

Multiple Learning
Approaches in the
Professional Development of
School Leaders – Theoretical
Perspectives and Empirical
Findings on Self-assessment
and Feedback

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Abstract

This article investigates the use of multiple learning approaches and different modes and types of learning in the (continuous) professional development (PD) of school leaders, particularly the use of self-assessment and feedback. First, formats and multiple approaches to professional learning are described. Second, a possible approach to self-assessment and feedback is explored including the 'Competence Profile School Management (CPSM)', which is one component of the modularized four-phase-PD program of three German states. Third, the quality and the impact of selfassessment and feedback is examined using quantitative as well as qualitative measures. The participants experience it as an enriching learning opportunity which promotes reflection and the motivation to gather more information about one's own behavior in day-to-day practice, supports other learning opportunities and promotes the participants' professional competencies in areas they identify as beneficial to improving their practice. Moreover, participants change the way they approach career planning after participating in this PD program. They seem to have developed a more differentiated subjective theory of leadership and identified different leadership career possibilities or career steps to principalship than they had before participating in the program. Overall, there are more participants willing to apply for different types of leadership position at schools and in the school system.

Keywords

assessment, development, feedback, leadership, management, professionalization

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Introduction

In view of the responsibilities of school leaders for ensuring and enhancing the quality of schools, school leadership has in the last decades become one of the central concerns of different actors in the school system (Huber and Muijs, 2010a). There seems to be a broad international agreement about the need for the professionalization of school leadership. Hence, (continuous) professional development (PD) plays an important role in the professionalization of aspiring and established school leaders. There are quite a few international trends in PD that can be identified. These have been derived from results of an international comparative study of the PD landscape for educational leadership personnel in 15 countries (Huber, 2004, 2010a, 2010b), as well as from extensive literature reviews, meetings with experts and international conferences covering the training and development of school leaders. The rhetorics of the PD curricula claim that the programs are increasingly oriented towards the participants' needs, that they take the demands derived from schools' evaluations into account, and try to serve practice by bridging theory and action. This needs and application orientation is expected to improve the impact and the sustainability of PD (Huber, 2011a, 2011b). In an effort to become better aligned with participants' needs a few PD approaches integrate diagnostic means or audits or needs assessments as feedback opportunities as the starting point for the participants' training and development. Diagnostic means can reveal previous knowledge, subjective theories, attitudes, attributes, expectations, goals, skills, abilities and observed performance. This is intended to provide relevant information for those who plan the PD as well as for the participants who can then make best use of the different learning approaches. Hence, a PD is expected to be better aligned to the specific aims of the program and to the participants' prior competencies. The aim is to improve the fit between the didactical features of the program and the participants' needs. A better fit supports the transfer from knowing to acting, from PD activities to day-to-day practice, and consequently, a better impact and a higher sustainability of the PD (Schön, 1983, 1984; Kolb, 1984; Bridges and Hallinger, 1995, 1997; Wahl, 2001; Huber, 2001, 2011a, 2011b; Huber and Hader-Popp, 2005).

In general, there is no single top-priority strategy or method in PD, but it is argued in this article that the use of a wide range of different strategies and methods is most effective. Hence, it is advisable for those responsible for planning and implementing training and development opportunities to use a variety of methods that help individual participants to learn and to be motivated to use the learning results for an improved performance.

Theoretical Framework: Multiple Approaches to Learning in (Continuous) Professional Development

During the last decades, formats and learning approaches besides the traditional 'course formats' have been developed and tried out in the PD of school leaders in many countries (Huber, 2004, 2010a, 2010b). In addition to the cognitive and theoretical ways of learning (lectures and self-study), which primarily serve to impart information, there are alternative approaches to learning in PD such as cooperative and communicative process-oriented approaches (for example, group work or project work), which primarily serve to develop a situational understanding and skills and abilities to apply acquired knowledge. Also, reflexive methods (for example, self-assessment and feedback as well as supervision/mentoring/coaching) are increasingly used to better link program aims to participants' needs, as argued above. Particularly, the use of these approaches in combination, taking advantage of their complementary functions, can also be observed (Huber 2004, 2010a, 2010b).

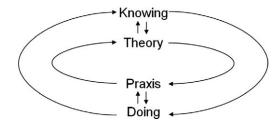


Figure 1. From theory to praxis, from knowing to doing (see Huber, 2009a, 2009b).

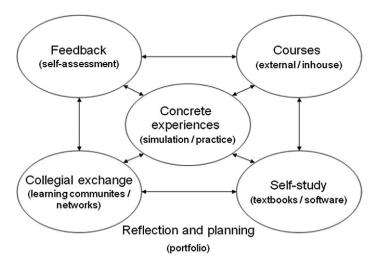


Figure 2. Approaches to learning in PD (see Huber, 2009a, 2009b).

On the basis of this analysis of different leadership training and development opportunities, a theoretical model was developed. This model illustrates different formats and modes of learning (see Figure 2). The model is meant to help to analyse PD programs in regards to the extent to which they use multiple learning approaches and also to analyse the interdependency of their didactical approaches. It is a heuristic tool for a better understanding of a PD program, particularly as different learning modes in practice are often blended. The model does not however, identify whether one of the formats or modes is better than the other, nor does it comment on the program's potential impact or sustainability.

The analysis of PD programs shows that all programs include course formats as a learning method. Self study, too, is a format of PD that is often used. In self study methods, the selected course topics are prepared and explored by the participants themselves using readers (a compilation of articles taken out of books or journals), texts specifically developed for the program or authentic documents taken from the practice. Blended learning approaches blend course formats and self study material, more recently often offered in web-based learning environments such as moodle (http://www.moodle.com) or PLANE (http://my.plane.edu.au). In addition to courses and self-study, practice is regarded as both the starting point and goal of PD programs, particularly when they are needs- and practice-oriented. It is also considered to be a useful learning arena in and of itself since the real working context represents appropriately complex and authentic

learning experiences. Working on individual projects, classroom observations, shadowing and mentoring should provide appropriate opportunities to work on complex problems taken from actual practice (Huber 2004). Professional learning communities and networks are becoming increasingly popular as well. They represent situated learning opportunities and provide chances for an intensive reflection on one's own action and behavior patterns. School leaders are likely to start from their individual subjective theories and beliefs, which control their behavior patterns, and modify their actions accordingly. Participants in networks report that through the mutual exchange of ideas and experiences they widen their understanding (see Hord, 1997; Little, 2002; Ainscow et al., 2005; Erickson et al., 2005; Lomos et al., 2011).

One approach which combines different learning modes and promotes the transfer from knowing to doing or from theory to praxis – and to prevent 'inert knowledge' (Whitehead, 1929) – is problem-based learning (PBL). This approach, which had been applied for many years in management training by companies and in the training of medical staff, was developed for the educational sector predominantly by Bridges and Hallinger at Vanderbilt University in the USA (see Bridges, 1992; Bridges and Hallinger, 1995, 1997), primarily for the development of educational leaders from school boards and schools. In this approach, concrete and complex problems, as they are experienced in everyday practice by school leaders, are used as a starting point to involve the learners in a cooperative problem-solving process.

Another starting point is to assess the participants' learning needs and to provide feedback to the current competencies. However, only few of the PD programs we analysed conduct an assessment and provide feedback.

The Use of Self-assessment and Feedback as Part of PD for School Leaders

In Germany the modularized four-phase-PD programs of the states of Thuringia, Saxony-Anhalt and Saxony include assessments as a learning opportunity. In phase 1, orientation is provided for teachers interested in school leadership. Phase 2 is the prepatory program for aspiring school leaders. Phase 3 is the induction phase for newly appointed school leaders. In phase 4 a variety of smaller programs are offered to experienced school leaders.

In the orientation phase, the specific goal is to provide the participants with opportunities to reflect on their individual competencies and interests and to compare them with the demands and challenges of school leadership. The intention is to support the participants in their career decision to apply for school leadership positions and to identify their own strengths and learning needs. Altogether, the following modules are offered in phase 1.

- 'School effectiveness, school development, and school management': this module is a lectureand group work-oriented one-day course.
- 'Competence Profile School Management': this module includes an extensive web-based selfassessment and a one-day workshop-oriented course to reflect on the feedback provided by the self-assessment.
- 'Practice perspectives': this module is a one-day course with small internship attachments and collegial (peer and superior) exchange.

This phase is spread out over 6 months and includes course formats, self study methods, working on individual projects in practice, establishing professional learning communities and

networks, and starts with self-assessment and feedback. Hence, it contains all the approaches described in the theoretical model above.

The orientation phase is based on the premise that there is good reason to support future school leaders as early as possible in the leadership orientation process. The modules provide a brief overview of the empirical knowledge base in the field, and stress the fact that there are are different approaches to school leadership. By doing this, this phase also embraces the values underpinning school leadership, and does not only reflect the normative approach taken in a number of countries to the competence and standards-based development of leaders. The central aim of this orientation phase is that participants reflect on themselves, on one hand, and on school leadership, on the other. While recruitment and selection in the states which run the program were often seen as a one way process of the education administration selecting suitable candidates for school leadership posititions, the new approach focuses on attracting more candidates who by participating in this phase get a more profound idea whether a school leadership position will suit them. This feedback, which is followed up by development exercises, is intended to improve the self-selection as part of recruitment for school leadership. Providing support for the processes of orientation and self-selection are seen as important factors which enhance the quantity as well as the quality of school leadership recruitment.

Internationally, there have been very few tools specifically designed for the school context that help determine the person-job fit regarding a leadership position. It is the 'fit' between job characteristics and a person's skills, attitudes, and ability to learn (potential) that matters (Hackman and Oldham, 1980; Caldwell and O'Reilly, 1990; O'Reilly et al., 1991; Holland, 1997; Lauver and Kristof-Brown, 2001; Kristof-Brown et al., 2005; Sekiguchi, 2004; Jansen and Kristof-Brown, 2006; Edwards, 2008). The Competence Profile School Management (CPSM; in German KompetenzProfil SchulManagement [KPSM]) is the first web-based self-assessment for school leadership in the German language. The aim of CPSM is to analyse the potential of individuals to take on school leadership roles. It can serve as an orientation for teachers who are interested in school leadership tasks or as a basis for clarifying personal strengths and weaknesses for newly appointed or experienced members of school leadership teams.

The self-assessment offers participants the possibility to reflect on their own strengths and weaknesses in the different requirement areas for school leadership which are assessed by CPSM. The results of the self-assessment are then looked at in relation to the results of their peers, who provide a relevant reference point. By providing inter-individual comparisons, CPSM provides an opportunity for participants view their own abilities or self perceptions in relation to others who have taken the self-assessment.

The first version of CPSM was comprised of 30 requirement dimensions, grouped into six job requirement areas. The job requirement areas and assigned requirement dimensions were determined based on theoretical work / theories of school leadership, studies of the job profiles of school leadership, and reviews of international studies from the field of school effectiveness and school improvement.

CPSM follows the principle that it is important to consider different kinds of information when trying to predict or assess the aptitude for any given job and its related job requirements. As we know from job-fit research it is important to take into account actual knowledge and abilities, the potential to learn (cognitive capacities) as well as personal characteristics such as job related attitudes and motives. Even though it was decided to not measure actual leadership knowledge, the CPSM tries to integrate the different perspectives of cognitive abilities and personality dispositions.

The requirement dimensions are operationalized using test scales. The scales underwent various pre-tests with experts and potential users in three different ways: one in paper version, with selected

Table 1. Requirement areas, dimensions (scales) and test formats of CPSM with values.

Requirement area/dimension/scale	Test format	Number of items	α
Work motivation			
Achievement motivation	M	12	0.81
Avoiding failure	M	12	0.77
Work engagement	Q	10	0.81
General skills			
Planning skills	Α	18	0.62
Process thinking	Α	4 × 5	0.67
Analytical text comprehension	Α	10	0.56
Analytical thinking	Α	6 × 8	0.80
Speed of thought	Α	40 + 40	0.74
Self management			
Self monitoring*	Q	11	0.53
Stress resistance	Q	10	0.82
Self efficacy	Q	10	0.84
Approach to change			
Power motive	M	12	0.78
Ambiguity tolerance	Q	10	0.81
Active pursuit of innovation	Q	9	0.84
Social approach			
Affiliation motive	M	12	0.82
Team orientation	Q	11	0.76
Empathy	Q	9	0.76
Feedback orientation	Q	9	0.70
Leadership			
Leadership motivation	Q	5	0.71
Enthusiasm	Q	9	0.82
Assertiveness	Q	8	0.71
Desire for social acceptance	M	12	0.71
Avoiding influence by others	M	12	0.79
Recognizing limits of feasibility	Q	10	0.82

Note: M: motivational grid, A: aptitude test scales, Q: questionnaire test scale.

scales to improve them, one as a cognitive interview to see what the participant is thinking during the test, and finally one that mimicked the actual testing scenario, where the participant did the webbased test and was asked to write down notes on a spare sheet for feedback after the testing.

After the analysis of the data after 444 participants had taken part in the self-assessment, the second version of the inventory (CPSM 2.0) was reduced to 24 job requirement dimensions using 24 test scales for 24 requirement dimensions still grouped into six job requirements areas (see Table 1). After the use of CPSM by another 631 participants, and the further analysis of items and scales as well as of evaluation data (social validity), the instrument was modified again (CPSM 3.0). Since then, another 400 participants have taken part.

In CPSM, various kinds of test formats are integrated: achievement tests focus on various forms of cognitive ability, questionnaire formats and motivational grids focus on different personality traits. A fuller description of the inventory including results of the pilot study, the standardization and the psychometric data analysis is provided by Huber and Hiltmann (2011) and in papers presented at AERA, ICSEI, ECER in the years 2008, 2009 and 2010.

As for the reliability of the scales, the scales have good reliability (α) between 0.60 and 0.84 (CPSM 3.0, N=1112, questionnaire scales: $0.70 \le \alpha \le 0.84$, motivational grid: $0.71 \le \alpha \le 0.82$, aptitude test scales: $0.60 \le \alpha \le 0.78$; r1/2=0.74, the item difficulty/selectivity (rit) is in most cases between 0.40 and 0.67 (very view items are lower but kept because of factor loading and contribution to homogeneity).

After finishing the self-assessment, the participant receives an email with instructions on how to download the personal feedback report, which is password protected. The feedback report contains extensive feedback on all six of the requirement areas with the 24 requirement dimensions. It includes explanations of how to read the report, understand the test scores, interpret one's test scores (percentile rank), and a description of the individual scales. With the formative purpose of the tool in mind, the report does not provide a summative score or statement about a person's actual fit for a leadership position. Rather, the feedback texts describe possible advantages and disadvantages that come along with the personal score in a given test dimension. Thus, it is still up to the participant to reflect personally on the results and to form an opinion (with the help of workshop exercises, and a coach or trainer, if desired) on how close a fit with a leadership position might be.

In addition to this comprehensive feedback report, a follow-up workshop is offered. It includes lectures, group work and discussions regarding the individual feedback report, and provides additional information on the tool's background, for example, how the test scores come about or how to interpret one's test scores (percentile rank) and the overall results. Individual and group reflection is stimulated by different kinds of tasks given to individuals, pairs and groups. These activities encourage discussions about one's own behavior tendency as well as about possibilities for individual professional development planning. This workshop is taken by all the CPSM self-assessment participants after getting their feedback report who, again, are all of the participants of the phase 1 of the PD program.

Research Interest and Design of Study

This article investigates the extent to which the self-assessment and feedback stimulates further learning and increases the motivation to engage in other learning opportunities. Furthermore, it explores to what extent participating in the orientation program including self-assessment and feedback has an impact on the participants' career planning in terms of their intention to apply for a leadership position.

In addition to surveys conducted before, during and after the program, a follow-up study was conducted using both quantitative and qualitative measures. The quantitative approach used standardized web-based questionnaires which consisted primarily of closed questions but asked several open ended questions as well. The questionnaires enabled data collection regarding various aspects of adult learning such as didactical features of the PD program, the participants' views on and experiences with processes and outputs/outcomes (for which a theoretical model was operationalized in indicators, see Huber [2011a, 2011b]), as well as regarding the different learning approaches, in particular with an additional in-depth survey about the use of the self-assessment. Each individual who had participated in the self-assessment was explicitly invited via email to provide feedback on his or her perception of the self-assessment. The data collection was conducted in two phases. The first study focused on CPSM 1.0, the second on CPSM 2.0. The response rates were both satisfactory, RR of CPSM 1.0 = 66%, RR of CPSM 2.0 = 62%. The drop-out rates of the evaluation survey were low (for instance, for CPSM 2.0, 315 participants of the 492 invited participants started the evaluation, 305 participants finished it).

In this article, the emphasis is put on the evaluation results of the second study. The findings of the first study solely focusing on the instrument CPSM are reported on by Huber et al. (2011). Detailed findings of the second study are presented by Huber, Kreienbühl, Schwander and Kaufmann (2010b). The distribution of various demographic variables (eg. gender, age, school type) of the sample mirrors the population, both of the participants of CPSM and the training and development program and of the teaching profession in the respective German-speaking countries in general.

Findings

Quality of the Self-assessment and the Feedback

Both the feedback report and the workshop were evaluated positively on different given aspects (for the feedback report: length, understandability of feedback, stimulation for reflection; for the workshop didactical features like content, facilitator, activities, methods, material, atmosphere, engagement of oneself and of other participants). Generally speaking, the vast majority of participants (89.4%) regards the self-assessment as very helpful and states that they had benefited from it.

It is striking that almost half of the participants (46.8%) report that the statements in the feedback report correspond only partly with their self-image. This might be attributed to the fact that the results align to some degree with the participants' self-image but there are also results which they find new and which do not mirror their self-perception. That can be regarded as positive, as on the one hand, the feedback cannot be completely different from their own self-concept. This congruency helps foster the acceptance of the results, even of results which might not be aligned to the self-image. On the other hand, if nothing was new to them, the self-assessment would be seen as unnecessary and the judgment of its usefulness would be low.

In terms of the workshop, looking at the various components such as coaching, group exchange, theoretical input, opportunities to ask questions and explanations of the results, we see a strong benefit (in all items and scales up to 80% agreement). Two-thirds of the participants received new ideas and were provided with professionally relevant contents.

Most of the participants (70.9%) state that their individual results from CPSM have given them useful ideas about how they can modify their behavior. Two-thirds (60.2%) regard the self-assessment as helpful to discuss their further professional development. More than half respond that the results tell them something new about themselves as well as that they have learnt more about leadership challenges. For two thirds (60.4%), it offers possibilities to find out their person-leadership fit and it gives information that they will think about (69.3%). Furthermore, for more than half (55.3%) of the participants, the results of the self-assessment motivates them to take on leadership responsibilities and to improve their school.

Regarding the follow-up evaluation of the self-assessment, the data show that 72% have discussed the results with their family or partner. This, of course, is not surprising, but it is very interesting to see that half of them (50.5%) also discussed the results with colleagues. Further, 15% claim that they discussed their results with their superior (aspiring school leaders with their school leaders; school leaders with their superintendents); 4.2% discussed them with a trainer or a coach they consulted with afterwards. This fact is astonishing since they are explicitly asked not to compare or share their results with their peers in the workshop, but in a trustworthy professional context at their school they are interested in reflecting more on themselves, and the qualitative data reveals that participants are curious about their colleagues' opinions: whether they mutually agree with the results or where they see differences. Furthermore, during their discussions at the workshop, they start to generate further

questions. In other words, by going through the process of the self-assessment they expand their criteria for self-reflection. They generate questions about a certain behavior in a certain social and organizational context. The participants seem to have experienced a stimulation for further reflection and a motivation to gather further feedback to improve their own practice.

All participants (100%) respond that they made the decision to look into certain results of the self-assessment more closely. Moreover, the majority (69.7%) of participants planned to intensify their self-observation; 41% defined targets for their own personal development. Only 6.5% set up a professional development plan, but 24.4% collected further information about professional development offers. Also, 20% claim that they have changed something in their professional practice. Interestingly, while the range of actions seems to vary widely, they all established a high motivation to reflect on themselves. This motivation could be used to further professional development.

Furthermore, when asked if their expectations had been fulfilled, 86% of the participants respond in a positive way. One-half of the participants (50.8%) stated that they had expected an improved assessment of their personal strengths, 69.5% had expected to find out to what extent their personal strengths fit a leadership position and 18% claim to have taken part out of curiosity. Thus, participants mention expectations which completely correspond to the tool's aims and formative purpose. On account of CPSM, participants have a better assessment of their own strengths (73.4%) and furthermore they can estimate their individual person-leadership fit better (58.4%). For almost one-third (27.9%), the self-assessment satisfied their curiosity. As the data of the evaluation show, the expectations and benefits of CPSM do correspond.

The overall impression is very positive (see Figure 3). The self-assessment module is recommended to others. Most participants (91%) would advise other colleagues to participate in the self-assessment. Even on more difficult items the evaluations stay positive.

Impact of PD Including Self-assessment and Feedback on the Participants' Career Planning

With the CPSM being one of the multiple learning approaches of PD, the question arises: What impact does the combination of the above described formats have on the participants' career planning in terms of their intention to apply (or refrain from applying) for a leadership position?

The impact on career planning can briefly be summarized as follows: The self-assessment appeared to have a marked impact on participants' ideas about their own aspirations to become a principal or to take on various leadership roles.

Of the participants who answered in the survey prior to the program (phase 1) that they wanted to become a principal, 24% changed their opinion over the course of the program. In the survey following the conclusion of the program, they state that they no longer want to become a principal. Another 16% of the participants who claimed in the initial survey that they did not want to become principals, by the end of the program changed their minds and reported aspirations to becoming principals.

In regards to aspiring to become an assistant principal: 25% of the participants who answered in the survey prior to the program (phase 1) that they wanted to become an assistant principal changed their opinion during the program. In the survey following the conclusion of the program, they answer that they no longer want to become an assistant principal. Of the participants who answered in the initial survey that they did not desire an assistant principal's position, 66% changed their opinions, stating in the concluding survey that they now want to become assistant principals.

In regards to aspirations of becoming a member of a school leadership team: 5% of the participants who answered in the initial survey that they wanted to become a member of the school

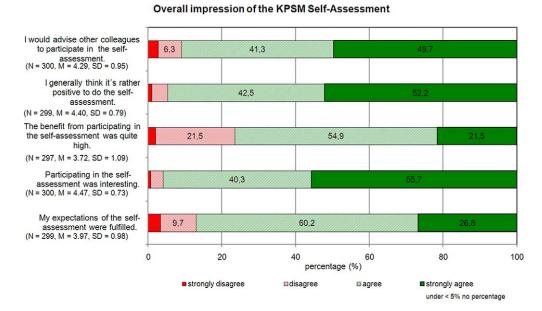


Figure 3. Overall impression of the CPSM self-assessment.

leadership team changed their opinion during the program. According to the exit survey, they no longer have this intention. However, 83% of the participants who answered in the initial survey that they did not want to become a member of the school leadership team changed their minds. In the concluding survey, they state that they now want to become members of a school leadership team.

Conclusion

The participants experience the self-assessment and feedback as an enriching learning opportunity. First of all, it promotes reflection and with this it promotes the motivation to gather more information about their behavior in day-to-day practice. Additionally, it becomes apparent that it promotes other learning opportunities as well, and not only the more innovative ones, but also the classic ones such as further course formats. Participants become interested in taking part in various modules, which, again, aids in the development of their professional competencies in areas they identify as helpful to improve their practice.

It is surprising that participants change their career planning after participating in this PD program. Besides further possible impact on their competencies (for impact models, see Kirkpatrick, 1994; Guskey, 2000, 2002; Muijs et al., 2004; Muijs and Lindsay, 2007; Huber 2011a, 2011b), it affects their motivation and their subjective theories of career planning. One must be well aware, however, that we here report data provided by the participants themselves. Self-reported data need verification in order to make definitive statements. The findings reflect only the participants' intention at the moment that they filled out the survey. It would be interesting to triangulate further data provided by others and a follow-up to ascertain if those saying they would or would not want to apply for leadership roles actually did so.

Number of participants who want to apply for	Change from prior want to not want after PD (%)	Change from prior not want to want after PD (%)
Principalship	24	16
Assistant principalship	25	66
Membership of a school leadership team	5	83

Table 2. Impact of PD including self-assessment and feedback on the participants' career planning.

If this PD program's aim is not only to develop competencies but to promote job applications for principalship, then our findings could be interpreted to suggest that the program is not successful as fewer participants overall state that they will apply for a principal's position right away. Nevertheless, if the PD program is meant to promote applications for all different kinds of school leadership positions, then these findings could be interpreted positively as overall there were more participants willing to apply for one of these positions than prior the program. In a time when many principals are retiring – in most of the German-speaking countries around 30–50% of the principals will retire within the next three years, particularly in these three German states from which we gathered the data – our finding could be interpreted to suggest that the program is successful, not in the short term but in the long term. It may be judged as positive that starting from a perhaps rather simple career perspective in terms of 'becoming a principal or not', they have apparently developed a more nuanced or complex subjective theory of leadership careers and different career possibilities or career steps to principalship.

Hence, the selection and recruitment of leadership personnel may also be affected by the program using various learning modes including self-assessment and feedback. This we do not know now. But it would be interesting to look into this linked research area as a further consequence of our study. The assumptions are: first, to have fewer applications for principal positions in the short term but more for middle management. This might change over time as professionals move from middle management to principalship. Second, to promote system leadership on various levels in the school system as well as in the individual school organization. Distributed leadership only works if there are motivated people who are willing to take on leadership roles other than or below school principalship. At the same time, these people can be observed in their new roles, and a long-term monitoring is possible which in turn increases the validity of observational data. Third, to have applicants who have reflected more rigorously on what will be expected and what the roles, tasks and required competencies, and even the challenges may be like. This could increase the quality of applications.

After this study we come to the conclusion that it is not only the use of different learning approaches that matters, but particularly how they are conceptually linked and how this linkage is implemented and then experienced by the participants. This linking is what makes a difference in the learning of adults, and in this case of aspiring school leaders.

To sum up, feedback in the form of a self-assessment makes a contribution to supporting the processes of career planning for potential candidates for leadership positions. The use of web-based self-assessments on a voluntary basis allows participants to receive feedback on their strengths and weaknesses in a time- and cost-effective manner. It is an easy-to-access starting point for a structured personal reflection on individual readiness to join an educational leadership role. The participants consider this to be a positive opportunity. Different individuals experience a different value from it, which is not surprising as they have different needs. The learning approach of self-assessment and feedback as part of a PD program seems to help balance these heterogeneous

needs and promote different elements of the professional development of the participants, according to their respective experiences and needs.

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