factors that influence teachers dispositions**

In this section we answer the research question by describing which organisational factors contribute to a successful implementation. To provide an answer we first had to explore whether the cases differed in the degree to which the PDP was successfully implemented, that is, whether teachers' dispositions towards using a PDP differed between the cases. The results made clear that cases differed regarding teachers' dispositions. It was therefore possible to compare cases with teachers who had positive dispositions towards using a PDP with cases of teachers with more negative dispositions. The results are presented similarly to the division of factors as presented in the theoretical framework.

Regarding the implementation factors, the purpose of implementing a PDP did not vary between the cases and did not influence the differences in dispositions between the cases. All schools aimed to promote the professional development of teachers. The introduction of the PDP, the clarity of the procedure and sustained use varied between the cases. The way the PDP was introduced in the schools differed but did not vary with the teachers dispositions. The differences concerned whether a pilot trajectory was included or not to involve teachers and supervisors in evaluating and adjusting the procedure of completing a PDP. Moreover, in some cases the PDP was not introduced properly and it was rather up to the teacher to find out how to complete a PDP. Clarity about the procedure and sustained use varied with teachers dispositions. In cases in which teachers had more positive

dispositions, there was more clarity for teachers about the procedure of completing a PDP and the PDP was used for a longer period of time.

Considering the social support factors, management support from the director was in most cases minor and on 'a distance'. Support from the supervisor stood out as a factor that varied with teachers' attitude. The cases with most positive teachers who did not feel pressured appeared to have more supportive supervisors than the cases that included teachers with more negative dispositions. Collegial support was in all cases minimal and did not have an effect on the implementation of the PDP.

Finally, cases differed to the degree to which the school vision and strategy were clearly formulated and communicated with teachers. Teachers' comments were often that school goals were rather general, whereas goals of the team or department were more specific and easier to apply in the work practice. These goals were, however, not deliberately linked to individual goals during a development interview.

## **Conclusions and discussion**

Literature provided insight into how a school organisation can be(come) a professional and developing organisation, and the PDP seems to be a good instrument to support this. Nevertheless, this study pointed out that it is not self-evident that implementing a PDP leads to a professional school organisation. It is necessary that some organisational conditions should be fulfilled. The purpose of the current study was to find out which organisational factors contribute to a successful implementation of a PDP. In the following sub-sections, we discuss the organisational factors that were investigated.

In all cases, the purpose of the PDP was to promote teachers' development. In contrast to research of Beusaert et al. (2011b), this did not automatically lead to teachers with only a positive attitude in our study. Some teachers were neutral or negative. Therefore, it is interestingly to find out which other factors might contribute to a positive attitude of teachers. Because then teachers might undertake more learning activities, and thereby show an expertise growth and improved performance (Beusaert et al. 2011b).

In this study, implementation and supporting factors and vision and strategy are considered factors that might influence how a PDP is embedded in the school organisation. Imhof and Picard (2009) and Driessen et al. (2007) argued that it is important that a PDP is integrated in the environment and that it should not be a separate instrument taking time and effort. They concluded that the introduction and implementation should be done thoroughly and supervisors should take time to discuss the PDPs. Also in this study, the PDP was often not thoroughly embedded in

the work environment which might explain why not all teachers were positive about using a PDP. Although, the aim of a PDP is clear for most teachers and the PDP is introduced carefully in most cases, other organisational conditions were less fulfilled for a successful implementation.

### **Implementing the PDP; introduction, procedure and sustained use**

A good introduction of the PDP is important to clarify its purpose and the procedure for completing a PDP to avoid misunderstanding and frustration (Austin et al., 2005; Challis 2001; Imhof & Picard, 2009). The results showed that most schools introduced the PDP well and most teachers found the procedure evident. In one case, it was, however, very unclear how filling in a PDP was followed up by interviews. Some teachers within this case, were unsure about the aim and doubted about what would happen with what they had written down. This might have resulted in more negative and reserved (i.e., neutral) dispositions towards a PDP.

In most cases the procedure consisted of development and performance interviews and ended with an assessment. However, in most cases, the PDP was not implemented for such a long time, and assessment did not yet take place. It is, therefore, not possible to determine the effect of this assessment on teachers' dispositions.

### **Supporting the teachers in using a PDP; management, direct supervisor and colleagues**

This study confirmed results from earlier studies (e.g. Beusaert et al., 2011b; Bull-ock et al., 2007) indicating that social support from a supervisor is important. Evers (2012) found, for example, that social support from the immediate supervisor is an important predictor for participating in learning activities. Within this study, we made a distinction between support from the director of the school and support from the direct supervisor. The director was responsible for monitoring the process from a distance while the direct supervisor was in charge of the (daily) support of teachers by having the development and performance interviews and providing social support. This study showed that the direct supervisor is an important person in the organisation who can promote the implementation and support teachers effectively. This support should preferably be more than just one interview in a year. Especially from case two it can be learned that it is important that the supervisor takes care of the trajectory and has qualities that comprise being a sparring partner, and creating an open climate in which teachers are not reluctant to be open about their performance and in which the supervisor can give honest feedback.

In most cases it was left to teachers' responsibility to support each other. Even though teachers were facilitated by feedback questionnaires, meetings for completing a PDP, and the team and school was characterized with an open and a trustful climate, teachers still engaged in a limited dialogue with each other about their development. Previous studies argued that collaboration is an important catalyst for learning at work (Burbank & Kauchak, 2003; Meirink et al., 2007). Therefore, more is needed to facilitate this dialogue, as a PDP did not provide enough reason to discuss individual development with colleagues. Whilst some teachers argued that collegial support supported them, it should be more than a feedback questionnaire. Teachers must be familiar with each others performance, by working together in projects, visiting lessons from colleagues and discuss their performance together to provide relevant feedback (Burbank & Kauchak, 2003).

### **Vision and strategy for developing and improving education in the school**

Most school teams of the current study could improve the reconciliation of school goals with individual goals, by formulating more clear goals (in dialogue with the employees), discuss these in central meetings and development interviews. Particularly, the study of Van Geijssel et al. (2009) showed that clear communication of the school's vision is important to reinforce teachers' identification with the school organisation and to inspire them to change their own practice. Teachers' internalisation of school goals makes them more aware of what they can achieve and supports them in determining own learning goals in their PDPs.

### **Limitations**

Because our aim was to gain more insight into how PDPs are implemented and how organisational factors relate to teachers' beliefs, we conducted an explorative study. We involved different schools who implemented PDPs. The schools differed on several factors which provided us more information about what factors led to a more successful implementation. However, on some factors school organisations were invariant and it was difficult to determine whether these factors lead to more or less successful PDP use. For example, the lack of support from colleagues was the same for all cases, and we could therefore not conclude whether this support appeared more it would have lead to more success. Moreover, results revealed besides differences between cases also differences within cases regarding teachers' dispositions. For example, case six included teachers with a negative, neutral and positive attitude. Further exploration is needed to clarify those differences, as in this research we considered the differences on the level of cases.

In addition, due to the small sample and explorative nature of the study, we could not generalize the results to a larger population and more quantitative studies are necessary to measure exact relations between the investigated variables.

### **Future research**

Based on the qualitative results of the current study, questions could be formulated to conduct a broader survey to find more generalisable outcomes. Also, more qualitative research is needed to find out what a direct supervisor actually can do to support teachers; for example, by being a sparring partner and give informed support. A suggestion for more qualitative and in-depth research is to compare supervisor- teacher dialogues of effective and less effective supervisors on several aspects such as frequency, content and type of feedback. Moreover, it is yet unclear what the role of the support from colleagues is. Is support from colleagues needed in this individual part of development or is it enough to collaborate and learn on mutual subjects, without discussing individual goals and development? In addition, this research gives thought to the role of leadership in formulating a vision and goals for the school and connecting this with individual goals and vice versa. New insights in the area of distributed leadership, could provide useful suggestions for investigating this; for example, on distributing responsibilities regarding attaining particular goals.

### **Practical implications**

If schools want to be professional organisations, professional development should become a first priority. The PDP can be a powerful instrument if the necessary conditions are fulfilled. Some practical recommendations can be made based on what is learned in this study.

First of all, a clear vision on what should be accomplished by implementing a PDP and a strategy should be formulated to determine how teachers are supported and how the PDP is used in the organisation. This strategy can be developed with a pilot trajectory in which supervisors and teachers evaluate and improve the procedure. Furthermore, meetings should be arranged, especially when teachers complete a PDP for the first time, in which they get the opportunity to fill in a PDP and get explanation and support. It is essential that the procedure is clear and that both teachers and supervisors have the same expectations from the PDP and interviews.

Secondly, this study argues that supporting teachers is an important part of the supervisors' task. Supervisors should take time to listen to teachers ideas for development, be a sparring partner and inspire teachers to take new steps in their development. They should also be prepared for these tasks and adjust their support to



teachers' expectations. For example, some teachers prefer to pursue goals for the long term or want to make career while other teachers first want to concentrate on more short term goals and improve their performance. If supervisors disregard this role than it might be likely that teachers consider the PDP as a waste of time.

Thirdly, although feedback from colleagues was regarded as supportive, it was often not valuable because teachers were often not familiar enough with each others performance. It is therefore recommended to facilitate class visits and meetings for providing relevant feedback.

## References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50, 179–211.
- Amrein-Beardsley, A., & Osborn Popp, S. E. (2012). Peer observations among faculty in a college of education: investigating the summative and formative uses of the Reformed Teaching Observation Protocol (RTOP). *Educational Assessment, Evaluation and Accountability*, 24(1), 5–24. doi:10.1007/s11092-011-9135-1
- Austin, Z., Marini, A., & Desroches, B. (2005). Use of a learning portfolio for continuous professional development: A study of pharmacists in Ontario (Canada). *Pharmacy Education*, 5(3/4), 175–181. doi:10.1080/15602210500282434
- Beausaert, S. A. J., Segers, M., & Gijsselaers, W. (2011a). Using a personal development plan for different purposes: its influence on undertaking learning activities and job performance. *Vocations and Learning*, 4(3), 231–252. doi:10.1007/s12186-011-9060-y
- Beausaert, S., Segers, M., & Gijsselaers, W. (2011b). The use of a personal development plan and the undertaking of learning activities, expertise-growth, flexibility and performance: the role of supporting assessment conditions. *Human Resource Development International*, 14(5), 527–543. doi:10.1080/13678868.2011.620782
- Bullock, A., Firmstone, V., Frame, J., & Bedward, J. (2007). Enhancing the benefit of continuing professional development: a randomized controlled study of personal development plans for dentists. *Learning in Health and Social Care*, 6(1), 14–26. doi:10.1111/j.1473-6861.2007.00142.x
- Burbank, M. D., & Kauchak, D. (2003). An alternative model for professional development: Investigations into effective collaboration. *Teaching and Teacher Education*, 19, 499–514. doi:10.1016/S0742-051X(03)00048-9
- Challis, M. (2001). Portfolios and assessment: meeting the challenge. *Medical Teacher*, 23(5), 437–440. doi:10.1080/01421590120075643
- Darling-Hammond, L., & Snyder, J. (2000). Authentic assessment of teaching in context. *Teaching and Teacher Education*, 16(5), 523–545. doi:10.1016/S0742-051X(00)00015-9
- Diessen, E., Van Tartwijk, J., Van Der Vleuten, C., & Wass, V. (2007). Portfolios in medical education: why do they meet with mixed success? A systematic review. *Medical Education*, 41(12), 1224–1233.
- Evans, A., Ali, S., Singleton, C., Nolan, P., & Bahrami, J. (2002). The effectiveness of personal education plans in continuing professional development: an evaluation. *Medical Teacher*, 24(1), 79–84. doi:10.1080/00034980120103478
- Evers, A. (2012). *Teachers' professional development at work and occupational outcomes: An organisational and task perspective* (Unpublished doctoral dissertation). Scientific Centre for Teacher Research of Open University, Heerlen.
- Fenwick, T. J. (2003). Professional Growth Plans: Possibilities and Limitations of an Organizationwide Employee Development Strategy. *Human Resource Development Quarterly*, 14(1), 59–77. doi:10.1002/hrdq.1050
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior*. New York: Psychology press.
- Fullan, M. (2001). *The new meaning of educational change* (3rd ed.). New York: Teachers college press.
- Garet, M., Porter, A., Desimone, L., Birman, B., & Yoon, K. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915–945. doi:10.3102/00028312038004915
- Geijssels, F., Sleegers, P., Stoel, R., & Krüger, M. (2009). The effect of teacher psychological and school organizational and leadership factors on teachers' professional learning in Dutch schools. *The Elementary School Journal*, 109(4), 406–427. doi:10.1086/593940
- Hargreaves, D. (1994). The new professionalism: The synthesis of professional and institutional development. *Teaching and Teacher Education*, 10(4), 423–438. doi:10.1016/0742-051X(94)90023-X

- Imhof, M., & Picard, C. (2009). Views on using portfolio in teacher education. *Teaching and Teacher Education*, 25, 149–154. doi:10.1016/j.tate.2008.08.001
- Janssen, S., Kreijns, K., Bastiaens, T., Stijnen, S., & Vermeulen, M. (2012). Teachers' professional development: an analysis of the use of Professional Development Plans in a Dutch school. *Professional Development in Education*, 38(3), 453–469. doi:10.1080/19415257.2011.635307
- Kelchtermans, G., Ballet, K., Peeters, E., & Verckens, A. (2009). Goede praktijkvoorbeelden als hefboom voor professionalisering? Een explorerend onderzoek naar determinanten en kritische kenmerken. [Good examples from practice as a leverage for professional development? An exploratory study into determinants and relevant characteristics]. *Pedagogische Studiën*, 86(3), 161–184.
- Knoepfel, R., & Logan, J. P. (2011). Linking theory with practice: a longitudinal analysis of student portfolios in principal preparation. *International Journal of Leadership in Education*, 14(3), 337–349. doi:10.1080/13603124.2010.503280
- Kreijns, K., Vermeulen, M., Kirschner, P. A., Van Buuren, H., & Van den Acker, F. (in press). Adopting the integrative model of behavior prediction to explain teachers' willingness to integrate ICT in their pedagogical practices: A perspective for research on teachers' ICT usage in pedagogical practices. *Technology, Pedagogy and Education*.
- Kwakman, K. (2003). Factors affecting teachers' participation in professional learning activities. *Teaching and Teacher Education*, 19(2), 149–170. doi:10.1016/S0742-051X(02)00101-4
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33, 159–174.
- Leggett, M., & Bunker, A. (2006). Teaching portfolios and university culture. *Journal of Further and Higher Education*, 30(3), 269–282. doi:10.1080/03098770600802297
- Mansvelder-Longayroux, D., Beijlaard, D., & Verloop, N. (2007). The portfolio as a tool for stimulating reflection by student teachers. *Teaching and Teacher Education*, 23(1), 47–62. doi:10.1016/j.tate.2006.04.033
- Maurer, T. J. (2002). Employee learning and development orientation: Toward an integrative model of involvement in continuous learning. *Human Resource Development Review*, 1(1), 9–44. doi:10.1177/1534484302011002
- Meirink, J., Meijer, P., & Verloop, N. (2007). A closer look at teachers' individual learning in collaborative settings. *Teachers and Teaching: Theory and Practice*, 13(2), 145–164. doi:10.1080/13540600601152496
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: Jossey-Bass.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks: Sage.
- Ministerie van Onderwijs, Cultuur en Wetenschap [Ministry of Education, Culture, and Science]. (2010). *Nota werken in het onderwijs 2011*. [Memo working in education 2011]. Retrieved from <http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2010/09/21/nota-werken-in-het-onderwijs-2011.html>.
- Mittendorff, K., Jochems, W., Meijers, F., & den Brok, P. (2008). Differences and similarities in the use of the portfolio and personal development plan for career guidance in various vocational schools in The Netherlands. *Journal of Vocational Education and Training*, 60(1), 75–91.
- Range, B. G., Scherz, S., Holt, C. R., & Young, S. (2011). Supervision and evaluation: The Wyoming perspective. *Educational Assessment, Evaluation and Accountability*, 23(3), 243–265. doi:10.1007/s11092-011-9123-5
- Rhodes, R. E., Blanchard, C. M., & Matheson, D. H. (2006). A multicomponent model of the theory of planned behaviour. *British Journal of Health Psychology*, 11(1), 119–137. doi:10.1348/135910705X52633

- Runhaar, P., Sanders, K., & Yang, H. (2010). Stimulating teachers' reflection and feedback asking: An interplay of self-efficacy, learning goal orientation, and transformational leadership. *Teaching and Teacher Education*, 26(5), 1154–1161. doi:10.1016/j.tate.2010.02.011
- Smith, K., & Tillema, H. (1998). Evaluating portfolio use as a learning tool for professionals. *Scandinavian Journal of Educational Research*, 42(2), 193–205. doi:10.1080/0031383980420206
- Smith, K., & Tillema, H. (2001). Long-term influences of portfolios on professional development. *Scandinavian Journal of Educational Research*, 45(2), 183–203. doi:10.1080/00313830120052750
- Smith, K., & Tillema, H. (2003). Clarifying different types of portfolio use. *Assessment & Evaluation in Higher Education*, 28(6), 625–648. doi:10.1080/0260293032000130252
- Smylie, M. A. (1995). Teacher learning in the workplace: Implications for school reform. In T. R. Guskey & M. Huberman (Eds.), *Professional development in education* (pp. 92–113). New York: Teachers college press.
- Spillane, J., Reiser, B., & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research*, 72(3), 387–431. doi:10.3102/00346543072003387
- Tigelaar, D., Dolmans, D., De Grave, W., Wolfhagen, I., & Van der Vleuten, C. (2006). Portfolio as a tool to stimulate teachers' reflections. *Medical Teacher*, 28(3), 277–282. doi:10.1080/01421590600607013
- Van Eekelen, I., Vermunt, J., & Boshuizen, H. (2006). Exploring teachers' will to learn. *Teaching and Teacher Education*, 22(4), 408–423. doi:10.1016/j.tate.2005.12.001
- Van der Heijden, B. (2003). Organisational influences upon the development of occupational expertise throughout the career. *International Journal of Training and Development*, 7(3), 142–165. doi:10.1111/1468-2419.00178
- Vanderlinde, R., van Braak, J., & Dexter, S. (2012). ICT policy planning in a context of curriculum reform: Disentanglement of ICT policy domains and artifacts. *Computers & Education*, 58(4), 1339–1350. doi:10.1016/j.compedu.2011.12.007
- Wade, R. C., & Yarbrough, D. B. (1996). Portfolios: A tool for reflective thinking in teacher education? *Teaching and Teacher Education*, 12(1), 63–79. doi:10.1016/0742-051X(95)00022-C
- Wolf, K., & Dietz, M. (1998). Teaching portfolios: Purposes and possibilities. *Teacher Education Quarterly*, 25(1), 9–22.
- Yin, R. K. (2003). *Case study research: Design and methods*. Thousand Oaks: Sage Publications.
- Zeichner, K., & Wray, S. (2001). The teaching portfolio in US teacher education programs: What we know and what we need to know. *Teaching and Teacher Education*, 17(5), 613–621. doi:10.1016/S0742-051X(01)00017-8

## Chapter 5

### **Putting it all together: Recommendations for PDP design, support and organisational conditions**

#### Abstract

The Professional Development Plan (PDP) seems to be a suitable instrument for guiding the individual learning process of teachers. This learning process is considered as deliberate, goal-directed and self-regulating. The PDP supports the teacher in reflecting on his or her performance, considering school requirements and own interests, formulating learning goals and making a plan of action. Although much guidance can be embedded in the PDP, research indicates that support from a supervisor or coach is necessary. In addition, it is necessary that the school organisation takes care of the implementation and facilitation of the PDP. This chapter provides a systematic approach for supporting teachers when using a PDP in the context of professional development. We distinguish between three levels of 'support'. Based on the results of the previous studies of this dissertation and the literature professional development and in particular on PDPs, we provide recommendations for 1) how to design a PDP, 2) how supervisors should provide support, and 3) how the organisation should facilitate teachers.

## Introduction

A PDP is increasingly used as an instrument to support the professional development of teachers. Its objective is that by completing a PDP, teachers reflect on their performance, define learning goals, and make a plan of action for attaining these learning goals. The instrument supports teachers in directing their development to improve their working practice and to innovate their teaching methods (Bullock, Firmstone, Frame, & Bedward, 2007; Evans, Ali, Singleton, Nolan, & Bahrami, 2002; Janssen, Kreijns, Bastiaens, Stijnen, & Vermeulen, 2012). A PDP can also promote the professional dialogue with colleagues and supervisors as it provides a basis for discussing professional development (Beausaert, Segers, & Gijssels, 2011b; Hargreaves, 1994). By implementing a PDP and supporting teachers in using a PDP, school organisations can promote teachers' development and consequently school development.

Using a PDP is more than just filling in a form. To make use of its potential the PDP should be well-designed, supported and implemented thoroughly. This chapter integrates the findings of the previous chapters by offering a systematic approach (i.e., recommendations) to support teachers' individual learning process by using a PDP. In the previous chapters, we have investigated the influence of guidance on the quality of PDPs (Chapter 2), teachers' beliefs about using a PDP (Chapter 3) and organisational factors that lead to a more successful implementation (Chapter 4).

This chapter describes the steps we have taken to develop a systematic approach in which practical recommendations are provided to support teacher in using a PDP in the context of professional development. We first describe current views on professional development that characterise the individual learning process. This description of the learning process formed the starting point for the systematic approach. Second, to structure this approach, the model presented in chapter 1 and depicted in Figure 5.1 was used. The model consists of three levels of support for the individual learning process. The inner circle (i.e., first level) represents the PDP itself with embedded support. The middle circle (i.e., second level) shows the support from the supervisor; this level links the inner and outer level of the model. The outer circle (i.e., third level) represents the school organisational conditions.

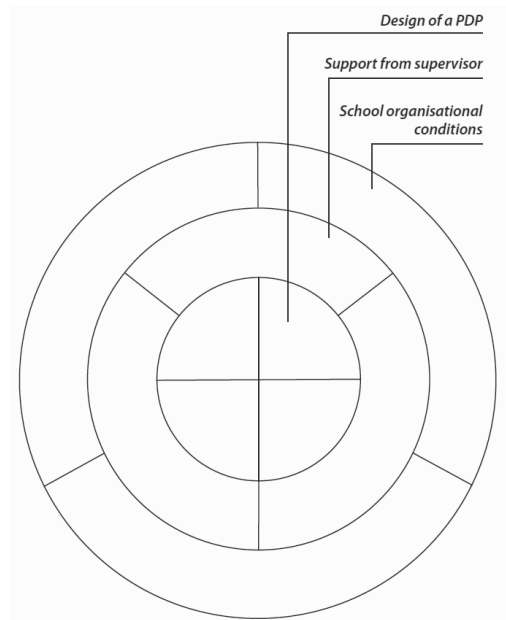


Figure 5.1: Three levels of support for using a PDP

The chapter is structured as follows. It starts with explaining the views on teachers' individual learning process. We proceed by describing each level of support such as presented in the model. By describing these levels successively, the model gets gradually filled in with important aspects for each level of support. Subsequently, an overview of practical recommendations for schools is given for each level. These overviews are similar to the steps Beusaert (2011) described for implementing a PDP in his dissertation. Our approach focuses on three levels of support as presented in Figure 5.1 and is adjusted to the educational context.

## Views on the individual learning process

This section describes the views on the learning process. These views were extracted from literature about learning. First, professional development should be embedded in daily work because the need to improve performance originates from the questions and problems teachers encounter in their everyday work. Second, reflection is essential for clarifying what improvements are needed to formulate meaningful learning goals. Third, the learning process is regarded as a deliberate process in which teachers are stimulated to set their own goals for development. Fourth,

the learning process is a self-regulating process in which teachers plan, monitor and evaluate their own learning. Finally, the motives teachers have for developing themselves should be supported by a PDP.

### **Learning is situated**

In line with other research (e.g. Brown, Collins, & Duguid, 1989; Putnam & Borko, 2000), we believe that learning should be situated in the daily practice of the teacher. A clear link between professional learning activities and the daily practice of learners is essential for effective professional development. According to Putnam and Borko (2000), cognition cannot be seen apart from the situation in which it is applied, instead cognition is situated in settings in which teachers work. The learning goals teachers want to attain and the competences they want to develop should be relevant for their work and the questions and problems they encounter. Following this line of thinking it is important that learning activities are clearly linked to the work situation to be effective (Brown et al., 1989; Glazer & Hannafin, 2006; Meirink, Meijer, & Verloop, 2007). The link between learning and the work practice is therefore essential for all aspects of the learning process and should be emphasized during the support teachers get.

### **Learning requires reflection**

By filling in a PDP teachers have to write down their reflections on their performances. They are encouraged to examine their educational practice in depth to formulate meaningful learning goals (Van Tartwijk, Driessen, Van der Vleuten, & Stokking, 2007; Wolf & Dietz, 1998). This reflection is an important activity to promote professional development because by reflecting teachers systematically think about their work experiences, gain better understanding of their practice and foresee possibilities for change and development (Austin, Marini, & Desroches, 2005; Driessen, Van Tartwijk, Overeem, Vermunt, & Van der Vleuten, 2005; Smith & Tillemä, 2001). In perspective of professional development, reflection is aimed at improving performance in work practice. Teachers should first become aware of their current functioning and understand the processes that underlie their performance. Based on this awareness, teachers can foresee possibilities to renew and improve their practice (Postholm, 2008).

For example, in a research of Postholm (2008), teachers had to reflect on their daily teaching practice. By reflecting on their performance, they had to put their experiences and expertise into words and explain this to others. This made the frame of reference from which the teachers act visible. Moreover, by analysing a certain situation or problem, teachers think of alternatives and ideas for renewing



practice, expand their frame of reference and improve their working practice (Tigelaar, Bakker, & Verloop, 2009). The teachers experienced this reflection as useful because they became aware of what worked in their teaching practice and what did not work so well (Postholm, 2008).

Several studies showed, however, that a PDP in itself is not sufficient to stimulate this deeper reflection (Mansvelder-Longayroux, Beijaard, & Verloop, 2007; Orland-Barak, 2005). Although teachers became aware of their own actions and performance, they often did not try to analyse and clarify why they performed those actions. They did not take the next step by trying to understand the processes that play a role in their functioning. Mansvelder-Longayroux et al. (2007) defined these learning activities in which teachers analyse their functioning and learning to get a better understanding as meaning-oriented learning activities. When analysing and trying to clarify what causes strong and weak performance, more meaningful goals and plans of action can be set to improve practice (Kicken, 2008). Support from a coach, supervisor or peer is then essential to stimulate these meaning-oriented learning activities (Bullock et al., 2007; Driessen et al., 2005; Mansvelder-Longayroux et al., 2007).

### **Learning is deliberate**

The learning process that is supported by using a PDP is a 'deliberate learning process' in which learning activities are undertaken intentionally to improve performance (Van de Wiel, Szegedi, & Weggeman, 2004). This deliberate learning is a conscious process in which teachers formulate learning goals and direct their own professional development. They become aware of their performance, take time and effort to plan and perform learning activities and monitor progress in their development (Eraut, 2004; Hoekstra, Beijaard, Brekelmans, & Korthagen, 2007). Although a PDP mainly focuses on deliberate learning, this does not mean that reactive and implicit learning does not occur or is not important. The following example of one of the teachers who participated in our study in Chapter 2 illustrates this combination of deliberate and implicit learning.

One of the learning goals of the teacher was to improve her Dutch language skills in order to write better educational products and to improve students' language errors. To improve her grammatical skills she made a plan of action in which she included professional learning activities such as receiving feedback from a colleague who teaches Dutch language (deliberate learning). However it might not be surprisingly that the teacher also might learn more informally during conver-

sations, with students, colleagues or even with family members, in which she becomes more conscious of how to use grammar.

### **Learning is self-regulated**

By filling in a PDP, teachers consider which learning goals are important to them and plan activities for accomplishing these learning goals for the next year (Bullock et al. 2007; Van Tartwijk et al., 2007). This deliberate learning directed towards the attainment of learning goals is essential in the theory of self-regulated learning (Zimmerman, 2000; Van de Wiel, Van den Bossche, Janssen, & Jossberger, 2011). By self-regulating their learning, teachers plan, monitor and evaluate their learning. First, teachers formulate learning goals and plan strategies to attain this goal. This first phase determines the direction to which teachers want to develop, and provides, at the same time, a standard to which progress can be evaluated (Latham & Locke, 1991). Subsequently, teachers perform learning activities to accomplish the goals. During this phase, actions are monitored and adjusted when needed. After performing the tasks, the evaluation phase starts in which teachers reflect on whether their goals have been accomplished, which strategies were used and which of them were effective. Based on this evaluation, new learning goals are set (Zimmerman, 2000). The PDP supports this process of reflecting on performance, goal setting and making plans of action.

### **Motives for learning**

By using a PDP teachers determine the direction for their development and formulate learning goals they want to achieve. To support teachers' learning, a PDP needs to take into account teachers motives for learning. Four types of motives can be distinguished. The first motive refers to teachers' will to improve their performance in the working practice, for example to improve their class management. The second motive refers to teachers' desire to be innovative by figuring out a solution for a difficult problem or by using new methods. The integration of new ICT-applications in lessons is an example of this motive (Verdonshot, 2009). These two motives were also found in Chapter 3 in which results indicated that teachers were mostly motivated to improve their performance in order to provide good education or to be challenged and develop new things (innovate). For example, one of the teachers said: 'it is fantastic to read about new developments in biology and to translate this in methods that are attractive for students'. The third motive we found in this study refers to teachers' ambition to make a career, for example to have more management tasks. The last type of motive is actually not really a motive as some teachers could not argue why they exactly participated in professional

learning activities (Janssen, Kreijns, Bastiaens, Stijnen & Vermeulen, in press; Van Eekelen, Vermunt, & Boshuizen, 2006). A PDP mainly supports the first two types of motives by providing teachers the opportunity to determine learning goals which aim to improve performance or to innovate. Regarding the career motive, it is up to the teacher to use the PDP for career purposes by making agreements with his or supervisor, for example, how the teacher could develop him or herself to become member of a management team or to apply for higher salary scales.

In sum, it can be concluded that when guiding teachers in their professional development, it is important that the need to improve performance originates from the working practice. The process of reflecting clarifies what improvements are needed. Teachers should then be stimulated to set their own goals for development and determine how they want to develop and relate their professional learning activities to their work practice to make professional development meaningful. Moreover, the PDP should follow the motives teachers have to develop themselves. In the next three sections we elaborate on how a PDP-design, support from the supervisor and school organisational conditions can take these views into account.

### **The first level: Design of a PDP**

In Chapter 2, it was explained that a PDP consists of three constituent elements; a diagnosis of performance, learning goals and a plan of action. These elements were based on literature about formulating learning goals and professional development. Chapter 3 and 4 showed that it is also important that teachers' learning goals are reconciled with school goals. Moreover, the PDP should take into the concerns or interests teachers want to take on for their development. For example, a teacher might experience that students lack motivation for participating in particular assignments and he or she wants to know more about assignments that can be used to increase students' motivation. This chapter, therefore, adds an element in which teachers are asked to take into account requirements and goals of the school and to describe their own interests which they want to take on. These four elements can be seen in the inner level of the model in Figure 5.2. For each element, some questions can be included in a PDP to help teachers in completing a PDP. Each element is explained in more detail in the following sections, followed by an overview that presents the elements and questions that could be included in a PDP.

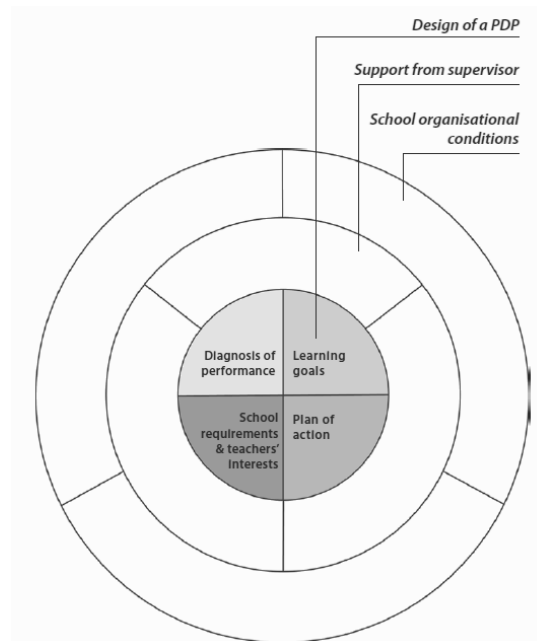


Figure 5.2: Four elements of a PDP design

### Element 1: Diagnosis of performance

The first element of the PDP consists of a diagnosis of performance. This element includes two questions. Teachers are asked to rethink their motives for their work and professional development and to reflect on their performance by describing their strengths and weaknesses.

#### *What does the teacher find important in work?*

Before teachers reflect on their performance and determine the goals they want to accomplish it is important that they rethink what is important in their work and what their motives for their own development are. Do they want to improve their performance to provide better education for students? Do they want to be challenged? Or do they want to make a career? (Knoeppel & Logan, 2011; Mansvelder-Longayroux et al., 2007; Wade & Yarbrough, 1996; Wolf & Dietz, 1998). This determines to a large extent the direction of their development and how they want to use the PDP. Teachers who are oriented towards making a career might fill in the PDP more strategically, while teachers who are focused on their professional development are eager to get more insight in their learning process (Mansvelder-Longayroux, 2006). Teachers, who are looking for a challenge, might be more fo-

cused on new developments in education. It is therefore important to start with the question about teachers' motives to let them become aware of how they are going to use the PDP and to let them rethink about what drives them in their work and what determines the direction of their development.

*What are teacher's strengths and weaknesses?*

Subsequently, teachers reflect on their performance by diagnosing their performance to discover possible strengths and weaknesses. The questions of this part should guide teachers in analysing their performance. For example, teachers should be advised to reflect on a situation in which they think they have performed really well (strengths) and reflect on a situation in which they were not satisfied with their performance (weaknesses). Teachers are asked to think about what made the situation easy or difficult and why, what they did, and what made their performance (in)effective. 'Why-questions' should be included to help teachers in reflecting more critically on their performance by exploring reasons and factors that play a role (Austin et al., 2005; Imhof & Picard, 2009; Kicken, 2008; Smith & Tillema, 2001; Van Eekelen et al., 2006).

**Element 2: School requirements and teachers' interests**

The previous element focused on a diagnosis of performance to become more aware of what needs to be improved. As can be read in Chapter 3 and 4 teacher development and improvement can also refer to accomplishing school goals or address teachers' interests and concerns. Therefore, this section takes into account school goals and requirements and teachers' interests and concerns.

*What does the school organisation require?*

To promote school development and individual development it is important that teachers and supervisors reconcile individual and school goals to reinforce school and individual development. Teachers' development can contribute to school development. For example, a school organisation has resolved that development of ICT is priority for the coming years. This means that teachers should attain particular ICT skills to contribute to this priority. On the other hand, school goals might inspire and encourage teachers to engage in learning activities and develop themselves (Geijsel, Sleegers, Stoel, & Krüger, 2009; Hargreaves, 1994). The following example clarifies this.

A school team has decided to improve the differentiation methods in the classes they teach. This might encourage and trigger the team members to participate in this development, because teachers think it

improves education, gives better learning results for their pupils and they perceive that it benefits students if all teachers act in the same way.

*What issues concern or interest the teacher?*

During their work, teachers might encounter issues that they think are interesting or which are urgent according to them. Teachers who develop themselves on something in which they are interested in or are driven by problems that are urgent for them are more inclined to capture this and undertake learning activities (Mansvelter-Longayroux, 2006). The following example illustrates this.

A teacher sees many opportunities to use ICT in the classroom due to new developments in technology (such as smart boards, smart phones and tablets). The teacher is interested in ICT and thinks that this can motivate students to learn more. This triggers him or her to formulate learning goals and make a plan of action to develop his or her ICT skills.

**Element 3: Learning goals**

This element of the PDP includes two sub questions. First, the teacher is asked to describe learning goals in terms of the results he or she wants to attain. Second, the teacher is asked to describe what competences he or she needs to develop to attain these results.

*What results does the teacher want to achieve?*

Learning goals should be defined in terms of results teachers want to achieve. These learning goals should meet several requirements to be meaningful. First, teachers should define learning goals that are congruent with the previous elements, that is, the diagnosis of their performance, school requirements and/or own interests. Second, the learning goals should be formulated in terms of the effects teachers want to achieve in the classroom and what they want to do differently (Janssen et al., 2012). Third, it is important that teachers know how to apply what they have learned to improve their performance (Brown et al., 1989; Glazer & Hannafin, 2006). Fourth, the learning goals must be as specific as possible, because a vague, 'I'll-do-my-best-goal' does not make clear what the teacher wants to achieve and makes it difficult to evaluate afterwards (Latham & Locke, 1991). To summarize, in this element teachers are asked to define attainable and specific results in terms of what they want to change in their performance and what effect they want to attain in their class.

*Which competences does the teacher need to develop?*

Teachers are asked to describe what they need to develop in terms of competences. The competence approach is often used in the job structure of Dutch school organisations. Dutch schools organisations, generally, use the competence framework developed by the Dutch Foundation for the quality of teachers (Onderwijs Coöperatie formerly known as Stichting Beroeps Onderwijs) for determining the requirements that are needed for the teacher profession and required by law (Wet BIO) (Ministry of Education, Culture, & Science, 2005). In literature, competences are defined as integrated sets of knowledge, skills and attitudes that are needed to perform competent professional behaviour within a range of relevant job situations (Baartman, Bastiaens, Kirschner, & Vleuten, 2007; Lizzio & Wilson, 2004). This definition implies that being competent means that a person has the potential to perform particular behaviour (Pantic & Wubbels, 2010). To support teachers in determining the competences they need to improve, an overview is needed which includes teachers' competences linked to relevant work situations and results in terms of changed behaviour and effects in the classroom.

#### **Element 4: Plan of action**

The last element concerns the plan of action in which teachers determine which professional learning activities they are going to perform to attain the learning goals and make a planning of these activities.

*Which activities is the teacher going to perform to attain his or her goals?*

To accomplish the learning goals and improve practice teachers should plan learning activities that are consistent with the learning goals and are attainable in a particular time period. Because learning preferably involves a sequence of activities, for example reading, discussing with colleagues and trying things out (Meirink et al., 2007), teachers should be stimulated to formulate learning activities which succeed each other logically. These activities should not be limited to incidental courses but encompass activities that are linked to and preferably take place in the work context such as collaborating with colleagues, experimenting and reflecting (Kwakman, 2003; Meirink et al., 2007; Putnam & Borko, 2000; Scribner, 1999). One of the teachers who participated in our study in Chapter 2 made the following plan of action with a sequence of activities.

The teacher wanted to improve her conversation skills to provide students more insight into their behaviour and support them better. To accomplish this learning goal she planned to follow a course on dealing with behavioural problems, discuss with and observe colleagues to

find out how they handle students with behavioural problems, experiment with a simulation game and reflect on conversations she has with her students.

*When does the teacher plan to perform the learning activities?*

Finally, teachers make a planning of when they are going to perform the activities that lead to the accomplishment of the learning goals. By setting time limits for accomplishing tasks and goals, teachers are more inclined to perform these activities (Latham & Locke, 1991). Teachers often experience high workload and performing activities to develop themselves have no high priority (Janssen et al., in press). Planning these activities in time might help them to take the necessary time. They could also use this planning to discuss with their supervisor what is being done and possibly, why activities did not take place as planned.

Table 5.1 summarises the recommendations for a PDP design. The recommendations are formulated in terms of elements that need to be included in the PDP and questions that should be asked to guide teachers in filling in a PDP. Appendix 2 provides an example of a PDP design based on these recommendations.

Table 5.1 Overview of the elements and questions of a PDP (based on Chapter 2, Janssen et al., 2012)

Main elements	Questions
1. Diagnosis of performance	What does the teacher find important in work? What are teacher's strengths and weaknesses?
2. School requirements and teachers' interests	What does the school organisation require? What issues concern or interest the teacher?
3. Learning goals	What result does the teacher wants to achieve? Which competences does the teacher need to develop?
4. Plan of action	Which activities is the teacher going to perform to attain the goals? When does the teacher plan to perform the learning activities?

## The second level: Support from supervisor

The second level of the model, support from the supervisor, is explained in this section. In literature about PDPs and portfolios, different actors are mentioned that could provide PDP users support. They can be supported by (senior) peers, coaches, supervisors, and mentors (e.g. Austin et al., 2005; Beausaert et al., 2011b; Bullock et al., 2007; Wade & Yarbrough, 1996). In Chapter 4, it became clear that, in practice, the supervisor often had the responsibility to support teachers in completing a PDP and taking care of the trajectory in which the PDP is embedded (e.g. providing the PDP form, having development and/ or performance interviews, and evaluating the



progress). Therefore, the recommendations we provide in this section are focused on support provided by the direct supervisor.

In line with the concept of transformational leadership (Engels, Hotton, Devos, Bouckenooghe, & Aelterman, 2008; Geijsel et al., 2009) we regard the supervisor as someone who provides individualized support and intellectual stimulation. Through taking the beliefs of teachers seriously, being a role model, coaching and providing feedback, supervisors can support teachers in their professional development. By encouraging teachers to try new things, to seek and discuss new information and ideas, and to experiment, the supervisor can provide intellectual stimulation.

To provide practical recommendations, the support of the supervisors was divided in three types of tasks they should perform to help teachers in using a PDP. These three tasks emerged from the interviews we conducted for the studies in Chapter 3 and 4 and were commonly used in the schools. These tasks are 1) having development interviews, 2) taking care of the development trajectory, and 3) creating a learning environment. The first task of the supervisor is to have the development interviews with teachers in which they support them in using a PDP. Moreover, it should be clear for teachers what is expected from them regarding the trajectory of using a PDP. Therefore the second task of the supervisor is to take care of the procedural part of the development trajectory. The third task of the supervisor is to create a learning environment in which teachers feel confident and trusted to be open about their professional development. Figure 5.3 shows the model including these tasks. The explanation of these tasks, is followed by an overview of practical recommendations for the supervisor.

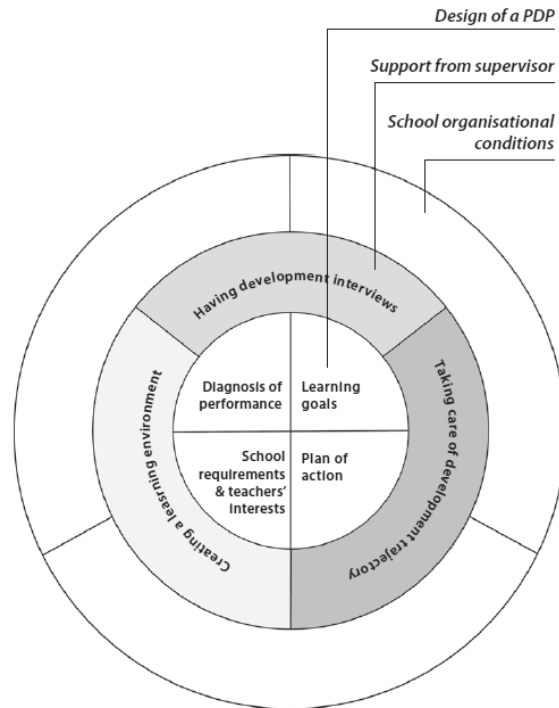


Figure 5.3: Three supporting tasks of the supervisor

### Supporting task 1: Having development interviews

During the development interviews, supervisors should guide teachers in diagnosing their performance and directing their professional development, adjust their support to individual differences and reconcile individual goals with school goals. First, support is needed to help teachers in diagnosing their performance. Literature on reflection indicated that reflection in portfolios of (student) teachers is often limited to descriptions and reports about what one has done (Mansvelder-Longayroux et al., 2007; Orland-Barak, 2005). According to Orland-Barak (2005) these descriptions can not be characterized as reflection. Mansvelder-Longayroux et al. (2007) recommended that critical reflection is needed to become aware of the reasons and factors that underlie particular performance. Superficial reflection prevents teachers from formulating meaningful learning goals and providing real solutions for the problems and issues they encounter. An important aim of the guidance is to support teachers to reflect on their performance and identify strengths and weaknesses to formulate well-considered learning goals that are consistent with the diagnosis of functioning (Janssen et al., 2012; Mansvelder-Longayroux et al., 2007; Wade &

Yarbrough, 1996). To promote this reflection the supervisor can facilitate teachers with critical conversations (Lyons, 1998). By asking 'why' and 'how' questions teachers are encouraged to explain their strengths and weaknesses and to link this with their behaviour and work situations (Kicken, 2008). The supervisor should stimulate teachers to see things from other perspectives, and search for alternative solutions (Driessen et al., 2005; Smith & Tillema, 2001). Moreover, the supervisor can support teachers in diagnosing their performance by providing feedback that is focused on teachers' behaviour in situations in which the teacher was effective or not effective. To provide this feedback the supervisor should be informed about teachers' behaviour, for example by class visits or 360 degree feedback (Beusaert et al., 2011b; Tillema & Smith, 2000)

Second, the supervisor has the task to support teachers in directing their development. Teachers often have difficulty in formulating specific learning goals, making a plan of action which is related to questions and concerns they have regarding their work situation, and making a consistent PDP in which all elements relate to each other (Janssen et al., 2012; Van Eekelen et al., 2006). The supervisor should provide feedback and guide the teacher in setting learning goals, by giving tips about how to make specific learning goals, and select learning activities that are relevant for fulfilling those goals (Kicken, 2008; Tillema & Smith, 2000).

For supporting teachers' reflection and goal setting it is important that the support is not just about checking whether all questions are posed but it is about a conversation in which the supervisor guides the teacher in clarifying his or her learning trajectory. The supervisor should encourage teachers' ownership of the PDP and their professional development and leave the choice for learning goals to the teacher (Beusaert et al., 2011b; Wade & Yarbrough, 1996). This support can be given by listening and being open to teachers' ideas and beliefs, without giving the teacher the feeling of being embarrassed. Teachers must feel comfortable without fearing that their status and image will be damaged, even when the supervisor asks critical questions (Carmeli, Brueller, & Dutton, 2009; Geijsel et al., 2009).

Third, the supervisor has an important role in adjusting his or her support to individual differences in beliefs and characteristics of teachers. In Chapter 3, the study on teachers' beliefs about using a PDP and individual factors that influence these beliefs, revealed that teachers differed in their beliefs about using a PDP, skills for completing a PDP and their motives to develop themselves (Janssen et al., in press). As a consequence, teachers need to be approached differently. Supervisors should find out what learning needs and concerns teachers have regarding their development and the use of PDPs. For example younger teachers seemed to have a more positive attitude towards the use of PDPs, while experienced teachers are not always convinced by its usefulness. The supervisor can discuss the meaning and usefulness of the PDP and provide extra support when teachers find parts of

filling in the PDP difficult. Some teachers need to be supported in determining learning goals, while others have difficulty in reflecting on their performance.

Fourth, supervisors should aim to reconcile school goals with individual goals. Our study in Chapter 4 showed that for many teachers it was not clear what the school goals were. Moreover these school goals were often not linked with their own goals. Therefore, it is an important task to help teachers in searching for possibilities to integrate school goals with their own goals (Janssen, Kreijns, Bastiaens, Stijnen, & Vermeulen, submitted)

### **Supporting task 2: Taking care of development trajectory**

The supervisor's second task is that he or she should take care of the development trajectory and clarify the different steps that teachers should take in the trajectory of completing a PDP. The teacher should be familiar with what is expected from him or her and what he or she can expect from the school organisation. For example, teachers should know how the PDP is followed up by an evaluation or performance interview. To avoid misconceptions about using a PDP, beliefs and ideas of teachers about using a PDP and how they want to professionalize themselves should be taken seriously and openly discussed (Janssen et al., in press). Finally, the supervisor should be available for questions and support, monitor teachers' progress and value the effort teachers take to complete a PDP and develop themselves (Geijssel et al., 2009; Van Tartwijk et al., 2007).

### **Supporting task 3: Creating a learning environment**

Reflective conversations normally ask for trust and openness between the supervisor and teacher. To conduct these conversations a learning climate is needed in which the development of the teacher can be discussed (Leggett & Bunker, 2006).

In Chapter 4, teachers often characterized the school or team climate as collegial and open. They expressed that they could easily talk with their supervisor and when needed they could ask for support. Carmeli et al. (2009) explored how this climate could be created. According to them, high-quality relationships are essential to feel 'safe', be open and stimulate learning behaviour. With high-quality relationships, teachers feel valued, overcome uncertainty and search for new ways to improve their practice. They formulated five dimensions of high-quality relationships which provide good starting points for creating a safe learning environment. First, people must be capable of displaying a range of emotions without having the consequence to be embarrassed. Second, the relationship must be able to stand stress and conflict. Third, people must feel comfortable to open up for new information and approaches without fear for damage to image and status. Fourth, people must

be regarded positively and feel known and respected. And fifth, people must feel related and involved when participating in mutual activities.

To stimulate a meaningful use of the PDP and thereby professional development, the supervisor has to attach importance to the PDP and regard it as a helpful instrument to support teachers' development (Imhof & Picard, 2009). Discussing a professional development is not something that can be limited to one development interview a year or squeezed in between all other tasks. It should have priority, and not be regarded as something extra on top of all other tasks they have to do. The supervisor has to set aside time to show interest in teachers' development and support them during and between the development interviews to promote a learning environment.

Table 5.2 shows the recommendations regarding the supporting tasks of the supervisors.

Table 5.2: Overview of recommendations for support from the supervisor

Supporting tasks		Recommendations	Literature
Having development interviews	Supporting diagnosis of performance	Ask for specific situations in which the teacher was effective or not	Janssen et al., 2012
		Stimulate teachers to think about why they were effective or not	Janssen et al., 2012; Mansvelder-Longayroux et al., 2007; Orland-Barak, 2005
		Be informed about teachers' performance (by class visits, and 360-degree feedback)	Beausaert et al., 2011
		Give feedback focused on behaviour/ learning	Beausaert et al., 2011; Driessen et al., 2005
		Be open and ask why questions	Driessen et al., 2005; Kicken, 2009; Lyons, 1998
		Ask how questions	Kicken, 2009
		Provide openness to other perspectives	Orland-Barak, 2005; Smith & Tillema, 2001
		Affirm the value of one's experience	Orland-Barak, 2005
	Supporting direction of improvement/ development	Help teachers to put emotions into words	Geijssel et al., 2009
		Advice on how to formulate learning needs (e.g. specific instead of abstract)	Kicken, 2009
		Support teachers in prioritizing their goals	Janssen et al., in press (ch 3)

		Stimulate to connect learning goals with working practice	Janssen et al., 2012 (ch 2)
		Stimulate to formulate results in terms of behaviour and effectiveness in their work	Janssen et al., 2012 (ch 2)
		Leave choices for development to the teacher	Beausaert et al., 2011; Wade & Yarbrough, 1996
		Listen carefully to teachers' ideas	Geijsel et al., 2009; Carmeli et al., 2009
		Encourage teacher to try new things in line with their interests	Geijsel et al., 2009
		Encourage teachers to seek and discuss new information and ideas that are relevant to their own and school development	Geijsel et al., 2009
	Supporting the making of a plan of action	Support teachers in formulating learning activities that succeed each other logically	Janssen et al., 2012
	Supporting teachers in completing a consistent PDP	Support teachers in completing a PDP in which the diagnosis of performance, school requirements and own interests, learning goals and plan of action are consistent	Janssen et al., 2012
	Taking into account individual differences	Find out what the teachers think is difficult to do, eg formulating learning goals	Janssen et al., in press (ch 3)
		Give more attention and support to what the teacher finds difficult	Janssen et al., in press (ch 3)
	Reconciling school and individual development	Discuss the relation between individual and school goals	Geijsel et al., 2009; Hargreaves, 1994
Taking care of trajectory	Taking care of follow up	Inform teachers about procedure, communicate expectations and discuss the use and meaningfulness of PDP Evaluate PDP use	Janssen et al., submitted; Beausaert et al., 2011b; Driessen et al., 2005; Wade & Yarbrough, 1996
	Being involved	Discuss ideas openly to counter misconceptions Ask teachers regularly about their progress and whether they need support Be available	Beausaert et al. 2011; Janssen et al., in press (ch 3); Wade & Yarbrough, 1996; Van Tartwijk et al., 2007

Creating a learning environment	Creating trust and openness	Let teachers express frustrations	Carmeli et al., 2009
		Accept differences between teachers	Carmeli et al., 2009
		Try to understand the teacher	Carmeli et al., 2009
		Show empathy towards the teacher	Carmeli et al., 2009
		Let teachers bring up problems and tough issues	Carmeli et al., 2009
		Value teachers effort and strengths	Carmeli et al., 2009
	Attaching importance to the PDP and teachers' development	Attach importance to the PDP	Imhof & Picard, 2009
		Regard the PDP as a helpful instrument	Imhof & Picard, 2009
		Give priority to supporting teachers' development	Janssen et al., submitted (ch 4)
		Set time aside to support teachers	Janssen et al., submitted (ch 4)

### The third level: School organisational conditions

The last part of the model, the outer level, comprises support on the organisational level. Research on professional development as well as research on the use of PDPs makes clear that the school organisation has an important role in facilitating teachers' development and implementing a PDP (Evers, 2012; Geijsel et al., 2009; Hargreaves, 1994). In Chapter 4, it is even argued, in line with Imhof and Picard (2009) and Driessen, Van Tartwijk, Overeem, Vermunt and Van der Vleuten (2007), that the PDP needs to be embedded in the school organisation. There are two reasons for the need for support on the organisational level.

First, the introduction of the PDP can be regarded as a new approach and should be done carefully and thoroughly. In the educational domain, professional development is traditionally seen as following courses and depends on whether a teacher takes the initiative to follow such courses (Kwakman, 2003). Insights about professional development are, however, changed and teachers are held accountable for their own learning that fits their working practice. Implications are that schools must take professional development seriously and support this process with the introduction and implementation of a PDP. Also, schools should take into account teachers beliefs about the PDP and professional development (Janssen et al., in press).

Second, literature about the use of PDPs and professional development of teachers stressed that support from management is important to promote profes-

sional development and using a PDP. Literature on professional development prescribes, for example, that supporting professional development asks for transformative leadership in which teachers get individual support and are intellectual stimulated in order to participate in professional learning activities (Engels et al., 2008; Evers, 2012; Geijssels et al., 2009). The previous section focused on how direct supervisors can provide immediate support for teachers. This section concentrates on how the school organisation can integrate the PDP into the work environment and facilitate collegial support. Based on our earlier research (predominantly Chapter 4) and literature about supporting professional development and the implementation of PDPs (e.g. Beusaert, 2011; Geijssels et al., 2009; Vanderlinde, Van Braak, & Dexter, 2012), we focused on three organisational conditions; developing a vision and strategy, implementing a PDP and providing managerial support. Figure 5.4 shows the organisational conditions. These conditions are explained in more detail in the following section.

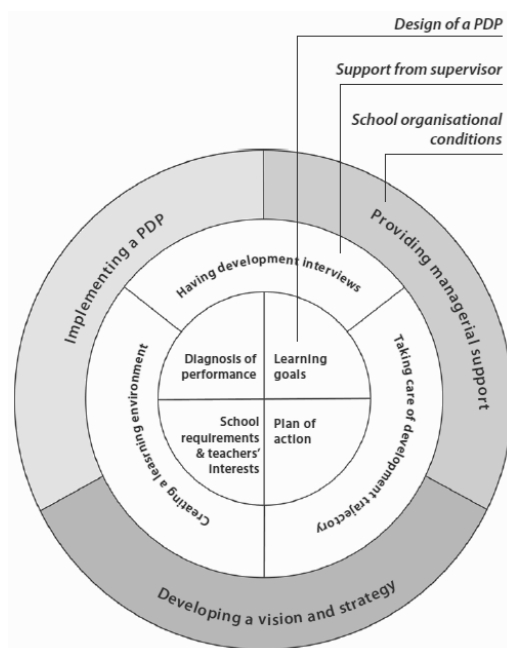


Figure 5.4. Three school organisational conditions

### Condition 1: Developing a vision and strategy

Schools have to formulate a vision and school goals to set direction. Setting direction makes teachers more aware of what they can realize in their work and promotes teachers to perform activities to attain the school goals. A clear communica-



tion of the school goals is therefore necessary to inspire teachers to change their practice (Engels et al., 2008; Geijsel et al., 2009; Hargreaves, 1994; Van Eekelen et al., 2006). Although research emphasizes this importance of the formulation of school goals, our study in Chapter 4, nevertheless, showed that schools often do not have such vision and school goals that are specific and related to teachers' everyday activities. School management, therefore, need to formulate an inspiring vision and specific goals, preferably in dialogue with the teachers (Engels et al., 2008). The development interviews provide a good opportunity to discuss and reconcile the school and individual goals.

## **Condition 2: Implementing a PDP**

By implementing a PDP, a new way of organizing professional development is introduced in the organisation. It requires from school management to think about the purpose of implementing the PDP, how the procedure of completing a PDP should be designed, and how the organisation can facilitate and support teachers in using a PDP in such a way that professional development is promoted in the organisation. To make recommendations we adhere to the implementation factors described in Chapter 4; establishing the purpose of implementing a PDP, introducing the PDP, and developing a procedure for using a PDP.

### *Establishing the purpose of implementing a PDP*

When the school organisation aims to promote professional development it is needed that the purpose is clear for teachers. It makes a difference for teachers if using a PDP is aiming for assessment or aiming for professional development. Implementing the PDP for promoting professional development has some benefits compared to implementing a PDP for assessment purposes. Beausaert, Segers, and Gijssels (2011a) found that when the PDP is implemented and perceived as a learning tool teachers are more likely to be positive about using a PDP. Another positive effect is that teachers are more willing to critically reflect on their performance and mention opportunities for learning because they do not have to be afraid for negative consequences (Imhof & Picard, 2009; Leggett & Bunker, 2006). As a result, it is recommended to use the PDP for developmental purposes.

### *Introducing a PDP*

To increase the likelihood that the PDP is adopted as an instrument to promote professional development, it is important to involve supervisors and teachers in developing, revising and implementing the instrument and procedures (Vanderlinde et al., 2012; Van Tartwijk et al., 2007). In general, the implementation of the PDP is conducted top down. The government requires from schools to implement instru-

ments for promoting and filing the professional development of teachers. To meet these requirements, (the HRD department of) school organisations implement a PDP to promote and file professional development (Beausaert et al., 2011b; Landelijk Platform Beroepen in het Onderwijs, [LPBO] 2010). However, this top down implementation of a new policy is often not the key to success (Fullan, 2001).

Instead school organisations should involve teachers during the implementation and take into account their beliefs about using a PDP (Janssen et al., in press). Literature about introducing new policies in school organisations argue that teachers have their own frame of reference with which they make sense and act on these new policies (Kelchtermans, Ballet, Peeters, & Verckens, 2009; Spillane, Reiser, & Reimer, 2002). In the study of Chapter 3, it became clear that although most teachers were (rather) positive about the PDP, some teachers were not convinced about its surplus value. Teachers found for example, that they already developed themselves and that the PDP was not supportive. They argued, for example that the format was too prescriptive and did not fit their ideas of development.

It, therefore, seems to be worthwhile to involve teachers in the implementation process. Starting with a pilot project and introducing the PDP with some workshops seem to be good ways of involving the teachers. During these workshops the usefulness and meaningfulness of the implementation can be discussed with the teachers (Van Tartwijk et al., 2007). For example, one of the participating schools in Chapter 4 started with a pilot trajectory in which teachers participated in designing and testing the procedure, evaluating the effects, and determining what should be improved. Besides that, workshops for introducing a PDP in the school organisation can be helpful to provide a clear explanation of the PDPs' purpose, how the PDP should be filled in and in which teachers can ask questions and share and discuss their beliefs and conceptions of the PDP.

#### *Developing a procedure for using a PDP*

School management is also responsible for developing a procedure for using a PDP. In general, the PDP is part of a trajectory in which teachers fill in a PDP, get a development and/ or performance interview, update the PDP, and receive evaluations from their supervisor, colleagues and students to determine whether they developed their abilities. In this trajectory, management determines how many development and/ or performance interviews take place and with whom, how feedback on teachers' performance is organized and whether the trajectory finishes with an assessment interview (Janssen et al., submitted). This procedure should not be too rigid and restrict the dialogue about professional development to the formal part of the procedure. Instead, the procedure should provide space for individual differences and informal learning. This means that the professional dialogue should also be continued between the formal interviews.

### **Condition 3: Providing managerial support**

Managerial support is necessary to prepare and enable the implementation and support of teachers by using a PDP. Considering this support, three issues should be considered (e.g. Amrein-Beardsley & Osborn Popp, 2012; Beausaert et al., 2011b).

First, the school organisation needs supervisors who are able to support teachers in completing a PDP. In practice, it became clear that not all supervisors had developed the competencies that are necessary to support teachers. Moreover, it is not self-evident that supervisors are familiar with what is expected from them (Janssen et al., submitted). The supporting task of the supervisor can easily be pushed into the background due to time limits and all other responsibilities teachers have (Beausaert et al., 2011b). Management, thus, needs to clarify what is expected from supervisors, and provide them with the opportunity to acquire the necessary competences.

The second issue is that supervisors and teachers need to be facilitated in time and money to fill in a PDP, have the development interviews and perform the professional learning activities (Beausaert et al., 2011b).

Regarding the third issue, teachers should be facilitated in supporting each other. The daily work practice of teachers is complex and collaboration is needed to encourage inquiry about each others performance. Teachers can exchange ideas, beliefs, and experiences; work together to implement a new teaching approach; conduct peer observations and support each other by providing feedback on performance (Amrein-Beardsley & Osborn Popp, 2012; Doppenberg, den Brok, & Bakx, 2012; Maurer, 2002; Meirink et al., 2007). Especially, collegial support and intervention should be stimulated. These collaborative activities occur less frequently in schools (Doppenberg et al., 2012), whereas these activities might help teachers in completing a PDP. To stimulate this interaction and collaboration between teachers, managers can organise meetings in which teachers fill in a PDP together and emphasize that teachers should take the opportunity to exchange ideas, methods and provide each other feedback to improve their practice.

The recommendations made on the organisational level are summarized in Table 5.3. The recommendations are divided in three categories developing a vision and strategy, implementing a PDP and providing managerial support.

Table 5.3: Overview of recommendations for school organisational conditions

Organisational conditions		Recommendations	Literature
Developing a vision and strategy		Develop a clear school vision and specific goals in dialogue with teachers Reconcile school and individual goals	Engels et al., 2008; Geijsel et al., 2009; Hargreaves, 1994; Van Eekelen et al., 2006
Implementing a PDP	Purpose	Implement the PDP with a development purpose	Janssen et al., submitted (ch 4); Beausaert et al., 2011; Imhof & Picard, 2009
	Introduction	Using a pilot trajectory to introduce, revise and evaluate the procedures with teachers	Janssen et al., submitted (ch 4); Vanderlinde et al., 2012
		Provide clear information about what is expected from teachers and supervisors	Austin et al., 2005; Beausaert et al., 2011; Imhof & Picard, 2009; Janssen et al., submitted (ch 4)
		Discuss the use of the PDP and avoid misunderstanding	Janssen et al., submitted (ch 4); Wade & Yarbrough, 1996
		Take teachers' beliefs seriously and listen and use their ideas	Janssen et al., in press (ch 3); Spillane et al., 2002;
	Procedure	Use workshops to provide information and to let teachers practice with using a PDP	Janssen et al., 2012; Janssen et al., submitted (ch 2 & 4)
		Make a clear but not too rigid procedure	Janssen et al., in press (ch 3); Wade & Yarbrough, 1996; Imhof & Picard, 2009
		Teachers should have the opportunity for (informal) meetings with their supervisor and colleagues in between when necessary.	Janssen et al., submitted (4); Austin et al., 2005
		Take into account teachers preferences to develop themselves	Verdonschot, 2009
		PDP is not something that has to be done once a year, professional development should be integrated in the working practice	Imhof & Picard, 2009; Janssen et al., submitted (ch 4)
Providing managerial support	Prepare the supervisor	Be clear about what is expected from the supervisor	Janssen et al., submitted (ch 4)

	Provide the supervisor opportunities to develop the competencies that are necessary	Janssen et al., submitted (ch 4)
Facilitate time and money	Facilitate the time and money needed to fill in a PDP, have development interviews and perform the professional learning activities	Beausaert et al., 2011; Janssen et al., submitted (ch 4)
Encourage interaction	Encourage teachers to interact and collaborate in their professional development	Amrein-Beardsley & Osborn Popp, 2012; Doppenberg et al., 2012; Meirink, 2007

## Discussion

In this chapter, the findings of our studies and of literature regarding PDP use and professional development were input for constructing a systematic approach to support teachers' individual learning process centred around a PDP. We translated results from literature and our studies to practical recommendations that can be adopted by school organisations. To develop an approach we first present the views on professional development that characterize the individual learning process. We approached the learning process from a self-regulating perspective in which teachers reflect on their performance and take charge of their own learning and we considered differences between teachers regarding their dispositions and beliefs about using a PDP, skills and motives for learning.

To visualise the systematic approach we presented a model (Figure 5.1) which includes three levels of support of the teachers' individual learning process. First, the learning process is supported by a PDP with embedded recommendations. Second, the supervisor has an important role to support the teachers. And last, support on the organisational level is required. The recommendations for using a PDP are formulated in such a way that it supports teachers' goal-directed and self-regulated learning.

The levels of support are conditional and depend on each other in different ways so that school development and individual development benefit from the implementation of a PDP. By linking the different levels of support, individual and school development can reinforce each other. Indeed, a PDP is effective when suited to individual differences in teachers' development. Teachers have their own learning needs and motives to develop themselves (Van Eekelen et al., 2006; Verdonshot, 2009), beliefs about their professional development (Janssen et al., in press; Kelchtermans et al. 2009) and they differ in their characteristics and skills to reflect and formulate learning goals (Janssen et al., in press; Van Eekelen et al., 2006; Mansvelder-Longayroux et al., 2007). PDPs are therefore most effective when

they take into account individual differences in the learning process and when they provide teachers with the opportunity to determine their own development.

In addition, organisational support is necessary for teachers to complete a high-quality PDP and thereby supporting their professional development. A learning climate in which teachers feel safe in being open about their performance and in talking about their professional development promotes teachers' development and performance improvement (Carmeli et al., 2009; Leggett & Bunker, 2006).

The aforementioned points characterized a movement from the 'outer' level, to the 'inner' level of the model in which organisation and supervisor promote the individual learning process. However, when individual development is promoted and teachers change their behaviour and improve their practice, this will in turn contribute to school development, especially when individual development is in line with school development.

The direct supervisor has an important role in connecting 'the inner and outer' circle of the model by reinforcing and connecting the individual development with school development. Considering the concept of transformational leadership, the supervisor is responsible for providing the necessary individual support and intellectual stimulation (Geijsel et al., 2009). The supervisor should also connect school and individual development during the interviews and team meetings by reconciling individual and school goals.

In conclusion, a PDP is a suitable instrument for promoting professional development of teachers and school development. To attain these effects, actors on all levels, teachers, supervisors and the school director, should acknowledge that the professional dialogue is an essential impetus to bring about development in the school organisation and improve the quality of the teacher profession.

## References

- Amrein-Beardsley, A., & Osborn Popp, S. E. (2012). Peer observations among faculty in a college of education: investigating the summative and formative uses of the Reformed Teaching Observation Protocol (RTOP). *Educational Assessment, Evaluation and Accountability*, 24(1), 5–24. doi:10.1007/s11092-011-9135-1
- Austin, Z., Marini, A., & Desroches, B. (2005). Use of a learning portfolio for continuous professional development: A study of pharmacists in Ontario (Canada). *Pharmacy Education*, 5(3/4), 175–181. doi:10.1080/15602210500282434
- Baartman, L. K. J., Bastiaens, T. J., Kirschner, P. A., & Vleuten, C. P. M. V. D. (2007). Evaluating assessment quality in competence-based education: A qualitative comparison of two frameworks. *Educational Research Review*, 2(2), 114–129. doi:10.1016/j.edurev.2007.06.001
- Beusaert, S. A. J. (2011). *The use of Personal Development Plans in the workplace. Effects, purposes and supporting conditions* (Doctoral dissertation). Retrieved from <http://arno.unimaas.nl/>
- Beusaert, S. A. J., Segers, M., & Gijsselaers, W. (2011a). Using a personal development plan for different purposes: its influence on undertaking learning activities and job performance. *Vocations and Learning*, 4(3), 231–252. doi:10.1007/s12186-011-9060-y
- Beusaert, S., Segers, M., & Gijsselaers, W. (2011b). The use of a personal development plan and the undertaking of learning activities, expertise-growth, flexibility and performance: the role of supporting assessment conditions. *Human Resource Development International*, 14(5), 527–543. doi:10.1080/13678868.2011.620782
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32–42. doi:10.3102/0013189X018001032
- Bullock, A., Firmstone, V., Frame, J., & Bedward, J. (2007). Enhancing the benefit of continuing professional development: a randomized controlled study of personal development plans for dentists. *Learning in Health and Social Care*, 6(1), 14–26. doi:10.1111/j.1473-6861.2007.00142.x
- Carmeli, A., Brueller, D., & Dutton, J. E. (2009). Learning behaviours in the workplace: The role of high-quality interpersonal relationships and psychological safety. *Systems Research and Behavioral Science*, 26(1), 81–98. doi:10.1002/sres.932
- Doppenberg, J. J., den Brok, P. J., & Bakx, A. W. E. A. (2012). Collaborative teacher learning across foci of collaboration: Perceived activities and outcomes. *Teaching and Teacher Education*, 28(6), 899–910. doi:10.1016/j.tate.2012.04.007
- Driessen, E., Van Tartwijk, J., Van Der Vleuten, C., & Wass, V. (2007). Portfolios in medical education: why do they meet with mixed success? A systematic review. *Medical Education*, 41(12), 1224–1233. doi:10.1111/j.1365-2923.2007.02944.x/full
- Driessen, E. W., Van Tartwijk, J., Overeem, K., Vermunt, J. D., & Van der Vleuten, C. P. M. (2005). Conditions for successful reflective use of portfolios in undergraduate medical education. *Medical Education*, 39(12), 1230–1235. doi:10.1111/j.1365-2929.2005.02337.x
- Engels, N., Hotton, G., Devos, G., Bouckennooghe, D., & Aelterman, A. (2008). Principals in schools with a positive school culture. *Educational Studies*, 34(3), 157–172. doi:10.1080/03055690701811263
- Eraut, M. (2004). Informal learning in the workplace. *Studies in Continuing Education*, 26(2), 247–273. doi:10.1080/158037042000225245
- Evans, A., Ali, S., Singleton, C., Nolan, P., & Bahrami, J. (2002). The effectiveness of personal education plans in continuing professional development: an evaluation. *Medical Teacher*, 24(1), 79–84. doi:10.1080/00034980120103478
- Evers, A. (2012). *Teachers' professional development at work and occupational outcomes: An organisational and task perspective* (Unpublished doctoral dissertation). Scientific Centre for Teacher Research of Open University, Heerlen.
- Fullan, M. (2001). *The new meaning of educational change* (3rd ed.). New York: Teachers college press.

- Geijssel, F., Slegers, P., Stoel, R., & Krüger, M. (2009). The effect of teacher psychological and school organizational and leadership factors on teachers' professional learning in Dutch schools. *The Elementary School Journal*, 109(4), 406–427. doi:10.1086/593940
- Glazer, E. M., & Hannafin, M. J. (2006). The collaborative apprenticeship model: Situated professional development within school settings. *Teaching and Teacher Education*, 22(2), 179–193. doi:10.1016/j.tate.2005.09.004
- Hargreaves, D. (1994). The new professionalism: The synthesis of professional and institutional development. *Teaching and Teacher Education*, 10(4), 423–438. doi:10.1016/0742-051X(94)90023-X
- Hoekstra, A., Beijaard, D., Brekelmans, M., & Korthagen, F. (2007). Experienced teachers' informal learning from classroom teaching. *Teachers and Teaching*, 13(2), 191–208. doi:10.1080/13540600601152546
- Imhof, M., & Picard, C. (2009). Views on using portfolio in teacher education. *Teaching and Teacher Education*, 25, 149–154. doi:10.1016/j.tate.2008.08.001
- Janssen, S., Kreijns, K., Bastiaens, T., Stijnen, S., & Vermeulen, M. (2012). Teachers' professional development: an analysis of the use of Professional Development Plans in a Dutch school. *Professional Development in Education*, 38(3), 453–469. doi:10.1080/19415257.2011.635307
- Janssen, S., Kreijns, K., Bastiaens, T., Stijnen, S., & Vermeulen, M. (in press). Teachers' beliefs about using a PDP. *International Journal of Training and Development*.
- Janssen, S., Kreijns, K., Bastiaens, T., Stijnen, S., & Vermeulen, M. (submitted). Implementing PDPs in Dutch schools: Organisational conditions and lessons learned.
- Kelchtermans, G., Ballet, K., Peeters, E., & Verckens, A. (2009). Goede praktijkvoorbeelden als hefboom voor professionalisering? Een explorerend onderzoek naar determinanten en kritische kenmerken. [Good examples from practice as a leverage for professional development? An exploratory study into determinants and relevant characteristics]. *Pedagogische Studiën*, 86(3), 161–184.
- Kicken, W. (2008). *Portfolio use in vocational education* (Doctoral dissertation). Retrieved from <http://www.ou.nl/documents/Promoties-en-oraties/Promoties/Promoties2008/>
- Knoepfel, R., & Logan, J. P. (2011). Linking theory with practice: a longitudinal analysis of student portfolios in principal preparation. *International Journal of Leadership in Education*, 14(3), 337–349. doi:10.1080/13603124.2010.503280
- Kwakman, K. (2003). Factors affecting teachers' participation in professional learning activities. *Teaching and Teacher Education*, 19(2), 149–170. doi:10.1016/S0742-051X(02)00101-4
- Landelijk Platform voor Beroepen in het Onderwijs [National Platform for Professions in Education]. (2010). *Bekwaamheidseisen in de school [Competences in the school]*. Retrieved from: <http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2010/07/19/bekwaamheidseisen-in-de-school-op-weg-naar-versterking-beroepskwaliteit-leraren.html>
- Latham, G. P., & Locke, G. A. (1991). Self-regulation through goal-setting. *Organisational Behaviour and Human Decision Processes*, 50(2), 212–247.
- Leggett, M., & Bunker, A. (2006). Teaching portfolios and university culture. *Journal of Further and Higher Education*, 30(3), 269–282. doi:10.1080/03098770600802297
- Lizzio, A., & Wilson, K. (2004). Action Learning in Higher Education: an investigation of its potential to develop professional capability. *Studies in Higher Education*, 29(4), 469–488. doi:10.1080/0307507042000236371
- Lyons, N. (1998). Reflection in teaching: Can it be developmental. *Teacher Education Quarterly*, 115–128.
- Mansvelder-Longayroux, D. D. (2006). *The learning portfolio as a tool for stimulating reflection by student teachers* (Doctoral dissertation). Retrieved from <https://openaccess.leidenuniv.nl>
- Mansvelder-Longayroux, D., Beijaard, D., & Verloop, N. (2007). The portfolio as a tool for stimulating reflection by student teachers. *Teaching and Teacher Education*, 23(1), 47–62. doi:10.1016/j.tate.2006.04.033



- Maurer, T. J. (2002). Employee learning and development orientation: Toward an integrative model of involvement in continuous learning. *Human Resource Development Review*, 1(1), 9–44. doi:10.1177/1534484302011002
- Meirink, J., Meijer, P., & Verloop, N. (2007). A closer look at teachers' individual learning in collaborative settings. *Teachers and Teaching: Theory and Practice*, 13(2), 145–164. doi:10.1080/13540600601152496
- Ministerie van Onderwijs, Cultuur en Wetenschap (2005). *Blijf groeien. Wet op Beroepen in het Onderwijs [Keep learning. Education Professions Act]*. Retrieved from <http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2005/10/14/blijf-groeienwet-op-de-beroepen-in-het-onderwijs.html>.
- Orland-Barak, L. (2005). Portfolios as evidence of reflective practice: What remains "untold." *Educational Research*, 47(1), 25–44. doi:10.1080/0013188042000337541
- Pantic, N., & Wubbels, T. (2010). Teacher competencies as a basis for teacher education – Views of Serbian teachers and teacher educators. *Teaching and Teacher Education*, 26, 694–703. doi:10.1016/j.tate.2009.10.005
- Postholm, M. B. (2008). Teachers developing practice: Reflection as key activity. *Teaching and Teacher Education*, 24(7), 1717–1728. doi:10.1016/j.tate.2008.02.024
- Putnam, R. T., & Borko, H. (2000). What Do New Views of Knowledge and Thinking Have to Say About Research on Teacher Learning? *Educational Researcher*, 29(1), 4–15. doi:10.3102/0013189X029001004
- Scribner, J. P. (1999). Professional Development: Untangling the Influence of Work Context on Teacher Learning. *Educational Administration Quarterly*, 35(2), 238–266. doi:10.1177/0013161X99352004
- Smith, K., & Tillema, H. (2001). Long-term Influences of Portfolios on Professional Development. *Scandinavian Journal of Educational Research*, 45(2), 183–203. doi:10.1080/00313830120052750
- Spillane, J., Reiser, B., & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research*, 72(3), 387–431. doi:10.3102/00346543072003387
- Tigelaar, D., Bakker, M., & Verloop, N. (2009, May). *Het bevorderen van reflectie bij MBO-studenten. [Promoting vocational students' reflection]*. Paper presented at the Onderwijs Research Dagen, Leuven.
- Tillema, H. H., & Smith, K. (2000). Learning from Portfolios: Differential Use of Feedback in Portfolio Construction. *Studies in Educational Evaluation*, 26(3), 193–210.
- Van Eekelen, I., Vermunt, J., & Boshuizen, H. (2006). Exploring teachers' will to learn. *Teaching and Teacher Education*, 22(4), 408–423. doi:10.1016/j.tate.2005.12.001
- Vanderlinde, R., van Braak, J., & Dexter, S. (2012). ICT policy planning in a context of curriculum reform: Disentanglement of ICT policy domains and artifacts. *Computers & Education*, 58(4), 1339–1350. doi:10.1016/j.compedu.2011.12.007
- Van de Wiel, M. W. J., Szegedi, K. H. P., & Weggeman, M. C. D. P. (2004). Professional learning: Deliberate attempts at developing expertise. In H. P. A. Boshuizen, R. Bromme, and H. Gruber (Eds.). *Professional learning: Gaps and transitions on the way from novice to expert*. (pp. 181–206). Dordrecht: Kluwer.
- Van de Wiel, M. W. J., Van den Bossche, P., Janssen, S., & Jossberger, H. (2011). Exploring deliberate practice in medicine: how do physicians learn in the workplace? *Advances in Health Sciences Education*, 16(1), 81–95. doi:10.1007/s10459-010-9246-3
- Van Tartwijk, J., Driessen, E., Van der Vleuten, C., & Stokking, K. (2007). Factors influencing the successful introduction of portfolios. *Quality in Higher Education*, 13(1), 69–79.
- Verdonschot, S. (2009). *Learning to Innovate* (Doctoral dissertation). Retrieved from <http://doc.utwente.nl/67417/>
- Wade, R. C., & Yarbrough, D. B. (1996). Portfolios: A tool for reflective thinking in teacher education? *Teaching and Teacher Education*, 12(1), 63–79. doi:10.1016/0742-051X(95)00022-C

- Wolf, K., & Dietz, M. (1998). Teaching portfolios: Purposes and possibilities. *Teacher Education Quarterly*, 25(1), 9–22.
- Zimmerman, B. J. (2000). Attaining self-regulation. A social cognitive perspective. In: M. Boekaerts, P.R. Pintrich, and M. Zeichner (Eds). *Handbook of self-regulation*. (pp. 13–39). San Diego: CA: Academic Press.

# Chapter 6

## Discussion

## Introduction

The quality of education and the quality of the teacher is a recurring and important topic in practice as well as in theory. New insights in educational science about how students learn and how teachers can adjust their didactics ask for changes in the educational repertoire (Darling-Hammond & Snyder, 2000; Smylie, 1995). Therefore, teachers need to be up to date and develop themselves according to these insights and innovations. To promote teachers' development, a Professional Development Plan (PDP) is an instrument increasingly used in schools. A PDP seems to be a suitable tool to support the individual learning process in which teachers diagnose their performance, consider the school requirements and teachers' interests, formulate new learning goals and make a plan of action to develop themselves (Janssen, Kreijns, Bastiaens, Stijnen, & Vermeulen, 2012). However, only implementing a PDP is not sufficient, it requires support from a coach, supervisor and colleagues and some organisational conditions to be fulfilled (Austin, Marini, & Desroches, 2005; Bullock, Firmstone, Frame, & Bedward, 2007; Driessen, Van Tartwijk, Overeem, Vermunt, & Van der Vleuten, 2005; Imhof & Picard, 2009). This support should take into account teachers' beliefs and characteristics and the school organisation should be a supportive and facilitating environment

The main aim of this dissertation was to examine how teachers can be best supported when using a PDP in the context of professional development. In the general introduction, we formulated three research questions related to this aim regarding; 1) the effects of guidance on the quality of PDPs, 2) teachers' beliefs about using a PDP and their characteristics and 3) organisational conditions that lead to a successful implementation of a PDP. The studies that address these research questions are presented in Chapter 2, 3 and 4. In Chapter 5, we specifically addressed the main question and presented a systematic approach for supporting teachers in using a PDP.

The first section of this chapter summarises and reflects on the main findings of these three studies. It also includes the answer to the main research question, *How can teachers be best supported when using a PDP in the context of professional development?* This chapter proceeds by describing the theoretical and practical implications, limitations, and future research.

## **Main findings and conclusions**

### **What is the effect of guidance on the quality of PDPs? (Chapter 2)**

In the first study, the effect of guidance on the quality of teachers' PDPs was investigated. To examine this quality an assessment tool was developed. To develop this tool and assess the quality of the PDPs, we defined three constituent elements of the PDP. The first element is the diagnosis of teachers' performance in terms of strengths and weaknesses. Based on this diagnosis, teachers define learning goals to improve and innovate their work practice (second element). The third element is a plan of action in which teachers determine the professional learning activities to attain their learning goals. In Chapter 5, we added a fourth element to give teachers the opportunity to reconcile their goals with school requirements or consider their own interests.

To determine the effect of guidance on the quality of PDPs, guided teachers were compared with unguided teachers on completeness regarding the first three constituent elements and consistency of the PDP. The results suggested that guidance had an effect on the quality of the PDP. This confirms the results from previous research that guidance is needed when teachers complete a PDP (Bullock et al., 2007; Driessen et al., 2005). Our results revealed that guided teachers elaborated more on their diagnosis of performance and defined more detailed learning goals addressing the competences they wanted to develop and the situation in which they wanted to improve themselves. No differences between the two groups were found regarding the plans of action. Both groups formulated plans that were not specific and did not include succeeding steps for accomplishing the learning goals. PDPs of the guided and unguided groups differed regarding the consistency between the different categories.

Taking into account our relatively small sample size, we may conclude from this study that the (guidance by) workshops helped teachers in diagnosing their performance and formulating learning goals. However, this guidance was not sufficient yet. Our analysis on the quality of the filled-in PDPs showed that more attention is needed to guide teachers in making specific plans of action and formulating a consistent PDP. Although the workshops were efficient as more teachers could be guided at the same time, they were apparently not adequate in giving individual support. Probably, teachers needed specific feedback to improve their PDPs by making it more consistent and support in defining learning activities for their plan of action.

Moreover, this research did not investigate the effect on the degree to which reflection was meaning oriented. Other studies (Kicken, 2008; Mansvelder-Longayroux, Beijaard, & Verloop, 2007) suggested that critical conversations are

essential for supporting teachers to reflect in a meaning oriented way. For these reasons future research should look more in depth into the specific guidance teachers need to critically reflect on their performance. Perhaps a design-based research method would be appropriate to apply here (Martens, 2010; McKenney & Reeves, 2012).

Our study elicited that only a small number of teachers were willing to complete a PDP in this school. This was for us a trigger to find out more about what beliefs teachers have about using a PDP and how school organisations can promote and support the professional development of teachers.

### **What groups of teachers with similar beliefs about using a PDP and characteristics can be identified? (Chapter 3)**

In the second study, we aimed to find indications for improving support of teachers by examining teachers' beliefs towards using a PDP and teachers' characteristics that might influence these beliefs. The school organisation that participated in our previous study did not succeed in persuading all teachers of the school to complete a PDP, only the teachers who joined the workshops and a few other teachers filled in the PDP voluntarily. Therefore, we investigated the beliefs teachers have regarding a PDP and their professional development. Previous research for example indicated that not all PDP users are positive about completing a PDP (Austin et al., 2005; Wade & Yarbrough, 1996). To improve the guidance of teachers in completing a PDP, we wanted to know what caused teachers' decisions to complete a PDP or not and what beliefs they had about the PDP.

The theory of planned behaviour (Ajzen, 1991) was used to investigate these beliefs in terms of attitude, subjective norm and perceived behavioural control, and teachers' characteristics. Because teachers' beliefs about completing a PDP have not been explicitly researched before, we adopted an explorative and qualitative approach. We conducted semi-structured interviews and performed a hierarchical cluster analysis to identify groups of teachers with similar beliefs.

The results showed that most teachers were positive about completing a PDP and they perceived it as a useful instrument for their professional development. Professional development was mainly important for them in order to provide good education and innovate themselves. Some teachers also used the PDP as an instrument for their career and to attain a higher salary scale, for example, by showing the direct supervisor what tasks they had performed and how they had developed themselves. A lot of teachers experienced the PDP as something extra on top of what they already had to do thus increasing their workload. Some of the participants were not convinced about the usefulness of the PDP, especially the older and more experienced teachers. Some teachers said they were still meeting the stand-

ards and when it was necessary - according to their own insights - they contacted their supervisor immediately and did not wait for the development interview. Younger teachers were more positive towards using a PDP, probably they had used this instrument before. Nearly all teachers did not find completing a PDP too difficult as there were no requirements for the quality of the PDPs.

Based on a hierarchical clustering we identified seven clusters ranging on a continuum from clusters of teachers with a positive attitude and feeling no pressure to complete a PDP, to clusters of teachers who had a neutral to negative attitude and felt more pressured to complete a PDP. Teachers with a firm positive attitude towards the PDP found it a useful instrument and were eager to learn. Teachers who were neutral doubted the usefulness of the PDP. Teachers with a neutral to negative attitude only made a PDP because it was mandatory. The main clusters differed regarding the teacher characteristic work experience. Teacher who completed a PDP because of its advantages had less work experience than teachers would completed a PDP because it was mandatory.

Teachers' beliefs about using a PDP have not been systematically researched before, despite the fact that previous research suggested that teachers' beliefs and attitude towards PDPs and professional development influence the way teachers react to this implementation (e.g. Beausaert, Segers, & Gijssels, 2011b; Imhof & Picard, 2009). By interviewing teachers we elicited their beliefs and clustered them based on their beliefs. In contrast with our expectations we did not find clearly distinguished clusters, but rather a continuum of clusters. Clearly distinguished clusters would have personalised guidance that is adjusted to the beliefs and characteristics of teachers of each cluster. Two limitations of this study could explain this result. First, the sample might have been too small for having distinctive clusters. Second, we did not include school organisations in which the PDP was not mandatory. Including schools in which the PDP is not obligatory might lead to more distinctive clusters, because then a cluster might be included in which teachers do not have the intention to use a PDP and do not use a PDP at all.

The differences found between and within the clusters led us to recommend that it is essential to address individual differences in beliefs, characteristics and learning needs when guiding teachers next to workshops such as offered in our first study. It is recommended to relieve teachers' feelings of extra workload when completing a PDP by embedding it into their work. Moreover, more attention should be paid to teachers with more work experience but with less experience with a PDP to let them become accustomed to reflect on their performance and direct their own learning.

#### **Which organisational factors contribute to a successful implementation of a PDP? (Chapter 4)**

Our third study explored the organisational conditions important for a successful implementation of the PDP. Earlier studies indicated that it is not self-evident that the use of a PDP is successful (Austin et al., 2005; Beausaert, Segers, & Gijssels, 2011a; Driessen, van Tartwijk, van der Vleuten, & Wass, 2007; Imhof & Picard, 2009). In practice, PDPs are often implemented using a top down approach and are not always welcomed by teachers with enthusiasm, especially when they do not have a voice in this decision. Its success, therefore, largely depends on how it is implemented and supported, and how teachers perceive a PDP and act on it (Fullan, 2001; Spillane, Reiser, & Reimer, 2002). To find out what organisational conditions are essential for a successful PDP use, we conducted a multiple case study and compared seven cases of school teams in which the PDP is implemented and used.

Although the results showed that in all cases the purpose of implementing the PDP was to promote professional development, this did not mean that all teachers were positive about using a PDP. Regarding the implementation factors it was important that teachers knew what was expected of them. Teachers have to know what a PDP is and its purpose. In most cases this was communicated well with the teachers. School management introduced the PDP by organising a meeting in which teachers could ask questions and workshops in which filling in a PDP could be practised. One school organisation even introduced the PDP by means of a pilot in which the procedure was tried out and evaluated before implementing it for the entire school. In cases in which the used procedure was evident more teachers had positive dispositions.

Second, we researched the influence of social support, divided in managerial and collegial support. In most cases, the director or principal had the responsibility for preparing the school organisation for the introduction and use of the PDP and monitoring the professional development process. Support from the direct supervisor emerged from the interviews as an influencing variable that varied with teachers' dispositions. The supervisor should support teachers' development by having a development interviews, taking care of the development trajectory in which a PDP is completed, discussed and evaluated, and creating a trusting learning environment. From the results, it appeared that not all supervisors were well prepared for this role and had the necessary qualities to perform these tasks. Collegial support occurred minimally. This kind of support was often not facilitated and stimulated by the school organisations, and teachers themselves did not take the initiative to support each other.

The last factor is vision and strategy. In most cases, the vision and strategic planning of school development was not well communicated to teachers and had a



minor role in the development interviews with teachers and thereby requires more attention than is currently occurring.

A critical remark on this study is that some variables were invariant across the cases. It was therefore not possible to establish whether purpose, support from management or colleagues have an influence on the use of PDPs. Moreover, the qualitative incentive of the study prevents us from generalizing the results and determining whether the influence of the organisational factors is significant.

Considering these limitations, we might conclude from this case study, that school organisations made their first steps (with implementing a PDP) by introducing a clear procedure for using the PDP. However, more action is needed or else the PDP is regarded as an instrument that comes on top of all other tasks (Driessen et al., 2007; Imhof & Picard, 2009). Based on our results, we recommend schools to take the following steps to embed the PDP in the working environment: involve teachers in establishing a vision and strategy for professional development, prepare supervisors well for their task, and facilitate a learning environment.

#### **How can teachers be best supported when using a PDP in the context of professional development? (Chapter 5, practical implications)**

In the 5th chapter we assembled the results of our studies and other research about completing a PDP and professional development in order to develop a systematic approach to support teachers' professional development by using a PDP. To this end, we first described the views, based on the literature about professional development, that characterise the learning process. This learning process is approached from a self-regulating perspective (Zimmerman, 2000) in which teachers reflect on their performance and take charge of their own learning preferably integrated in their working practice. Differences between teachers regarding their beliefs, skills and motives for learning were also considered. With the approach we aimed to support the learning process by making use of three levels of support (Figure 6.1). These levels of support include a PDP design with embedded guidelines, support from a supervisor and organisational conditions.

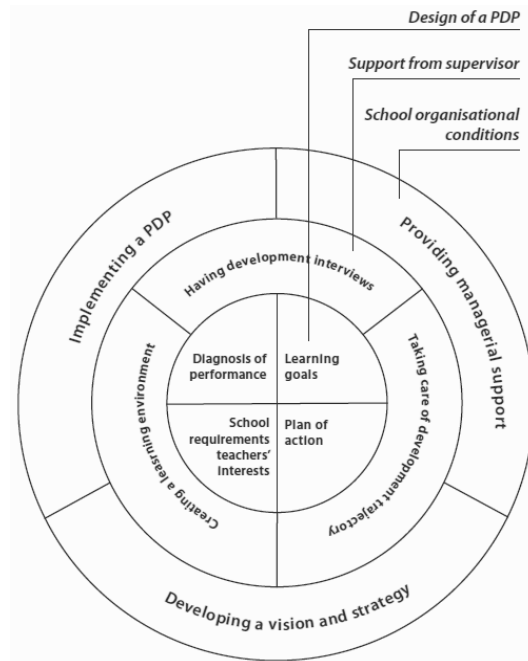


Figure 6.1: Three levels of support for using a PDP

The first and core level, concerns the support by a PDP design. By filling in a PDP, teachers direct their professional development by diagnosing their performance, considering requirements and goals from the school and own interests for development, formulating learning goals and making plans of actions to attain these learning goals. Regarding the second level, we argued that support from the supervisor is important to guide teachers in completing a PDP. This resembles the concept of transformational leadership in which management, director or supervisor, provides teachers with individualised support and intellectual stimulation (Geijsel, Sleegers, Stoel, & Krüger, 2009). The supervisor has critical conversations with the teachers during development interviews, is in charge of the established procedure and creates a learning environment. This support of the direct supervisor is purposely put in the middle level of Figure 6.1. The supervisor has an important role in connecting the 'inner' and 'outer' level to reinforce individual as well as school development. The outermost level considers the context of the school organisation in which teachers use a PDP. The school organisation should fulfil the necessary conditions to promote and facilitate teachers in making a PDP. These conditions concern the development of the strategy and vision about school development, the implementation of the PDP and managerial support.

To conclude, in Chapter 5, we aimed to provide an approach for initiating a dialogue in schools about professional development to make clear that it is a continuous, and goal-directed process in which teachers, supervisors and management take responsibility to develop and improve continuously. Nevertheless, the success of the systematic approach depends on the beliefs and behaviour of the actors involved and the context in which the approach is implemented. Teaching is a complex task and the performance of the school organisation partly depends on the dynamics of an ever-changing context of innovations and human behaviour. This systematic approach gives school management, supervisors and teachers some structure and guidelines to deal with this complexity.

### **Theoretical implications**

The results of this dissertation contributed to a better understanding of how teachers should be supported in their professional development by a PDP in a sustainable way which comprehends a change in vision and strategy on how to organise professional development. Earlier studies already indicated that support is crucial to help teachers to critically reflect on their performance and formulate meaningful learning goals (Bullock et al., 2007; Driessen et al., 2005; Van Eekelen, Vermunt, & Boshuizen, 2006). Moreover, several studies investigated the effects of the use of portfolios or PDPs in education (Imhof & Picard, 2009; Mansvelder-Longayroux, et al., 2007; Wade & Yarbrough, 1996) and in work settings (Austin et al., 2005; Beausaert, et al., 2011a; Smith & Tillema, 2003). Although these studies already pointed out that for an effective PDP some conditions should be met, such as guidance and clear guidelines, we especially aimed to focus on how the implementation and support should be adjusted to be more effective. To improve this support it was crucial to get more insight into the constituent elements of a PDP and to get a better grip on the beliefs teachers have about using a PDP and what caused these beliefs. The following contributions were made.

First, the constituent elements of a PDP were defined. By defining the constituent elements we made use of the current insights about professional development. The PDP should 1) incorporate principles from self-regulated learning, in which reflection in a meaning-oriented way has a crucial role (e.g. Mansvelder-Longayroux et al., 2007; Vrieling, 2012), 2) promote that professional development is integrated into the workplace (e.g. Putnam & Borko, 2000) and 3) use the competence-based approach. These elements should be intertwined within the four constituent elements of a PDP, the diagnosis of performance, school requirements and own interests, formulation of learning goals and making a plan of action. The constituent

elements were also effectively used as an assessment tool to determine the quality of the PDPs

Second, it became clear that teachers need support in using a PDP and this support needs to take into account individual differences. In general support is needed on all elements of a PDP to improve the quality; diagnosing performance, considering school requirements and own interests, formulating specific learning goals and making a plan of action. Teachers should also be guided in making a consistent PDP, in which the contents of the different elements is clearly related. Moreover, support should take into account the differences in beliefs teachers have towards using a PDP and the skills they have for completing one. For example, one teacher has difficulty in diagnosing his or her performance whereas another teacher thinks it is difficult to formulate learning goals. Workshops provided for a group of teachers are therefore not sufficient; instead, more individualised support is needed to take into account these individual differences.

Third, the theory of planned behaviour was used as a framework to explore the relationship between individual and organisational factors on the one hand and teachers' decision to complete a PDP on the other hand by taking into account teachers' beliefs about using a PDP (Fishbein & Cappella, 2006). These beliefs of teachers have not been systematically researched before, while they exert great influence on teachers' decision to use a PDP or not and clarify what underlies this decision. In this research, attitude and subjective norm seemed to be the most important reasons for teachers to decide to use a PDP. Teachers either made a PDP because they regarded it beneficial for their development, or they were obligated to make one and did not see the advantage of completing a PDP. The following factors might have influenced teachers' beliefs regarding the use of a PDP: age, support from the supervisor and the way the PDP is introduced.

Fourth, the use of a PDP is put in a context. Completing a PDP is not just about filling in a form, but it is about an integral perspective on how professional development should be organised in a school to make it more sustainable (Imhof & Picard, 2009; Smith & Tillema, 2001). The model we presented in Chapter 5 (Figure 6.1) visualises this and includes a PDP with embedded guidelines, support from the direct supervisor and organisational conditions. This model forms a basis for future research to investigate how these levels can positively interact with each other to support the individual learning process of teachers with respect to the professional development when using a PDP.

## Limitations

In this research we aimed to acquire more insight into the way in which teachers can be best supported when using a PDP in the context of professional development. By using qualitative methods as interviews and case studies we explored our research questions in more depth and took into account the perspective of teachers, supervisors as well as management and the context in which they work. Such methods are recommended when exploring new phenomena's. However, these methods have their limitations making it difficult to generalize.

Qualitative methods are quite labour-intensive and therefore only rather small samples can be researched with this method. Consequently, it was not possible to measure correlations between the variables we researched and to determine to what degree these variables explained teachers' dispositions. Moreover, the sample size was too small to represent the teacher population. By involving a sample of teachers who differed in age and experience and who work in different schools we aimed to include teachers who varied regarding their beliefs towards using a PDP. The teams we included varied in school type and the experience they have in using a PDP.

The research was also limited because only schools which had implemented a PDP and teachers who had made a PDP were included. We did not investigate the beliefs of teachers who work on schools in which a PDP was not implemented or in which it was not mandatory to complete a PDP. The clustering we conducted in Chapter 3 could therefore have been different if teachers had been included who decided not to use a PDP because they did not feel pressured by management. The resulting clusters might then have been more distinguishing, because it would include teachers who clearly do not intend to complete a PDP. Nevertheless, by only including teachers who completed a PDP, we expected to get more information of teachers who already had formed a more elaborate opinion about completing a PDP because of their experience.

Another limitation of our research is that it does not include the effects on professional development. We assumed that when teachers make a (high-quality) PDP and receive the necessary support, they are more inclined to perform professional learning activities focused on improving their working practice. Earlier research found mixed evidence regarding these effects and explained these effects by a variety in teachers' views on using a PDP and (a lack of) the necessary supporting conditions (e.g. Austin et al., 2005; Beusaert et al., 2011; Driessen, et al., 2007). In this research we focused on these supporting conditions and teachers' beliefs, future research should test whether these factors indeed lead to improved performance.

## Future research

Future research is needed to generalize our results.

First, the results we found from our qualitative research should be validated with quantitative or multi-method approaches. Our studies contributed to gaining more insight in what factors might influence teachers' dispositions about using a PDP and what support is needed to guide teachers in completing a PDP. These results can be used as input for quantitative instruments such as questionnaires. The TPB (theory of planned behaviour) questionnaire is an instrument that can take these factors into account and can be used to determine the relations between variables (Fishbein & Ajzen, 2010). When examining the relations between teachers' decision for completing a PDP, and their beliefs and dispositions quantitatively, the following factors age, support from the supervisor and a clear introduction, should especially be included in a questionnaire. Such a broader survey might lead to more generalisable outcomes. For example: does good support of a supervisor indeed lead to a more positive outcome and feeling less pressure from others to complete a PDP, do teachers' motives for professional development influence teachers' attitudes about completing a PDP or do teachers' beliefs that the PDP is an instrument for their career influence their attitude?

Our studies showed that the clusters we found were a continuum rather than distinctive from each other. These results should be replicated with a larger sample by using less labour-intensive methods to find out whether distinguishable clusters of teachers can be identified or whether it can be concluded that each teacher is different and in need of specific support.

We also did not measure whether the three levels of support, a PDP design, support from the supervisor and organisational conditions, indeed lead to more participation in professional development activities and increased performance. Future research should reveal whether this support makes a difference for the quality of the PDP and participation in more focused professional development activities.

Second, the model (Figure 6.1) and recommendations, presented in Chapter 5, form a good basis for future research on the relations between the different levels of the model. Future research should address the role of the supervisors and colleagues and how transformational leadership can be put into practice and lead to a better support of teachers. Regarding the role of the supervisor, it should be researched how supervisors regard their role and what they can do to develop the necessary competences. An example in Chapter 4 illustrated that while one supervisor would acknowledge that a PDP is a valuable instrument and acts as a sparring partner for the teacher, another supervisor might still be in doubt whether the PDP is useful for all teachers. Moreover, the interaction between the supervisor and

teacher might also influence the effectiveness of the PDP. For instance, one of the supervisors of the research in Chapter 4 was considered too young and thereby too inexperienced as a supervisor to guide the more experienced teachers in their development. More insight is therefore needed to determine how supervisors can be prepared for their job and whether school organisations should bear in mind to hire supervisors with affinity and potency to accomplish the tasks for supporting teachers in using a PDP.

## **Practical implications**

Schools should especially pay attention to three practical issues.

First, implementing a PDP is in some way a paradox and can be confusing for teachers. A PDP is often implemented top down and teachers do not have the choice whether they fill in a PDP or not. Thus, on the one hand, filling in a PDP is an obligation whereas on the other hand, it provides teachers the opportunity to take charge of their own professional development. Teachers themselves determine how they complete a PDP and realise the goals they set. In other words, the PDP provides a formal structure for organising professional development in which teachers are responsible for filling in a PDP, and develop themselves, and have autonomy in their learning process. This should be made very clear by the school organisation to avoid any misunderstanding.

Second, our research revealed that teachers differed regarding their beliefs about using a PDP, the motives they had to develop themselves, the skills for filling in a PDP and their career phase regarding their age and experience. Some teachers were eager to learn and saw all kinds of possibilities to develop themselves but did not know where to start, whereas other teachers did not really see the necessity to develop themselves or found it difficult to formulate the right learning goals. Some teachers had a lot of experience and insight into their own strengths and weaknesses, whereas other teachers found it difficult to reflect on their performance. Some teachers wanted to make a career and use the PDP to show their competences, whereas other teachers aimed to improve their teaching for their students. Some teachers were in a career phase in which they had to put major effort into class management whereas other teachers were constantly looking for a challenge. Regarding the support from the supervisor, it seems necessary that supervisors should have an open mind for the developmental stage of the teachers and the learning needs and they have to adjust their support to it.

Third, for a PDP to be successful it is important that all actors in the school organisation cooperate and enable a professional dialogue about professional development. Teachers should take charge of their learning, supervisors should stimu-

late and support these teachers, and management should organise multiple information sharing platforms in order to stimulate this professional dialogue.

In conclusion, this dissertation shows that implementing a PDP and supporting the professional teacher is no sinecure. An integrative perspective, including a well designed PDP, support from a supervisor and organisational conditions, is necessary. Moreover, flexibility in the support is needed to adjust to individual learning needs.



## References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Austin, Z., Marini, A., & Desroches, B. (2005). Use of a learning portfolio for continuous professional development: A study of pharmacists in Ontario (Canada). *Pharmacy Education*, 5(3/4), 175–181. doi:10.1080/15602210500282434
- Beausaert, S., Segers, M., & Gijsselaers, W. (2011a). The use of a personal development plan and the undertaking of learning activities, expertise-growth, flexibility and performance: the role of supporting assessment conditions. *Human Resource Development International*, 14(5), 527–543. doi:10.1080/13678868.2011.620782
- Beausaert, S. A. J., Segers, M., & Gijsselaers, W. (2011b). Using a personal development plan for different purposes: its influence on undertaking learning activities and job performance. *Vocations and Learning*, 4(3), 231–252. doi:10.1007/s12186-011-9060-y
- Bullock, A., Firmstone, V., Frame, J., & Bedward, J. (2007). Enhancing the benefit of continuing professional development: a randomized controlled study of personal development plans for dentists. *Learning in Health and Social Care*, 6(1), 14–26. doi:10.1111/j.1473-6861.2007.00142.x
- Darling-Hammond, L., & Snyder, J. (2000). Authentic assessment of teaching in context. *Teaching and Teacher Education*, 16(5), 523–545. doi:10.1016/S0742-051X(00)00015-9
- Driessen, E., Van Tartwijk, J., Van Der Vleuten, C., & Wass, V. (2007). Portfolios in medical education: why do they meet with mixed success? A systematic review. *Medical Education*, 41(12), 1224–1233. doi:10.1111/j.1365-2923.2007.02944.x/full
- Driessen, E. W., Van Tartwijk, J., Overeem, K., Vermunt, J. D., & Van der Vleuten, C. P. M. (2005). Conditions for successful reflective use of portfolios in undergraduate medical education. *Medical Education*, 39(12), 1230–1235. doi:10.1111/j.1365-2929.2005.02337.x
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior*. New York: Psychology press.
- Fishbein, M., & Cappella, J. (2006). The role of theory in developing effective health communications. *Journal of Communication*, 56(1), 1–17. doi:10.1111/j.1460-2466.2006.00280.x
- Fullan, M. (2001). *The new meaning of educational change (3rd ed.)*. New York: Teachers college press.
- Geijssels, F., Sleegers, P., Stoel, R., & Krüger, M. (2009). The effect of teacher psychological and school organizational and leadership factors on teachers' professional learning in Dutch schools. *The Elementary School Journal*, 109(4), 406–427. doi:10.1086/593940
- Imhof, M., & Picard, C. (2009). Views on using portfolio in teacher education. *Teaching and Teacher Education*, 25, 149–154. doi:10.1016/j.tate.2008.08.001
- Janssen, S., Kreijns, K., Bastiaens, T., Stijnen, S., & Vermeulen, M. (2012). Teachers' professional development: an analysis of the use of Professional Development Plans in a Dutch school. *Professional Development in Education*, 38(3), 453–469.
- Kicken, W. (2008). *Portfolio use in vocational education*. Open University.
- Mansvelder-Longayroux, D., Beijaard, D., & Verloop, N. (2007). The portfolio as a tool for stimulating reflection by student teachers. *Teaching and Teacher Education*, 23(1), 47–62. doi:10.1016/j.tate.2006.04.033
- Martens, R. L. (2010). *Zin in onderzoek. Docentprofessionalisering*. Oratie. Heerlen: Open Universiteit in the Netherlands.
- McKenney, S., & Reeves, T. C. (2012). *Conducting educational design research*. London: Routledge.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: Jossey-Bass.
- Putnam, R. T., & Borko, H. (2000). What Do New Views of Knowledge and Thinking Have to Say About Research on Teacher Learning? *Educational Researcher*, 29(1), 4–15. doi:10.3102/0013189X029001004

- Smith, K., & Tillema, H. (2001). Long-term Influences of Portfolios on Professional Development. *Scandinavian Journal of Educational Research*, 45(2), 183–203. doi:10.1080/00313830120052750
- Smith, K., & Tillema, H. (2003). Clarifying different types of portfolio use. *Assessment & Evaluation in Higher Education*, 28(6), 625–648. doi:10.1080/0260293032000130252
- Smylie, M. A. (1995). Teacher learning in the workplace: Implications for school reform. In T. R. Guskey & M. Huberman (Eds.), *Professional development in education* (pp. 92–113). New York: Teachers college press.
- Spillane, J., Reiser, B., & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research*, 72(3), 387–431. doi:10.3102/00346543072003387
- Van Eekelen, I., Vermunt, J., & Boshuizen, H. (2006). Exploring teachers' will to learn. *Teaching and Teacher Education*, 22(4), 408–423. doi:10.1016/j.tate.2005.12.001
- Van Tartwijk, J., Driessen, E., Van der Vleuten, C., & Stokking, K. (2007). Factors influencing the successful introduction of portfolios. *Quality in Higher Education*, 13(1), 69–79.
- Vrieling, E. M. (2012). *Promoting self-regulated learning in primary teacher education* (Doctoral dissertation). Retrieved from <http://www.ou.nl/documents/14300/8ca1aebb-3ab2-4047-8020-c0f198e45ad3>.
- Wade, R. C., & Yarbrough, D. B. (1996). Portfolios: A tool for reflective thinking in teacher education? *Teaching and Teacher Education*, 12(1), 63–79. doi:10.1016/0742-051X(95)00022-C
- Zimmerman, B. J. (2000). Attaining self-regulation. A social cognitive perspective. In: M. Boekaerts, P.R. Pintrich, and M. Zeichner (Eds). *Handbook of self-regulation*. (pp. 13–39). San Diego, CA: Academic Press.

## Summary

There is increased interest in practice and theory to promote the professional development of teachers. New insights into how education should be and today's knowledge based society demand more quality of education and require continuous professional development of teachers. The Dutch government anticipated on these changes by requiring from school organisations a solid personnel policy, and by introducing a new job structure and a schooling grant for teachers. To meet these requirements, school organisations increasingly use a Professional Development Plan (PDP) as an instrument to promote teachers' professional development.

Research, however, showed that it is not self-evident that the implementation of a PDP leads to successful professional development. Earlier studies revealed mixed evidence regarding the effectiveness of PDPs and indicated that guidance and a good implementation is essential for successful use. The aim of this dissertation was to examine how teachers can be best supported when using a PDP in the context of professional development. In Chapter 2 we examined the effects of guidance (workshops) on the quality of PDPs. Although this guidance was found supportive, we wondered if teachers might have their own beliefs about filling in a PDP and if school organisational conditions were necessary to facilitate a successful implementation. By exploring these two factors (individual factors and organisational factors) in Chapter 3 and 4 we gained more insight into teachers' beliefs about filling in a PDP and essential organisation conditions. This led to a systematic approach which included practical recommendations for supporting and facilitating the use of PDPs in school organisations. This approach is presented in Chapter 5. Chapter 6 provides an overview of the main findings and conclusions and presents the theoretical and practical implications, limitations, and future research.

In the first study, reported in **Chapter 2**, we investigated the influence of guidance on the quality of PDPs. The quality of PDPs from two groups of teachers from a secondary vocational school were compared. The experimental group received guidance in terms of workshops, whereas the control group did not receive such guidance. The quality of the PDPs was established with an assessment tool. This tool was developed for this study and consisted of three constituent elements: 1) diagnosis of own performance (in terms of strengths and weaknesses), 2) formulation of learning goals and 3) making a plan of action. The quality of the PDPs was determined by two criteria. These criteria were: 1) the completeness of the filled in PDPs and 2) consistency between and within the three elements.

From the results we tentatively concluded that the workshops helped teachers in diagnosing their performance and in formulating their learning goals. Teachers from the guided group elaborated more on their diagnosis of performance and defined more detailed learning goals compared to the control group (no guidance).

These learning goals addressed the competences they wanted to develop and the situation in which they wanted to improve themselves. However, no differences were found regarding the plans of action. Both groups formulated plans of action which were not specific and did not include succeeding steps to accomplish their learning goals. Moreover, the PDPs of both groups differed from low to reasonably consistent, in which the PDPs of the guided group tended to be more consistent. The guidance of teachers should therefore be improved by providing more attention to complete consistent PDPs in which the diagnosis of performance, the learning goals and the plan of action succeed each other logically. Moreover, teachers need more help in making specific plans of action.

Although these results revealed that guidance supported teachers in completing a higher quality PDP, the results also revealed that only a small number of teachers completed a PDP. In line with other research, we expected that this could be explained by how teachers perceived using a PDP and how the organisation implemented the PDP and supported the use of a PDP. In the following studies, we aimed to explore beliefs teachers have about completing a PDP and how they can be supported and facilitated by the organisation.

**Chapter 3 and 4** describe two explorative studies in which we investigated teachers' beliefs, their characteristics and organisational factors. For these studies, interviews were conducted with 41 teachers, six supervisors, five school directors and HR managers from two primary schools and three secondary schools. The study of Chapter 3 concentrated on teachers' beliefs and characteristics by using the interviews of the teachers. The study of Chapter 4 focused on the organisational conditions that contribute to a successful implementation.

The aim of the study presented in **Chapter 3** was to identify groups of teachers with similar beliefs about using a PDP and similar characteristics. The theory of planned behaviour (TPB) was used as a framework to examine these beliefs. This theory distinguishes three psychosocial variables and underlying beliefs that influence teachers' intention to use a PDP. These variables and beliefs are: 1) attitude and outcome beliefs, 2) subjective norm and normative beliefs, and 3) perceived behavioural control and efficacy beliefs. TPB was used to develop the interviews and, thereby, to identify the beliefs teachers have towards a PDP. Age, years of experience, experience in the use of a PDP, motives for professional development and general beliefs about professional development were included as teachers' characteristics. The interviews were qualitatively analysed by coding all interviews. Based on this coding we applied hierarchical cluster analysis for defining groups of teachers who have similar beliefs towards the use of a PDP.

The results regarding teachers' beliefs revealed that most of them were positive about the use of a PDP. They perceived it a useful instrument for their professional development. Some teachers used the PDP to apply for a higher position by show-

ing how they had developed themselves. Even though most teachers were positive about the PDP because it supported their development, they experienced it as something extra on top of what they already had to do. Some of these teachers were not convinced about the value of completing a PDP. They thought for example that they were still meeting the standards and when it was necessary they immediately contacted the supervisor without waiting for a development interview.

Based on the cluster analyses we revealed seven clusters of teachers. These clusters were rather a continuum than that they were very distinct. The continuum of clusters ranged from teachers with a positive attitude and who felt no pressure to fill in a PDP, to teachers with a neutral to negative attitude and who felt more pressure to complete a PDP. Teachers in the first clusters had a firm positive attitude towards using a PDP; they found it a useful instrument and were eager to learn. Teachers in the middle clusters were in doubt about the usefulness of a PDP. Teachers in the remaining cluster had a neutral to negative attitude and they only completed a PDP because it was mandatory. The clusters differed regarding the teacher characteristic work experience. Teachers who completed a PDP because of its advantages had less work experience than teachers who filled in a PDP because it was obligatory. This might be due to that teachers with less experience finished their education recently in which they probably used instruments for reflection and development.

The study in **Chapter 4** focused on the organisational conditions contributing to a successful implementation of a PDP. The interviews with the teachers, supervisors and directors were analysed per case. Thus, we could compare how the PDP was implemented in different schools and teams and determine what variables lead to more positive beliefs (attitude, subjective norm and perceived behavioural control) regarding the use of a PDP and therefore a more successful implementation. The organisational factors we investigated were implementation factors, social support factors and strategy and vision.

The results showed that teachers' beliefs differed between the cases. It was therefore possible to compare cases which included teachers who had positive beliefs towards using a PDP with cases that included teachers with more negative beliefs. This analysis revealed that cases in which the PDP was introduced well, in which the PDP was used for a longer time and in which the procedure was evident, teachers had more positive beliefs about the use of a PDP. Considering social support, it appeared that support from the supervisor emerged from the interviews as an influencing variable which varied between the cases. Whereas support from the director of the school and colleagues was minimal. The cases varied to the degree to which school vision and strategy were clearly communicated. This vision and strategy were, however, often not deliberately linked to individual goals.

These results showed that while schools had taken their first steps in implementing a PDP, more effort is needed to embed the PDP in a school environment. School organisations could improve this by preparing the supervisors well for their task to support teachers in using a PDP. Moreover, schools organisations should involve teachers in establishing a vision and strategy for professional development and promote collegial support.

In **Chapter 5**, the results of these three studies and research about using a PDP and professional development were used to formulate practical recommendations for schools. To that end, we first defined how we regarded the individual learning process based on literature about professional development. The learning process is situated, needs reflection, is deliberate and is self-regulated. Differences between teachers regarding their dispositions regarding the use of a PDP, skills and motives for learning were also considered. We divided the approach into three levels of support. The first level concerns the support by a PDP which includes questions and explanations to support teachers in diagnosing their performance, considering schools' requirements and teachers' interests, formulating learning goals, and making a plan of action. The second level concerns support from the supervisor. The supervisor conducts the development interviews with teachers, takes care of the development trajectory of using a PDP and creates a learning environment. The supervisor also connects the first level with the third level by reinforcing individual and school development. The third level then consists of the organisational conditions that contribute to a successful PDP implementation. These conditions include the development of a strategy and vision about school development, the implementation of a PDP and managerial support. For each level of support an overview of practical recommendations is provided for the schools.

Finally, **Chapter 6** presents the main conclusions, implications for theory and practice, limitations and suggestions for future research. This dissertation provided more insight into how teachers should be supported in their professional development by using a PDP. Our results indicated that guidance by workshops was not sufficient; teachers needed more individualized support adjusted to their learning needs and teachers' beliefs regarding the use of a PDP. It became clear that the supervisor has a crucial role in adjusting his or her support to these individual learning needs and discuss the beliefs regarding a PDP. We concluded that an integral approach for supporting teachers is needed in order to promote teachers' professional development including a PDP design, support from a supervisor and organisational conditions.

## Nederlandse samenvatting

In zowel de dagelijkse praktijk als de wetenschap is er toenemende aandacht voor de professionalisering van leraren. Huidige inzichten laten zien dat de rol van de docent bepalend is voor de kwaliteit van het onderwijs. Continue professionele ontwikkeling van docenten is van groot belang om de kwaliteit te verhogen en te waarborgen. De overheid anticipeert hierop door van schoolorganisaties te eisen dat zij een gedegen personeelsbeleid hebben waarin volop aandacht is voor de professionele ontwikkeling van de docent. Daarnaast heeft de overheid een nieuw functiebouwwerk geïntroduceerd, de functiemix. Deze functiemix zorgt voor differentiatie in de docentfunctie, waarmee docenten beloond kunnen worden voor extra inzet en ontwikkeling. Ook is er een lerarenbeurs ingesteld, die docenten kunnen aanvragen om een studie te volgen. Tegen deze achtergrond zijn daarom instrumenten nodig die het proces van professionele ontwikkeling ondersteunen en stimuleren. Een van deze instrumenten is het Professioneel Ontwikkel Plan (POP).

Onderzoek naar het gebruik van POP's laat echter zien dat het niet vanzelfsprekend is dat de inzet van POP's leidt tot succesvolle professionalisering. Er zijn namelijk geen eenduidige resultaten met betrekking tot de effectiviteit van POP's. Maar dezelfde studies suggereren ook dat wanneer er een goede begeleiding en een goede implementatie aanwezig zijn, de kans op een succesvol gebruik wordt vergroot.

De doelstelling van deze dissertatie was daarom om te onderzoeken hoe leraren het beste ondersteund kunnen worden wanneer zij een POP gebruiken in de context van professionele ontwikkeling. In hoofdstuk 2 beschrijven we een studie naar het effect van begeleiding door workshops op de kwaliteit van POP's. Ook al vonden we dat deze workshops ondersteuning boden, ervoeren we tijdens deze studie dat opvattingen van leraren van belang zijn voor het maken van een POP. Ook ervoeren we dat de schoolorganisatie een succesvolle implementatie moet faciliteren willen leraren gemotiveerd zijn een POP te maken. Door deze twee factoren (individuele factoren en schoolorganisatiefactoren) in hoofdstuk 3 en 4 te onderzoeken kregen we meer inzicht in de opvattingen van leraren over het gebruiken van een POP en de organisatiefactoren die van belang zijn. Dit leidde tot een systematische benadering waarin praktische aanbevelingen zijn opgenomen voor het ondersteunen en faciliteren van het gebruik van POP's in schoolorganisaties. Deze benadering staat beschreven in hoofdstuk 5. Hoofdstuk 6 geeft een overzicht van de belangrijkste bevindingen en conclusies en presenteert de theoretische en praktische implicaties. Verder beschrijft hoofdstuk 6 de beperkingen van het onderzoek en geeft richting aan toekomstig onderzoek.

In de eerste studie, die beschreven staat in **hoofdstuk 2**, onderzochten we de invloed van begeleiding op de kwaliteit van POP's. De kwaliteit van POP's van twee groepen van leraren van een mbo-school werd vergeleken. De experimentele groep ontving begeleiding in de vorm van workshops, terwijl de controlegroep deze work-

shops niet ontving. De kwaliteit van de POP's van beide groepen werd vastgesteld met een beoordelingsinstrument. Dit instrument was ontwikkeld voor deze studie en bestond uit drie constituerende elementen van een POP: 1) diagnose van functioneren in termen van sterktes en zwaktes, 2) formulering van leerdoelen en 3) het maken van een actieplan. Met het beoordelingsinstrument werd de kwaliteit bepaald door de POP's op twee criteria te analyseren en beoordelen. Deze criteria waren: 1) de compleetheid van het ingevulde POP en 2) de consistentie binnen en tussen de drie belangrijkste elementen.

Uit de resultaten konden we voorzichtig concluderen dat de workshops leraren ondersteunden bij het diagnosticeren van hun functioneren en het formuleren van leerdoelen. De leraren van de begeleide groep beschreven hun diagnose van functioneren uitgebreider en formuleerden meer en meer gedetailleerde leerdoelen dan de controlegroep. Deze leerdoelen waren gericht op de competenties die de leraren zelf wilden ontwikkelen en de situaties waarin zij zichzelf wilden verbeteren. De actieplannen van beide groepen bleken te weinig verschillend te zijn. Bovendien formuleerden beide groepen actieplannen die niet specifiek waren. Ook misten de plannen een opsomming van de leeractiviteiten die elkaar logisch opvolgen en die zouden moeten leiden tot het behalen van de geformuleerde leerdoelen. Daarnaast varieerden de geanalyseerde POP's van weinig consistent tot redelijk consistent, waarbij de POP's van de begeleide groep consistentier neigden te zijn. Begeleiding van leraren bij het maken van een POP kan daarom verbeterd worden door meer aandacht te besteden aan het consistent maken van de POP's, waarin de diagnose van het functioneren, de leerdoelen en de actieplannen elkaar logisch opvolgen. Begeleiding zou zich ook moeten richten op het maken van specifieke actieplannen.

Hoewel de resultaten lieten zien dat de workshops ondersteunend waren voor het invullen van een POP, bleek dat slechts een klein gedeelte van de leraren die op de onderzochte school werkte, het POP had ingevuld. Op basis van deze studie en ander onderzoek verwachtten wij dat twee aspecten van belang zijn: 1) de opvattingen van de docenten over het maken van een POP en 2) ondersteuning van de schoolorganisatie. Daarom onderzochten wij in de daaropvolgende studies de opvattingen van leraren over het gebruiken van een POP en onderzochten we hoe zij het beste ondersteund en gefaciliteerd kunnen worden door de schoolorganisatie.

In **hoofdstuk 3 en 4** worden twee exploratieve studies beschreven waarin respectievelijk de opvattingen van leraren, in relatie met hun kenmerken en organisatiefactoren onderzocht werden. Om dit te onderzoeken zijn 41 leraren, zes direct leidinggevenden en vijf schooldirecteuren en HR-managers geïnterviewd. Deze participanten werkten op twee basisscholen en drie middelbare scholen. De studie die beschreven is in hoofdstuk 3 richtte zich op de opvattingen en kenmerken van leraren. Voor deze studie werden de resultaten van interviews van de leraren gebruikt. De studie van hoofdstuk 4 was gericht op de schoolorganisatorische factoren die bijdragen aan een succesvolle implementatie van een POP.



Het doel van de studie die in **hoofdstuk 3** beschreven wordt was het identificeren van groepen leraren met gelijke opvattingen over het gebruiken van een POP en met gelijke achtergrondkenmerken. De theorie van gepland gedrag (TPB; theory of planned behaviour) is daarbij gebruikt als raamwerk om deze opvattingen te onderzoeken. De theorie maakt onderscheid tussen drie psychosociale variabelen (houding, subjectieve norm en eigen effectiviteit) en de daarbij horende onderliggende opvattingen. De psychosociale variabelen bepalen de intentie van leraren om een POP te gebruiken. Deze variabelen en opvattingen zijn 1) houding en uitkomstverwachtingen wanneer de POP zou worden gebruikt, 2) waargenomen norm en normatieve opvattingen (van anderen) over het gebruik van de POP en 3) eigen effectiviteit (geloof in eigen kunnen) ten opzichte van het gebruik van het POP en de onderliggende opvattingen over ondersteunende en belemmerende factoren. TPB diende als uitgangspunt voor de ontwikkeling van de interviews. Hiermee achterhaalden we de opvattingen van leraren over het gebruiken van een POP. De volgende docentkenmerken werden meegenomen: leeftijd, jaren werkervaring, ervaring met het gebruik van een POP, motieven voor professionele ontwikkeling en de meer algemene opvattingen over professionele ontwikkeling. De interviews werden kwalitatief geanalyseerd door deze te coderen. Op basis van deze codering pasten wij hiërarchische clusteranalyses toe. Daarmee konden groepen van leraren met gelijke opvattingen over het gebruiken van een POP geïdentificeerd worden.

De resultaten toonden aan dat de meeste leraren positief waren over het gebruik van een POP. Ze vonden het POP een nuttig instrument voor hun professionele ontwikkeling. Sommige leraren gebruikten het POP om in aanmerking te komen voor een hogere functieschaal. De meeste leraren vonden dat het POP hen ondersteuning gaf in hun ontwikkeling. Toch werd het invullen van een POP als een extra belasting in hun werk gezien. Enkele leraren waren niet overtuigd van de (meer)waarde van het invullen van een POP.

Met de clusteranalyses vonden we zeven clusters van leraren. Het bleek dat deze clusters meer een continuüm vormden dan dat zij erg onderscheidend waren van elkaar. Het continuüm van clusters varieerde van clusters met leraren die een positieve houding hadden en weinig druk voelden om een POP in te vullen tot clusters met leraren die een neutrale tot negatieve houding hadden en die meer druk ervoeren om een POP in te vullen. Leraren in de eerste clusters hadden een sterke positieve houding ten aanzien van het gebruik van een POP; zij vonden het een nuttig instrument en wilden graag leren. Leraren uit de middelste cluster twijfelden over de bruikbaarheid van het POP. De leraren uit de overgebleven clusters hadden een neutrale tot negatieve houding en vulden enkel een POP in omdat het verplicht was. De achtergrondkenmerk werkervaring verschilde tussen de clusters. Leraren die een POP invulden vanwege de voordelen hadden minder werkervaring dan de leraren die een POP invulden omdat het verplicht was. Een verklaring hiervoor kan zijn dat leraren die weinig werkervaring hebben recent hun opleiding hebben afge-

rond. Voor deze opleiding hebben zij mogelijk ervaring opgedaan met instrumenten die reflectie en ontwikkeling bevorderen.

Deze resultaten lieten zien dat leraren verschillend waren in hun opvattingen over het gebruik van een POP. Desondanks waren de clusters niet duidelijk onderscheidend van elkaar en vormden ze meer een continuüm.

De studie in **hoofdstuk 4** richtte zich op de organisatorische factoren die bijdragen aan een succesvolle implementatie van een POP. Om scholen en teams te vergelijken hebben we gebruik gemaakt van interviews per team. We vergeleken hoe het POP geïmplementeerd was en onderzochten welke organisatorische factoren mogelijk leidden tot meer positieve opvattingen, met betrekking tot houding, waargenomen norm en eigen effectiviteit, over het gebruik van POP's en daarmee tot een succesvolle implementatie zouden leidden. De organisatiefactoren die werden onderzocht waren implementatiefactoren, sociale ondersteuningsfactoren en strategie en visie.

De resultaten lieten zien dat er verschillen waren in opvattingen van leraren tussen de teams. Daardoor was het mogelijk om teams met leraren die positieve opvattingen hadden over het gebruiken van een POP te vergelijken met teams waarin leraren meer negatieve opvattingen hadden. Deze analyse maakte duidelijk dat in de teams waar het POP goed was geïntroduceerd, het POP voor een langere tijd gebruikt werd en de procedure duidelijk was, leraren positievere opvattingen hadden. Van de sociale ondersteuningsfactoren was ondersteuning van de direct leidinggevende een factor van invloed. Deze factor varieerde nogal tussen de teams. De ondersteuning van de directeur van de school was in alle teams minimaal en bestond voornamelijk uit het monitoren van het proces van het gebruik van het POP. Daarnaast kwam ondersteuning van collega's weinig voor. De teams waren verschillend in de mate waarin de visie en strategie duidelijk gecommuniceerd werd met leraren. Vaak werden deze visie en strategie niet gerelateerd aan de individuele doelen van de leraren. Deze resultaten lieten hiermee zien dat hoewel de scholen hun eerste stappen hadden gezet om het POP te implementeren, meer inzet nodig is om het te integreren in de schoolcontext. Schoolorganisaties kunnen dit verbeteren door de direct leidinggevenden goed voor te bereiden op hun taak om leraren te begeleiden bij het invullen van een POP. Scholen zouden leraren moeten betrekken bij het vaststellen van een visie en strategie voor professionele ontwikkeling en ondersteuning door collega's moeten bevorderen.

De resultaten van de drie studies en literatuur over het gebruik van het POP en professionele ontwikkeling werden gebruikt om een systematische benadering voor het ondersteunen van leraren bij het maken van een POP te ontwikkelen. Deze benadering staat beschreven in **hoofdstuk 5** en bestaat uit een reeks van praktische aanbevelingen. Om deze benadering te ontwikkelen, beschreven we eerst het individuele leerproces op basis van literatuur over professionele ontwikkeling. We beargumenteerden dat het leerproces in een context moet plaatsvinden, reflectie nodig heeft, intentioneel en zelfregulerend is. Ook werd bij de benadering rekening

gehouden met verschillen tussen leraren met betrekking tot hun disposities (dat wil zeggen, hun houding, subjectieve norm en eigen effectiviteit) en vaardigheden voor het invullen van een POP en motieven om te leren. In de benadering onderscheidden we drie ondersteuningsniveaus. Het eerste niveau is de ondersteuning van een POP met vragen en uitleg om leraren te helpen bij de diagnose van hun functioneren, het rekening houden met de vereisten van de school en eigen interesses, het formuleren van leerdoelen en het maken van actieplannen. Het tweede niveau bevat ondersteuning van de direct leidinggevende. De direct leidinggevende voert de ontwikkelgesprekken met de leraren, verzorgt het traject voor het gebruiken van een POP en creëert een leeromgeving. Daarnaast verbindt de direct leidinggevende het eerste niveau van ondersteuning met het derde niveau door zowel individuele ontwikkeling als schoolontwikkeling te bevorderen. Het derde niveau bestaat uit de schoolorganisatiecondities die bijdragen aan een succesvolle implementatie van het POP. Deze condities zijn de ontwikkeling van een visie en strategie voor schoolontwikkeling, de implementatie van een POP en managementondersteuning. Elk ondersteuningsniveau omvat een overzicht van praktische aanbevelingen voor scholen.

Tot slot geeft **hoofdstuk 6** een overzicht van de belangrijkste conclusies, implicaties voor theorie en praktijk. Tevens worden de beperkingen en suggesties voor toekomstig onderzoek besproken. De studies in deze dissertatie gaven meer inzicht in hoe leraren het beste ondersteund kunnen worden wanneer zij een POP gebruiken in de context van professionele ontwikkeling. De resultaten lieten zien dat begeleiding in groepen niet genoeg is. Leraren hebben geïndividualiseerde ondersteuning nodig die aangepast is aan hun leerbehoeften en rekening houdt met opvattingen die zij hebben. Het werd duidelijk dat de leidinggevende een belangrijke rol heeft in het aanpassen van zijn of haar begeleiding naar deze individuele leerbehoeften en in gesprek moet gaan over het nut van het gebruik van het POP. We concludeerden dat een integrale benadering nodig is om leraren te ondersteunen in hun professionele ontwikkeling. Deze ondersteuning bevat een goed ontwerp voor een POP, ondersteuning van een direct leidinggevende en de juiste schoolorganisatorische condities.

**Appendix 1: Overview of summarized responses of teachers regarding  
their beliefs and individual characteristics that might influence  
teachers' beliefs (Chapter 3)**

	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6	Cluster 7
<i>Most important reason</i>	Advantages (12): learning (11)/ salary (1)	Advantages (5): learning (4)/ salary (1)	Advantages (3): learning (2)/salary (1)	Obligation + advantages: learning (2)	Obligation + advantages (3): Learning (2)/ salary (1)	Obligation(6)	Obligation (10)
<i>Attitude</i>	Positive (10) neutral (2)	Positive (5)	Neutral (3)	Positive (2)	Neutral (3)	Positive (6)	Negative (4) Neutral (5) Positive (1)
<i>Advantages</i>	Own development (12) Attention/ appreciation (2) Career (4) Quality of education (1) For the supervisor (3)	Own development (5) Quality of education (1) Career (1) For supervisor (2) Appreciation (1)	Own development (2) Making agreements with supervisor (1) Growth/ salary (1) Quality (1)	Own development (2) Development interview with supervisor (2) Development school (1)	Career (2) For the supervisor (1) Own development (3) Development of the school (1)	Own development (6) Career (4) School development (1) Making visible (2) Development interview (1) Working together with colleagues (1) Routine (1) Match assessment and development (1) Time (2) Too leading (1) Ambition does not match ambition (2) Formulating goals for improvement (1) Much focus on personnel (1) Planning in hours (1)	Own development (5) Improving quality of education (3) Filing (3) Career (1) Interview with supervisor (2) Dividing new functions (1) Become aware (1) Emphasis on teacher instead of student (Waste of) time (5) Questionnaires are subjective (2) "Snapshot" (2) Obligation (2) Formulating goals for improvement (already functioning well)(1) Not dynamic (1)
<i>Disadvantages</i>	Improvement (1) Time (6) Extra work (2) It is the same every time (1) Make something up (1) Rigid formulation (1)	Inconsistent format (1) 'Snapshot'(1) Obligation (1) Assessment colleagues (1) Short term (1) No assessment (1) No perspectives for growth (1)	Pressure to learn (1) Focus on future (1) Emphasis on obligatory task (1) It is exaggerated (1) Extra work (1)	Filing (1) Time (1)	Filing (1) Different learning goals between colleagues (1) Time (1)		

	Cluster 1		Cluster 2		Cluster 3		Cluster 4		Cluster 5		Cluster 6		Cluster 7	
<i>Subjective norm</i>	No pressure (12)		Obligation (3) Obligation/ no pressure (2)		Obligation/ no pressure (3)		Obligation/ no pressure (2)		Obligation (3)		Obligation (1) Obligation, no pressure (5)		Obligation (6) Obligation, no pressure (4)	
<i>'Important others'</i>	Colleagues (5)		Direct supervisor (4)		Direct supervisor (3)		Myself (1)		Management (2)		Direct supervisor (3)		Management (8)	
	Management (7)		Management (4)		Management (1)		Organisation (1)		Direct supervisor (1)		Myself (2)		Students (1)	
	Parents (3)		Colleagues (2)						Nobody (1)		Board (1)		Board (2)	
	Direct supervisor (8)		Myself (1)								Inspection (1)		Supervisor (4)	
<i>Reasons for others</i>	Students (3)										Management (2)		Nobody (1)	
	Myself (8)										Inspector (1)			
	Well being of teachers		To be informed about teachers' performance		Good and satisfied personnel		Gathering learning goals and ambitions		Assessment Quality		Good working relation with supervisor		Unclear opinion of management	
	Quality of education		Development of teachers		Quality of education		Development of teachers		It is an obligation		Development of teachers		No priority for management	
<i>Perceived behavioural control</i>	Team leader/ team development		Development of teachers		Development of teachers				Recording		It is an obligation		Development of teachers	
	Everybody benefits from a good teacher		To have inspiring teachers		No priority for management						To have something on paper		It is an obligation	
	Facilitate professionalization		Quality of teachers		To gather wishes for development						No priority for management		For the development interview	
	Development of teachers		For assessment								Be informed about teachers' performance		Be informed about teachers' performance	
<i>Mean age (SD)</i>	<b>Easy (6)</b> <b>Neutral (4)</b> <b>Difficult (2)</b>	<b>Easy (4)</b> <b>Neutral (1)</b>	29.4 (11.0)		<b>Difficult (1)</b> <b>Neutral (2)</b>		<b>Neutral (2)</b>		<b>Easy (3)</b>		<b>Difficult (1)</b> <b>Easy (4)</b> <b>Neutral (1)</b>		<b>Neutral (7)</b> <b>Difficult (1)</b> <b>Easy (2)</b>	
<i>Mean years of experience (SD)</i>	38.6 (9.45)		27.3 (2.3)		43.5 (12.0)		47.3 (5.7)		41.0 (9.2)		43.6 (12.6)		20.8 (12.2)	
	11.3 (6.1)		5.0 (2.0)		20.5 (14.8)		23.3 (7.5)		8.8 (3.8)					

	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6	Cluster 7
<i>Motives for development</i>	Teaching profession (12) Challenge (8) Career (2)	Teaching profession (5) (5) Career (1)	Teaching profession (3) Challenge (1) No motive (1)	Teaching profession (2) No motive (1) Challenge (1)	Challenge (3) (2)	Challenge (6) Teaching profession (4) Career (1)	Teaching profession (8) Challenge (4) Career (4) No motive (3)
<i>Experience with PDP</i>	Study (4) Former job (2) None (1) Performance interviews (5)	None (2) Former job (1) Study (2)	Former job (1) None (1) Study (1)	As a supervisor (1) None (1)	None (1) Former job (1) As a supervisor (1)	As a supervisor (1) Study (1) Former job (1) Performance inter-view (1) None (2)	None (7) Performance inter-view (2) Former job (1)

## Appendix 2: Example of a format for a Professional Development Plan

Digital version: <http://portal3.rdmc.ou.nl/pop/app/main.jsp>

### General information

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Name:	School type:
Age:	Subject/ field:
Sex:	Working hours a week:
Years of experience:	Current position:
Date:	Name supervisor:
Name of school:	Time period:

### Supervision

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Name supervisor:  
Agreements (date/ time):

### Development Plan

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#### Element 1: Who am I?

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Before establishing goals it is important to reflect on your performance at work. You reflect on what you find important in your work and you determine the strengths and weaknesses in your performance. This forms the basis for your professional development.

*Question 1.1: What do you find important in your work?*

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#### **Explanation:**

What do you pursue? What inspires you? What motivates you? Point out your most important motives for working in education.



**Tip:**

The *Inspirator* is a digital program which supports you in determining what you consider important in your work. The *Inspirator* includes interviews with other teachers about their development as a teacher and about what they consider to be important in their work. You can also have your own interview about your motives. You can also use the *LaP (Teacher as a Person)*. This is an online program which includes all kinds of tests that provide you insight in your qualities, beliefs and motivation. You do not have to do all the tests. You can determine which tests you want to do. The tests motivation, motivation teacher and beliefs about education apply to this question.

**Weblinks:**

- [Inspirator](http://portal2.rdmc.ou.nl/inspirator) (<http://portal2.rdmc.ou.nl/inspirator>)
- [LaP \(Teacher as a Person\)](http://portal.rdmc.ou.nl/lap/index.jsp) (<http://portal.rdmc.ou.nl/lap/index.jsp>)

**Answer:**

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*Question 1.2: What are my strengths?*

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**Explanation:**

Write down your strengths and link these to the competences the school formulated for teachers.

What are your strengths as a teacher? To answer this question it might help to describe a situation in which you performed well and in which you were satisfied with the result. Ask yourself why this situation went well? Why did you perform effectively? What did you do? Which skills, knowledge and/ or attitude contributed to your good performance?

**Tip:**

The *checklist competences* is a good program for getting an impression of your competences, as formulated for the teachers' profession. This program will give you a quick impression of the competences you have mastered.

Do you want to know more about the competences that play a role in your work? The *competence matrix* provides you with an overview of situations that teachers encounter in daily practice and the competences that are essential for these situations.

All sorts of tests of the *LaP (Teacher as a Person)* apply to this question. For example; creativity and flexibility, communication with parents and personal characteristics.

**Weblinks:**

- [checklist competences](http://www.lerarenweb.nl/scans/checklist) (<http://www.lerarenweb.nl/scans/checklist>)
- [competence matrix](http://portal.rdmc.ou.nl/competentie) (<http://portal.rdmc.ou.nl/competentie>)
- [LaP \(Teacher as a Person\)](http://portal.rdmc.ou.nl/lap/index.jsp) (<http://portal.rdmc.ou.nl/lap/index.jsp>)

**Answer:**

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*Question 1.3: What are my weaknesses?*

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**Explanation:**

Everyone has their strengths and weaknesses. Describe your weaknesses and link these to the competences the school formulated for teachers.

To answer this question it might help to describe a situation which you found difficult and in which you were not satisfied about the results you achieved. Ask yourself why this situation did not go well? Why didn't you perform effectively? What did you do? Which skills, knowledge and/ or attitude caused the weaker performance?

**Tip:**

The *checklist competences* is a good program for getting an impression of your competences, as formulated for the profession of teachers. This program will give you a quick impression of the competences you have mastered.

Do you want to know more about the competences that play a role in your work? The *competence matrix* provides you with an overview of the situations that teachers encounter in daily practice and the competences that are essential for these situations.

All sorts of tests of the *LaP (Teacher as a Person)* apply to this question. For example; creativity and flexibility, communication with parents and personal characteristics.

**Weblinks:**

- [checklist competences](http://www.lerarenweb.nl/scans/checklist) (<http://www.lerarenweb.nl/scans/checklist>)
- [competence matrix](http://portal.rdmc.ou.nl/competentie) (<http://portal.rdmc.ou.nl/competentie>)

- [LaP \(Teacher as a Person\)](http://portal.rdmc.ou.nl/lap/index.jsp) (<http://portal.rdmc.ou.nl/lap/index.jsp>)

**Answer:**

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**Element 2: Where am I going?**

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*Question 2.1: What does the school organisation require from me?*

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**Explanation:**

Even though the PDP is a personal plan, the department and the school for which you work also have ambitions, goals and results to accomplish.

Describe what the organisation requires from you regarding your professional development and how you can contribute to the school/department's goals and ambitions.

**Tip:**

Discuss the goals of the school and department/ team with your supervisor. What do the school and the department require from you? Examine whether these goals and requirements are consistent with the goals you pursue and how you can contribute to the school/department's goals. Adjust your PDP if necessary.

**Answer:**

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*Question 2.2: Which issues of my work concern me?*

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**Explanation:**

Are there issues in your work that concern you? For example, you think that students should be more motivated to do their work well. You want to figure out how you can motivate students by being more creative in assignments, or by providing more individual support for students.

In addition, you might want to broaden your tasks as a teacher and develop yourself. Your position as a teacher might concern diverse professional tasks such as educating, having meetings with parents and organising a field trip. However, you also want to be more involved with the development of students and become a student counsellor.

For this question, you write down what issues and or (extra) tasks you want to take on.

**Answer:**

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**Element 3: What am I going to develop?**

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Based on the answers to the previous questions, you determine which results you want to achieve in the forthcoming year and how you need to develop yourself to achieve those results. Possibly, you want to develop your strengths even further. For example, the guidance of students is going really well, and you decide that you want to specialize yourself in this task. You can also choose to develop your weaknesses. For example, you have difficulty in dealing with parents of students and what to improve your conversation skills. You can also pursue to try a different direction and focus your professional development on that. Remember that a year is short. You have to make decisions on what you want to accomplish this year and prioritize the goals you want to achieve.

*Question 3.1: Which result do I want to achieve?*

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**Explanation:**

Professional development should eventually lead to changes in behaviour in the classroom and in school. In this question, you are asked to describe what you are going to do differently and what effect you want to have as a teacher. It is best to describe specific results. The results should be attainable regarding the time and resources you have. Describe the results you want to achieve regarding your behaviour and your performance in your work.

**Tip:**

The *competence matrix* provides you with an overview of the situations that are important for the profession of being a teacher. These situations are linked to specific behaviour and results that are important in that situation. Videos are included which show the situations.

*Videos*

•(<http://streaming.rdmc.ou.nl/RdMC/Competentie/vmbo/BEGELEIDEN%20GROEPE N.wmv>)

This example shows how a teacher supports a group of students. When watching this video, observe the teachers' behaviour. How does the teacher act? What effect does it have?

### **Weblinks**

- [Competence matrix \(http://portal.rdmc.ou.nl/competentie\)](http://portal.rdmc.ou.nl/competentie)

### **Answer:**

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*Question 3.2: Which competences do I need to develop?*

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### **Explanation:**

Describe the competences (in terms of knowledge, skills and attitude) you are going to develop to achieve the results you described. You should be very specific in describing what knowledge, skills and attitude you want to develop.

### **Answer:**

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### **Element 4: Plan of action. How am I going to reach my goals?**

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Based on the results you want accomplish, you determine which activities you need to perform to accomplish these results. Monitor and evaluate your activities, whether they were effective and led to the desired results or not. Make a planning for a year to perform the activities and divide the planning in different steps you need to take. It is also important to include meetings with your supervisor or coach to discuss your progression.

*Question 4.1: Which activities am I going to do to reach my goals?*

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### **Explanation:**

To reach your goal, you need to take several steps and do professional development activities. These activities do not need to be courses. There are different ways to develop yourself. You can, for example, search for information on the internet or in books, exchange experiences and methods with colleagues, experiment and evaluate the results with your students. Describe the activities you are going to do.

### **Tip:**

Discuss with your supervisor or coach which activities you are going to do to achieve the desired results and how you monitor your progress and evaluate the results.

**Answer:**

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*Question 4.2: Make a planning for your professional development activities*

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**Explanation:**

Planning professional learning activities is an important part of completing a PDP. Make a specific and reasonable planning. This can be a planning for a week or a month. A simple table can support your planning. You can discuss this planning with your supervisor to determine what activities you can do and when you can carry out these activities.

The form that is presented below can support you in making a planning.

*File*

- (Actieplan.doc)  
Form for making a plan of action

**Activity:**

Use the planning form as a worked-out example. A test is also available to support you in time management: the Teacher as a Person, *time-management*.

**Weblinks:**

- LaP (Teacher as a Person) time management (<http://portal.rdmc.ou.nl/lap>)

**Tip:**

Make agreements with your supervisor about your professional development. Discuss what you are going to do, how much time you need, what the best way is to plan your activities and the costs that you need to make. This conversation is the start of your development. During the year and afterwards, meetings are needed to discuss progression and to evaluate the results.

**Answer:**

## Dankwoord

Nu het proefschrift is afgerond, kijk ik terug op een interessante en leerzame tijd! Ik heb bij het RdMC, nu LOOK, veel eigen invulling kunnen geven aan mijn promotietraject. Ik vond het soms moeilijk, maar vooral ook erg leerzaam om op deze manier mijn eigen weg te vinden in het onderzoek naar de professionalisering van leraren. Daarnaast heb ik het combineren van promoveren met het werken aan allerlei onderwijsprojecten erg waardevol gevonden. Juist de projecten die we deden met scholen hebben mij veel inzicht gegeven in de dynamische onderwijspraktijk! Dit alles zou natuurlijk niet zo goed zijn gegaan als ik geen medewerking, steun, begeleiding en feedback zou hebben gekregen van allerlei mensen. Graag maak ik dan ook van de gelegenheid gebruik om deze mensen te bedanken.

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Lieve familie, wat is het fijn een grote familie te hebben. Altijd iemand om te bellen en altijd is er veel gezelligheid tijdens de regelmatige vrijdagavondetentjes. Lieve 'schoonfamilie', graag bedank ik jullie voor de gezellige afleiding tijdens allerlei feestelijke aangelegenheden en dat jullie het beste met mij voorhebben!

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