The Influence of School Leaders' Informal Learning on their Professional Identity in Primary, Secondary and Higher Education

Stijn Kuhlmann
8291055
Dr. Ellen Daniëls
Dr. Despoina Georgiou

Word count: 7835

Abstract

Formal and informal workplace learning activities have become more relevant during the last years (Tynjälä, 2008), especially in education because of its influence on school leader professional development. The effects of formal workplace activities on school leaders' have frequently been researched (Bush & Jackson, 2002; Huber, 2003; Wilson & Xue, 2013). The effects of informal workplace activities on school leaders' professional identity, however, remain underexposed (Daniëls et al., 2019; Hulsbos et al., 2016; Zhang & Brundrett, 2010). This study aims to investigate the influence of informal workplace activities on professional identity development of school leaders by interviewing school leaders from primary, secondary and higher education in the Netherlands. Results show that the most frequent used informal workplace activities are discussion, observation and reflection. School leaders value professional development and can clearly express increased skills and self-image, most frequently caused by remarks made by peers and personal reflection during conversations.

This study provides insights into how informal workplace learning influences professional development of the interviewed school leaders. As such, it provides a starting point for future investigations that should focus on specific workplace activities such as cooperative learning and the influence of formal learning on informal workplace activities.

Introduction

School leader professional identity development has become more relevant (Hulsbos et al., 2016) as the quality of education in the Netherlands and educational development have become a major focus of the Dutch government (Rijksoverheid, n.d.). In 2023, the Dutch government intends to spend 128 million euros for the development of teachers and school leaders (Rijksoverheid, n.d.). School leaders need to stay up to date with educational developments, to increase a school's quality (Creemers, 1994; Hallinger, 2005; Robinson et al., 2008). Which influences school leader employability and wellbeing (Rothwell & Charleston, 2013).

A focus on professional identity is relevant because school leaders have considerable influence in enhancing learning outcomes of students (Simkins et al., 2009) and in creating learning environments for their teachers (Willemse et al., 2015). As well as the fact that school leaders themselves also view professional development as an important aspect of their career (Nicolaidou & Petridou, 2011). Moreover, school leadership is an important factor in maintaining and increasing the schools' quality (Creemers, 1994; Hallinger, 2005; Robinson et al., 2008). Thus, developing school leaders could foster the demand for continues improvement of individual schools (Huber, 2004). In conclusion, it is important school leaders invest in the development of their professional identity.

School leaders' professional identity can be developed through formal and informal learning activities. Most research has focused on formal learning activities of school leaders (Bush & Jackson, 2002; Huber, 2003; Wilson & Xue, 2013). And literature on informal learning activities is limited (Daniëls et al., 2019; Hulsbos et al., 2016; Zhang & Brundrett, 2010). The relationship between informal learning activities and leadership is especially relevant for school leaders, because informal learning activities are a powerful predictor for the quality of their activities (Hattie, 2012). Furthermore, those activities can increase workplace satisfaction, commitment and improve performance (Matthews, 1999), and in turn impact students' learning experiences (Akiba, 2015).

The scientific problem addressed in this study aims to fill the gap in knowledge of informal workplace learning and its influence on professional identity development of school leaders. This could improve the employability of school leaders (Rothwell & Charleston, 2013) and increase the quality of the education system (Creemers, 1994; Hallinger, 2005; Robinson et al., 2008) and thereby fostering more learning development within students (Simkins et al., 2009).

School Leadership

The current study focuses on the informal professional development of school leaders. First, the developments in leadership will be discussed. There have been different definitions of leadership. Stogdill (1950, p. 4), defined leadership as "the process (act) of influencing the activities of an organized group in its efforts toward goal setting and goal achievement". Kotter (1988) defined leadership as moving a group in a similar direction with mostly non-coercive means. Stating that leadership can only occur when the leader is followed voluntarily. Volckmann (2012) identified three aspects of leadership: context, leader, and followers, wherein the followers are of equal importance to the leader. Without followers there is no leader (Volckmann, 2012). In this article, leadership is defined as a process of using influence to guide activities and relationships in a group (Yukl, 2002). This definition mentions the common trait of many leadership definitions, the use of influence to guide people to a common goal.

Second, now that leadership has been discussed, the focus will shift to school leadership. School leaders can be seen as a particular subgroup of leaders. Hence, the definition of school leadership of Bush and Glover (2003) will be used: "School leadership is a process of influence based on clear values and beliefs leading to a 'vision' for the school" (Bush & Glover, 2003, p. 31). This vision is designed by the leader to create commitment among the staff and a future for the school (Bush & Glover, 2003). "The philosophy, structures and activities of the school are geared towards the achievement of this shared vision" (Bush & Glover, 2003, p. 8). These definitions provide a comprehensive description of school leadership serving the current study.

Thirdly, in order to better understand school leadership, five qualities of successful school leadership will be discussed. These components can improve teacher and student performance (Bamburg & Andrews, 1990; Glasman 1984). The first quality that a successful school leader needs to possess is a clear vision for the school which is clearly communicated, implemented, and accepted by teachers and students (Daniëls et al., 2019; Harris et al., 2003). The vision has a broad character and incorporates what is currently going on in the school and what needs to be achieved (Blair, 2002). This vision entails clear implementation of policies related to the vision (Blair, 2002; Blase, 1987). The school leader embodies the vision in his activities and behavior. When acting upon the vision, school leaders consult multiple sources and demonstrate follow-through when making a decision, even when that decision is challenged (Blair, 2002).

The second quality is the school leader's ability to motivate, develop and support teachers by coaching them during activities. This is accomplished by giving feedback to

teachers and rewarding their accomplishments (Daniëls et al., 2019). Creating empowerment amongst employees and supporting self-belief by providing continues opportunities for development. Thereby demonstrating great care for their school and its teachers (Harris et al., 2003).

A third quality of successful school leaders is that they create systems and structures that support teachers and the school (Blair, 2002). They also encourage individual leadership from their teachers. Thereby creating a safe space in the school that supports academic success (Blair, 2002). The school leader is accessible for teachers and students, interprets requests made by teachers and implements them in the school (Blase, 1987). Thus, contributing to the shaping of the school's organizational culture by demonstrating trust and collaboration (Daniëls et al., 2019).

A fourth quality of successful school leaders is the ability to hire and retain skilled employees. This is accomplished by encouraging and supporting professional development and in creating an organization that supports these endeavors (Daniëls et al., 2019). However, investing in the development of their employees is not enough, school leaders need to participate in professional development to increase their own skills (Brauckmann, et al., 2023).

Therefore, a fifth quality of successful school leaders is continuous critical reflections on personal actions and the impact of those actions. Demonstrating an interest in instruction and curricula to contribute to educational development (Daniëls et al., 2019). Possessing self-awareness and inner understanding of feelings and aspirations (Notman & Henry, 2011).

The expression of successful school leadership qualities is dependent on the degree to which school leaders incorporate those qualities in their professional identity (Dilts, 1998). These qualities can be enhanced through professional development of school leaders (Brauckmann, et al., 2023), contributing to an increase in educational quality (Creemers, 1994; Hallinger, 2005; Robinson et al., 2008). Subsequently, this will be explained more in-depth in the next paragraph.

Development of Professional Identity

School leader professional identity can be advanced with professional development, through formal and informal learning activities. There are more differentiations but those fall outside of the scope of this study (e.g., Tynjälä, 2013). Professional development is defined as activities in education that assist with the formal and informal development of professional abilities. These types of activities are undertaken by individuals that seek to keep up with recent changes in their field, to enhance their skills or to support a change in their

organization (Dall'Alba & Sandberg, 2006). These activities take deliberate practice to cause changes in cognition and performance (Anderson, 1976; Benner et al., 1992) thereby increasing school leader capabilities. Professional development is something most school leaders encounter through trainings or on-the-job learning (Daniëls et al., 2019). A theoretical focus on professional development can contribute to its visibility in the public eye (Dall'Alba & Sandberg, 2006) and shed light on its importance for school leader development. Professional development can offer school leaders opportunities for reflection and application of new knowledge, increasing their capabilities (Brauckmann, et al., 2023). Additionally, now that professional development has been defined the focus will be shifted to the development of professional identity.

Professional identity is defined as "the sense of being a professional" (Paterson et al., 2002, p. 6). It consists of "technical- and interpersonal skills, critical self-evaluation, professional judgement, self-directed learning, and professional reasoning" (Paterson et al., 2002, p. 7). In other words, professional identity consists of not only an increase in skills but also self-analysis. One definition of this change in knowledge and skills is "Identity transformation involves a more profound change, in the sense that old elements are put into the background and new ones come to the fore" (De Weerdt et al., 2006, p. 318). This process can be described as lifelong, dynamic and interactive (Cornelissen & van Wyk, 2008). Personal characteristics that contribute to the development of professional learning identity are: a desire to increase knowledge (Smith, 2007), the view that the development is always ongoing (Moss et al., 2014) and a personal view on successes and failures (Bischoff et al., 2002). Professional identity of school leaders includes personal congruence (personal values and goals), sincerity corresponding with the values of the organization (Woo et al., 2016).

There are however several barriers when it comes to professional identity development of school leaders. Firstly, school leaders need to deal with external accountability requirements which are imposed on schools. These mandates drive school leaders towards efficient solutions and not towards personal innovation and reflection. School leaders can be supported in their development activities by a culture that supports learning and gives school leaders diverse opportunities to learn (Kochan et al., 2005). Secondly, school leaders have a limited time frame in which they deal with several tasks at once, leaving little time for self-reflection (Kochan et al., 2005). One way to solve this problem is practicing with informal and formal workplace learning activities (Smith, 2007). Furthermore, the focus will be put on formal and informal workplace learning with an in-depth analysis of informal workplace learning activities.

Formal and Informal Workplace Learning

Formal workplace learning activities are inexplicably linked with informal workplace learning activities (Malcolm et al., 2003). So, it is important to discuss both formal and informal learning. Formal and informal workplace learning can be seen as a continuum (Malcolm et al., 2003), which is illustrated in figure 1. To start with formal learning, it is defined as an intentional form of learning, taking place in an educational setting with a certain structure and time limit arranged for it. During formal learning the individual is not in control of the learning process, it is externally guided (Malcolm et al., 2003). Informal learning is defined as all learning that occurs outside of that formal learning setting. It is implicit and unplanned, depended on the context with collaborative elements (Hager, 1998). Informal learning activities are mostly self-guided, local, and intentional (Cerasoli et al., 2018). They are characterized by an inductive process of action and reflection (Marsick & Volpe, 1999).

Figure 1

Continues nature of learning activities

Note. As described by Malcolm et al. (2003), Doornbos et al. (2004).

Both concepts can be expanded by work of Doornbos et al. (2004) with deliberate and spontaneous learning. Deliberate learning is defined as learning triggered by a planned activity or by working. The activity has an explicit goal which is planned (Doornbos et al., 2004). Spontaneous learning can be described as learning that occurs when the individual has another goal in mind than learning. The learning is unplanned and unintended. Both formal and informal workplace learning activities are linked because both elements can exist simultaneously in the same activity (Cramp, 2016). Informal learning activities can be formally supported by providing professional literature or attending development course. On the contrary, it can also be the other way around, contents of a formal learning activity can be discussed afterwards, facilitating informal learning (Choi & Jacobs, 2011; Ellström, 2001).

Moreover, now that both concepts have been defined, the focus will be specifically on the types of informal workplace learning activities. The focus has been put on informal workplace learning activities and not formal workplace learning activities because most of the learning takes place in informal settings (Marsick, 2006). Yet, little is known about the effects of informal workplace learning activities (Daniëls et al., 2019; Hulsbos et al., 2016; Zhang & Brundrett, 2010).

There are different categorizations for informal workplace activities (Billett, 1995; Doornbos et al., 2008; Kyndt et al., 2016): based on number of people that partake in the activity, the expertise of the individuals (Doornbos et al., 2008) or based on the learning methods being utilized (Billett, 1995; Kyndt et al., 2016). In the current study informal workplace activities are divided into individual informal workplace activities and collaborative informal workplace activities. Individual informal workplace activities encompass: (1) individual application of new information (Doornbos et al., 2008), (2) reflection on own workplace performance (Kyndt et al., 2016), (3) learning while partaking in an unrelated activity (Hodkinson & Hodkinson, 2005), (4) learning from reading professional literature (Kyndt et al., 2016) or (5) consulting information sources such as the internet (Doornbos et al., 2008; Kyndt et al., 2016). Whereas collaborative informal workplace activities contain: learning from colleagues, which cover discussion and observation of colleagues (Billett, 1995; Doornbos et al., 2008; Hodkinson & Hodkinson, 2005; Lohman, 2005). Doornbos et al. (2008) divides these activities into three subcategories based on the expertise of the colleague: (1) learning form more experienced colleagues, (2) less experienced colleagues, or (3) equals. The last one is also called ‘learning together’, which describe an equal exchange of knowledge between colleagues (Doornbos et al., 2008). These three activities can take shape by sharing ideas or asking questions (Hodkinson & Hodkinson, 2005; Lohman, 2005). Billet (1995) characterizes these types of activities as a form of coaching, supported by a colleague during a workplace activity.

Finally, for informal workplace activities to occur, several key factors need to be considered. Firstly, the learning potential of a workplace activity (Ellström, 2001). Individual characteristics can influence the learning potential of the activity. More experienced individuals are more influenced by the context of the learning situation than less experienced individuals and can have different attitudes towards the learning activity (Kyndt et al., 2016). Secondly, there need to be opportunities for evaluation of performance with feedback and reflection. Thirdly, work processes need to be formalized (Ellström, 2001). Formalization can make tacit knowledge more explicit and foster discussion (Imants & van Veen, 2010). Fourth,

there needs to be participation in the development of work processes. And fifth, there need to be varied sources of instructional materials to assist in the learning process, ample time to do it in (Imants & van Veen, 2010) and organizational support for the activity. This final factor is something school leaders can influence themselves (Kyndt et al., 2016). Increased knowledge about informal learning can contribute to the professional identity development of school leaders and supporting the development of education as a whole (Creemers, 1994; Hallinger, 2005; Robinson et al., 2008).

Research question

Research on the influence of informal workplace learning activities on professional identity development of school leaders is scarce. Therefore, the current research study will build upon recommendations given by Daniëls et al. (2019), Zhang and Brundrett (2010) and Hulsbos et al. (2016) to close this gap in knowledge. Hulsbos et al. (2016) specifically mention the lack of knowledge about the effect of informal learning activities and is, to the best of my knowledge, the only research study published in the Netherlands. To create a better picture of the influence of informal workplace activities on professional identity development of school leaders, the current research study attempts to answer the following research questions:

1. Which informal workplace activities do school leaders undertake?
2. How do school leaders view their professional identity development in their respective careers?
3. How do informal workplace activities influence the development of school leader professional identity?

Method

Research design

The research study was approached from a social-constructivism paradigm. This paradigm is characterized by a focus on processes and perceptions (Loseke, 2017), which will be researched with qualitative data. The goal of the research was to contribute to the understanding of a social phenomenon (Rowan & Huston, 1997) and to understand the reality this phenomenon took place in (Mortelmans, 2020). Qualitative research is ideal for exploratory analysis, when little is known about a specific subject. Because it allows for a flexible way of investigation to draw on different observations (Gerring, 2017). Qualitative research also allows for the gathering of rich data that is elaborative for the research questions

(Barrett & Twycross, 2018). The current research study attempted to answer questions related to specific individuals and situations which are expressed in natural language. The research questions warrant the use of case-level analysis, research of a specific set of events or groups (Gerring, 2017). It allows for a deep level of understanding of certain individuals (Creswell, 2012). In this case, school leader's informal workplace activities and the development of professional identity.

Participants

The participants in this research study were school leaders from primary, secondary and higher education located in the Netherlands. These groups of school leaders were chosen to collect as much data as possible. Allowing for more nuance in the data to be gathered which leads to richer data (Pistrang & Baker, 2012). Each school leader had at least two years of experience in the job. The reason for this is that after a year on the job, one has a base of experience to act from (Schmidt et al., 1986). So, after two years, school leaders would have ample relevant information to share. They were recruited via LinkedIn, mail, and the network of the researcher. Purposive sampling has been used for participant recruitment; participants are selected deliberately (Etikan et al., 2016), based on position within the school and years of service. Purposive sampling places emphasis on gaining a comprehensive understanding of a phenomenon until saturation has been reached (Miles & Huberman, 1994). Research has indicated that a minimum of 12 respondents needs to be interviewed until saturation occurs (Guest et al., 2006). If saturation does not occur after 15 respondents, involvement of new respondents will stop because of the limited time of the current study.

Of the 33 school leaders that were contacted a total of 16 school leaders have participated in this research study. Of those 16 respondents, eight worked in a primary school, seven worked in a secondary school and one worked in a university of applied sciences. Saturation did occur after 14 interviews. This means that no new codes appeared (Hennink et al., 2017).

Instrumentation

The current research study consisted of several variables. Variables are explained in the coding tree to support the operationalization (see appendix D). Because multiple perspectives need to be gathered, data-collection has been done with semi-structured interviews (Wester, 2019) (see appendix C). The interview consisted of a list of topics, gathered during the literature study, that were answered using probes (McIntosh & Morse, 2015). These questions allow for the interviewer to delve deeper into experiences of events (Nielsen & Randall, 2013) and for the interviewee to emphasize the meaning of those

experiences (Rubin & Rubin, 2005). Because of the open nature of the interview, new concepts can emerge. These concepts can be explored further in-depth. The semi-structured interview allows for the interviewer to ask extra questions to explore new concepts more in depth, increasing the collection of rich data (Dearnley, 2005). Because of the openness of the interview, it is easier to get to the core of the subject (Harvey-Jordan & Long, 2001).

The methodological quality is determined by its trustworthiness, validity and reliability (Murphy & Dingwall, 2003). Trustworthiness depends on the constructed research question, the data collection method, how data are analyzed and what conclusions are drawn (Roberts & Priest, 2006). Validity is the extent to which what is measured is actually what is intended to be measured (Roberts & Priest, 2006). To increase the validity of the study, triangulation was used: using multiple sources to gather data (Patton, 1999) this is applied by consulting different school leaders. Furthermore, data source triangulation was utilized, which allows for data to be explored more in-depth, which leads to greater understanding of the phenomenon and an increase in trustworthiness (Lambert & Loiselle, 2008). It can assist with the discovery of patterns within data and increase the confidence in the findings (Thurmond, 2001). Data source triangulation was used in this study by the use of recordings and transcripts of the interviews and having a feedback session on the used coding tree.

Reliability describes whether a measurement provides consistent results (Carmines & Zeller, 1979). To ensure the reliability of the interviews, a pilot has been used to ensure the questions are being correctly understood and logically placed in the interview guideline. After the pilot, adjustments have been made, such as improvement of questions and changing of the timeframe. During the interview, the adjusted interview guideline and questions have been used for each participant. In this way, the consistency can be partially ensured. The follow-up questions cannot be prepared because they depend on the answer of the respondent.

Methodological quality was also guaranteed through confirmability: the researchers' efforts to confirm data, and to affirm or challenge theory or interpretation (Reid, 1994). Confirmability can be enhanced by obtaining direct reports from primary sources. This has been done by conducting interviews directly with school leaders. The quality is also guaranteed with critical thoroughness, clearly defining important concepts in preparation for the interview (Whittemore et al., 2001), such as informal learning and professional identity development. Thoroughness has been warranted by a detailed methodology, results, and discussion section (Stavru, 2014).

Procedure and ethics

Informed consent was obtained by using an informed consent letter which consists of an information part and a statement of consent (see appendix B). In the information part, the respondents have been informed of the goal of the research, expectations of the researcher, design of the study, data storage procedures, privacy-rights and contacts of the researcher, supervisor, and UU. The statement of consent consists of a note that the respondent has been fully briefed about the goal, the way the data will be handled, the fact that the respondent explicitly gives permission for partaking in the study and the processing of data. If the respondent accepted, he or she would contact the researcher and agree to participate. Received documents have been converted to pdf-A files and stored on Yoda databases. Documents will be deleted after a period of 10 years. The ethical approval has been requested at the UU and has been given, the research will be conducted, based on UU guidelines.

The interviews took place online because it was important to make participation with the interview as easy as possible for the respondents. Before the official interviews started, a pilot interview has been held to test the interview guideline and questions. Each interview lasted for about 35 minutes to make certain that the participants and interviewer did not lose focus and no important information was being missed. The interview started with a repeat of the goal of the study, the informed consent procedure and a question if the interview audio and visual footage may be recorded. If the interviewee agreed, the interview topics would be discussed. Each topic was supported by a starting question and several subjects. Once all the interview topics had been discussed, the interviewer would utilize member checking; summarize the answers to check if all information is correctly interpreted and collected (Birt et al., 2016). If all necessary information was collected properly, the interview would end.

Data-analysis

For the data analysis, inductive analysis has been conducted: an analysis of large chucks of data wherein differences, similarities and themes are found (Creswell, 2002). The themes are based on literature research and topic list of the interview (appendix C) and placed into a coding tree (appendix D). The coding tree consists of the different constructs with definitions that were measured during the data-analysis process. The analysis of the data has been an iterative process. The analysis will first start with open coding: the interview transcript is divided into fragments that each have the same theme. Subsequently, axial coding will commence: fragments that share themes are combined under a single theme. Finally, selective coding will commence wherein a higher abstraction level is reached thanks to the description of the themes (Creswell, 2002). This analysis has been done in NVivo 12, a software package that supports coding, sorting and retrieval of data (Wong, 2008).

Results

Informal workplace activities undertaken by school leaders

The first research question was focused on gaining a clear picture of the types of informal workplace learning activities utilized by Dutch school leaders. The interviewed school leaders expressed partaking in several informal workplace learning activities. As shown in table 1, the activity that was most utilized by school leaders was learning from a discussion with colleagues. Reflection was the second most utilized informal learning technique and observation was the third most utilized technique. None of the respondents expressed learning something new while participating in another activity, individually doing another activity or by consulting an internet source. Informal workplace learning where multiple partaking individuals learned something and informal learning while reading professional literature were each expressed by one school leader.

Table 1

Informal workplace learning activities used by number of school leaders and total number of examples given.

Informal workplace activities	Number of school leaders that used it	Number of examples given
Informal learning together	1	1
Informal learning with reflection	7	14
Informal learning by reading literature	1	1
Informal learning by observing	6	12
Informal learning while participating in another activity	0	0
Informal learning in a discussion with colleagues	10	30
Informal learning by doing another activity individually	0	0
Informal learning from internet source	0	0

Informal workplace learning in a discussion

Most respondents explained that their experiences with informal workplace learning took place in conversations with staff, fellow school leaders or board members. One respondent explained: *'I think that this happens especially during a consultation moment or conversations with fellow school leaders or board members (R6).'* Remarks in these meetings led to new insights because fellow school leaders had different perspectives on dilemmas or asked unexpected questions that led to a change in perspective. It demonstrated to the respondent that the way they dealt with gifted students was special and not every school did it the same. These meetings occur often so the changes of a new insight to occur is therefore increased. A respondent explained: *'We see each other every six to eight weeks at board a*

board meeting and that always includes the informal meeting moments (R4).' In those meetings school leaders asked questions and shared experiences. One of these meetings gave the respondent the insight that it is important to express one's own wishes and demands on how to communicate with the school's participation council.

Not only did insights occur during board meetings but also in one-on-one conversations with fellow school leaders. A respondent remarked that during these informal meetings it was nice to hear new viewpoints on dilemma's or just to spar and listen and give unsalted opinions. Another respondent explained: *'I have situations in which I have a consultation with fellow school leaders in which we discuss situations we come across (R1).'* This situation was about how to deal with culturally different parents when they don't participate in school festivities. The respondent was initially quite rigid with these parents, but after a suggestion made by a peer to be more lenient and cooperative, the respondent changed her approach. Not only did respondents gain new insights in conversations with fellow school leaders but also in conversations with staff members. These conversations mostly occurred in hallways or coffee rooms: *'Conversations that are in the hallways, that are in the coffee rooms when you walk by each other after school (R1).'* During these small conversations in the hallways about a new school program a teacher admitted being overwelled. This showed the school leader that she had to intervene in the process and take control. However, these instances were a rare occurrence in the conversations with respondents.

Informal workplace learning with observations

The second most used informal workplace learning activity was the use of observations during meetings with school staff or fellow school leaders. Respondents used observation during meetings which gave them insights in the effects of their actions. One respondent explained that by looking at the staff she noticed they did not understand her strategy: *'... people were actually looking a bit glassy at me ... then I noticed I'm just going a hundred steps to fast (R13).'* After that observation she changed her approach and got everyone on the same page and which led to more staff involvement. Another respondent explained that by observing conversation techniques of a lawyer he gained an insight on how to gain control in a conversation. The respondent explained: *'You really do that super handy by using your own strength to pull the conversation back to you and say it's this or it's that (R3).'* So, not only did respondents observe their colleagues to gain new insights, but other individuals with different skills were also valuable learning opportunities.

Informal workplace learning with reflection

Reflection used as a method for informal learning was something respondents used to observe their own behavior and adjust to the situation. In a conversation with two individuals about an internship dispute where the individuals attempted to have the respondent solve the conflict, the respondent noticed this and mentioned: *'Normally in the rush of the day I would quickly go through it. And now I thought stop, slow down and think, have hem come with a solution (R9).'* This reflection led to an expression of the respondent that the individuals tried to move the responsibility to solve the dispute to the respondent. By expressing this reflection to the individuals, the responsibility to solve the dispute stayed with the individuals. Another respondent remarked: *'That informal learning is also about self-reflecting (R1).'* This was mentioned when a respondent considered stepping in when a curriculum change did not seem to work. Reflection allowed for the respondent to think about actions and its consequences which led to the respondent stepping in and guiding the curriculum change personally. It was a recognition that sometimes staff needed to be trusted and other times the school leader needed to intervene.

Lesser used informal workplace learning tactics

An informal learning situation in which multiple individuals together learned something new was a rare occurrence. Only one respondent described that during an informal meeting with a fellow school leader, asking questions and thinking along lead to a mutual increase in knowledge: *'By having her join the meeting she also got more insight … (R15).'* The respondent gained the insight that each school handles compulsory and appropriate education differently. The fellow school leader got a better understanding on how to communicate this issue with local municipalities. Another informal learning technique that was only mentioned ones was the use of professional literature to gain new insights. A respondent mentioned that by reading a specific book about involving all parties when solving a dilemma. Reading this book led to a better understanding about the way this could be done. Which the respondent used during a meeting with parents when talking about school involvement.

School leaders' perception of their personal professional development

All of the respondents were able to express their professional identity and the importance of professional development. They were able to specifically explain their strengths and weaknesses as a school leader. A respondent explained: *'I think I have a good image of what is expected of me, to provide quality education (R3).'* When talking about the professional identity of school leaders' remarks made by staff also influenced the image: *'If I have to describe how I experience myself and often hear back, is that I am someone that is*

connecting (R4).' This same respondent had learned to ask for help and to be more vulnerable with staff during the intervision meeting: *'I think that I have practiced that for several years and I've become a lot better at it…(R4).'* So professional identity development was not only influenced by staff experiences but also by staff comments. One respondent remarked: *'By nature I am very analytical but that interpersonal is something I have really development since I began in this function. So, in a sense it has influenced my self-image … (R16).'* This development allowed for the respondent to look more closely at message hidden behind the communication of school staff. This demonstrates that during their career, respondents altered their own professional image based on experiences. Another respondent explained that by experiencing a conflict with a colleague the respondent was confronted with his own professional identity: *'Well, it keeps you sharp … if you don't have it then you become rigid in what you can, what succeeds and what you think is going well (R2).'* Addressing that continues learning is an important facet in the professional development of a school leader. Always seeing new opportunities for improvement with informal workplace learning activities. Adding: *'How I see myself is that everyone has their qualities. … What that teaches me is that you are never done learning, …(R2).'*

Influence of informal workplace activities on school leader professional development

Respondents expressed that informal workplace activities have developed their professional identity. However, some respondents found it difficult to be specific in how the informal workplace activities influenced their professional identity. Respondents gave answers such as: *'I have really undergone a personal change, in my professional attitude … how I stand here as human in my function (R1).'* At first the respondent was more rigid and after this change became more open. Then she realized by observing staff that sharing experiences with staff was very important, which she experienced as very pleasant. Another respondent mentioned: *'Yes generally I think I have become a better school leader for it (R4).'* This change was achieved by reflecting on personal actions and adapting the communication approach to the situation. It influenced the respondents' vision on how to communicate with staff and parents, it became more confident and relaxed. Respondents did acknowledge their professional identity had been developed by informal workplace activities. However, not all respondents felt that way about the influence of informal workplace activities. One respondent remarked: *'I think that the fluctuations of my self-image of my qualities in this phase of my career no longer is subject to many fluctuations, I know more or less what I can and cannot do (R7).'* So, for two respondents concrete learning gains from informal workplace learning were difficult to retrieve. One reason given for this was that

informal workplace learning happens all the time, so retrieving one specific example was difficult.

Other respondents did come up with concrete examples about what they had gained: *'It is something about which I think harder now when I am about to say something'. 'I have become more aware (R13).'* This insight was caused by a conversation with a teacher in which the teacher became emotional after a direct comment from the respondent. Another respondent said about her role in motivating staff: *'So I am now more aware about if I think something, then I should also mention it and then I am also the person who gives more appreciation (R12).'* This awareness was created by a comment made by a staff member during intervision. A different respondent added that the informal workplace activities allowed her to realize that it is okay to make mistakes and discuss that with others, not everything that a school leader does has to be perfect. The respondent remarked: *'And that's were my opportunities for growth come from. How do I stay connected to myself with another person? And that's where I've grown in the past few years since I began (R15).'* Results about the influence of informal workplace activities on professional identity varied between respondents.

Discussion

This research study attempted to close the gap in knowledge about the influences of informal workplace activities on the professional development of school leaders. By conducting and analyzing a series of interviews the following research questions were addressed: 1) *Which informal workplace activities do school leaders undertake*, 2) *how do school leaders view their professional identity development in their respective careers*, and 3) *how do informal workplace activities influence the development of school leader professional identity?*

How informal learning for school leaders takes place

Findings show that most informal learning with school leaders takes place in discussions with peers or school staff. This activities usually take place during board meetings or informal meetings between school leaders, leading to new insights. School leaders also gained new insights by observing staff members and reflecting on personal actions. Matching earlier descriptions of informal learning that characterize it as a process that consists of action and reflection (Marsick & Volpe, 1999). The current results are somewhat in line with earlier research by Hulsbos et al. (2016). That study showed that the most popular informal learning activities for school leaders were working on innovations in school, reflection and participating in a learning network. Learning by working on innovations was not found in this

study. However, reflection in the study by Hulsbos et al. (2016) also contained a form of organized reflection with fellow school leaders. Partially matching the learning by observation with other school leaders investigated in this current study.

This current research study showed discussion with colleagues was the most prominent form of informal workplace learning. These results are supported by earlier research stating that group working promoted the sharing of expertise and exchange of knowledge, assisting in individual learning enhancement (Eraut, 2004). Research also shows that a significant amount of professional development takes place in communities of practice (Marsick, 2006), during conversations with peers. Face-to-face informal learning activities have been shown to be tied to professional development (Cerasoli et al., 2018; Rodriguez-Gomez, 2020). In the interviews that were conducted some of the sessions with board members offered special opportunity for reflection on school related issues. Highlighting the collaborative elements of informal learning (Hager, 1998). Although this activity is not marked as being the most common among school leaders by Hulsbos et al. (2016), Hulsbos does mention similar techniques as being popular among school leaders.

It is important to note that not all informal workplace learning activities were observed. For example, school leaders made no mention of new insights while working on school improvements or in cooperation with colleagues with both parties learning something new, even though research proves these strategies are being used (Doornbos et al., 2008; Hulsbos et al., 2016).

School leaders' view on professional development

The current study showed that school leaders found professional development an important part of their professional career. These remarks match earlier research that stated that school leaders find professional development an important part of their school development (Nicolaidou & Petridou, 2011). Other research has shown that school leaders characterized informal learning activities as fruitful (Cramp, 2016). Most school leaders viewed their professional identity development as an ongoing process with new insights gained each day. Influencing their self-image and views on strengths and opportunities for improvement. Matching with earlier views that characterize professional identity development as a lifelong (Cornelissen & van Wyk, 2008) ongoing (Moss et al., 2014) process, creating profound change (Weerdt et al., 2006). Informal workplace activities have shown to influence the development of professional identity. Informal workplace activities led to redefinitions of the role of a school leader and a changed approach in communicating with staff and parents.

The activities also demonstrated what important skills school leaders needed to further develop.

By reflecting on specific informal learning moments school leaders had expressed a deeper understanding about the professional development. Viewing professional development as an ongoing process. These results mirror earlier research about professional development within schools that stated that participants viewed professional identity development as an ongoing process that would constantly strengthen throughout career (Woo et al., 2006). However, some school leaders found it difficult to express the specific influence of informal workplace activities. This could be because of the spontaneous (Hager, 1998) and infrequent nature of informal learning (Cramp, 2016). In the current study respondents stated that it had helped them but not going into more detail how exactly.

Influence of informal workplace learning on professional identity development

The influence of informal workplace learning on professional identity development of school leaders has shown to be difficult to articulate. Some school leaders did however find clear examples of gains made with informal workplace learning. Influencing and changing perceptions of self by school leaders. Clearly focalizing a change in professional skills and image. These results match earlier research on the influence of informal workplace learning on professional identity. Earlier research characterized informal learning activities in formal events as influential for school leader understanding because it allowed school leaders to test opinions and views in small groups (Cramp, 2016). This matches results of this current study as multiple respondents used informal meetings with one or more school leaders to test views and opinions.

Limitations and recommendations for future research

This research study has several limitations. A first limitation of this study was the possible interviewer influence when assisting in connecting insights that were gained with professional development. Because of the spontaneous (Hager, 1998) and infrequent nature of informal learning (Cramp, 2016), discussing it with respondents was a challenge. So, to guide respondents in their train of thought, connections between professional identity and behavior were made by the researcher. These connections were always communicated as examples. The interpretation of behavior and skills by the researcher could have steered the interview response (Alsaawi, 2014). Future research should strive to create questions that provide clear links between informal workplace activities and professional development. Allowing this link to be solely made by the respondent and limiting interviewer influence.

A second limitation of this research study addresses the assessed time frame of the interviews. Of the 16 interviews, 13 were conducted with ample of time. With three interviews respondents had a limited timeframe, which influenced the amount of information that could be gathered from those interviews. This limited the depth in which informal learning situations could be discussed, possibly missing valuable data. Future researchers should increase the length of these interviews to allow for more valuable data to be gathered.

A third and final possible limitation of this research study is the influence of formal learning courses on informal workplace learning (Choi & Jacobs, 2011; Ellström, 2001). As both formal and informal learning can lead new insights (Cramp, 2016). In multiple interviews respondents mentioned the participation in trainings had helped them gain new insights. Respondents mentioned the training of giving feedback and using reflection. These insights could influence future reflection on professional development. Matching earlier research that has shown that school leaders often encounter professional development through trainings (Daniëls et al., 2019). Therefore, a final recommendation for future research is to examine the influence of formal learning activities on informal workplace learning. Increasing understanding of the sole influence of informal workplace learning. These limitations and recommendations should be considered when assessing the results of this research study.

Conclusion

This research study attempted to fill the gap in knowledge about the influence of informal workplace activities on school leader professional development (Daniëls et al., 2019; Hulsbos et al., 2016; Zhang & Brundrett, 2010). Results have shown that informal workplace activities do indeed influence the professional development of school leaders. Highlighting that the most frequent form of informal workplace activities that school leaders undertake are discussions with peers, observations and reflections on past events. School leaders value professional development and can vocalize their professional growth. Showcasing the importance of developing and nurturing this form of learning.

However, it is important to note that this research study had several limitations which should be considered. Not every informal workplace activity was properly highlighted, the possible interviewer influence when connecting activities with gained insights, the limited time frame for some interviews and the possible influence of formal learning activities on informal workplace activities.

These limitations however also offer opportunities for future research. The interview schedule and timeframe could be improved, allowing for more information to be retrieved. New research could look at the interplay formal and informal learning activities because both

are important for school leader development (Cramp, 2016). Matching with the discussed continuum of formal and informal learning (Doornbos et al., 2004; Malcolm et al., 2003). Showcasing that there is still much to uncover about the influence of informal workplace activities on professional development for school leaders.

This study has helped to shed light on the importance of professional development for school leaders by contributing to its understanding (Dall'Alba & Sandberg, 2006). The findings of this study can help school leaders gain more insight in how peers shape their professional identity with informal workplace learning. This insight can increase the development school leaders can achieve during their career, as it shows that professional development can be achieved in multiple ways and is always present, offering school leaders a new perspective on how to support it. Supporting school leader performance, workplace satisfaction and commitment (Matthews, 1999). Enhancing successful school leadership qualities (Brauckmann, et al., 2023). Also allowing schools themselves to offer more opportunity for informal workplace learning and professional development. In this way improving school leader employability (Rothwell & Charleston, 2013), thereby increasing the quality of the education system (Creemers, 1994; Hallinger, 2005; Robinson et al., 2008), assisting in creating learning environments for teachers (Willemse et al., 2015), fostering student learning experiences (Akiba, 2015) and development (Simkins et al., 2009). Which complements the demand for continues school improvement (Huber, 2004) and fits with the goals of the Dutch government to focus on educational development (Rijksoverheid, n.d.).

References

Akiba, M. (2015). Measuring teachers' professional learning activities in international context. In *International perspectives on education and society* (pp. 87–110). https://doi.org/10.1108/s1479-367920140000027003

Alsaawi, A. (2014). A critical review of qualitative interviews. *Social Science Research Network*. https://doi.org/10.2139/ssrn.2819536

Anderson, J. R. (1976). *Language, memory, and thought.* Hillsdale. NJ: Erlbaum Associates.

Bamburg, J., & Andrews, R. (1990). School goals, principals and achievement. *School Effectiveness and School Improvement, 2*(3), 175–191. https://doi.org/10.1080/0924345910020302

Barrett, D. A., & Twycross, A. (2018). Data collection in qualitative research. *Evidence-Based Nursing*, *21*(3), 63–64. https://doi.org/10.1136/eb-2018-102939

Benner, P., Tanner, C., & Chesla, C. (1992). From beginner to expert: Gaining a differentiated clinical world in critical care nursing. *Advances in Nursing Science*, *14*(3), 13-28. https://doi.org/10.1097/00012272-199203000-00005

Bischoff, R. J., Barton, M., Thober, J., & Hawley, R. (2002). Events and experiences impacting the development of clinical self confidence: A study of the first year of client contact. *Journal of Marital and Family Therapy, 28*, 371–382. https://doi-org.proxy.library.uu.nl/10.1111/j.1752-0606.2002.tb01193.x

Blair, M. (2002). Effective school leadership: The multi-ethnic context. *British Journal of Sociology of Education*, *23*(2), 179-191. https://doi-org.proxy.library.uu.nl/10.1080/01425690220137701

Blase, J. J. (1987). Dimensions of effective school leadership: The teacher's perspective. *American Educational Research Journal*, *24*(4), 589-610. https://doi-org.proxy.library.uu.nl/10.3102/00028312024004589

Brauckmann, S., Pashiardis, P., & Ärlestig, H. (2023). Bringing context and educational leadership together: Fostering the professional development of school principals. *Professional Development in Education, 49*(1), 4-15. https://doi.org/10.1080/19415257.2020.1747105

Billett, S. (1995). Workplace learning: its potential and limitations. *Education + Training, 37*(5), 20-27. https://doi.org/10.1108/00400919510089103

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, *26*(13), 1802-1811. https://doi.org/10.1177/1049732316654870

Bush, T., & Glover, D. (2003). *School leadership: Concepts and evidence.* National College for School Leadership. https://dera.ioe.ac.uk/id/eprint/5119/13/media-84d-76-school-leadership-concepts-and-evidence-summary_Redacted.pdf

Bush, T., & Jackson, D. (2002). A preparation for school leadership: International perspectives. *Educational Management & Administration*, *30*(4), 417-429. https://doi-org.proxy.library.uu.nl/10.1177/0263211X020304004

Carmines, E. G., & Zeller, R. A. (1979). *Reliability and validity assessment.* Newbury Park, CA, SAGE.

Cerasoli, C. P., Alliger, G. M., Donsbach, J. S., Mathieu, J. E., Tannenbaum, S. I., & Orvis, K. A. (2018). Antecedents and outcomes of informal learning behaviors: A meta-analysis. *Journal of Business and Psychology*, *33*(2), 203-230. https://doi-org.proxy.library.uu.nl/10.1007/s10869-017-9492-y

Choi, W., & Jacobs, R. L. (2011). Influences of formal learning, personal learning orientation, and supportive learning environment on informal learning. *Human Resource Development Quarterly*, *22*(3), 239–257. https://doi.org/10.1002/hrdq.20078

Cornelissen, J., & van Wyk, A. (2008). Professional socialisation: An influence on professional development and role definition. *South African Journal of Higher Education*, *21*(7). https://doi.org/10.4314/sajhe.v21i7.25745

Creemers, B. P. M. (1994). The history, value and purpose of school effectiveness studies. *Elsevier eBooks*, 9–23. https://doi.org/10.1016/b978-0-08-042392-0.50006-1

Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* Upper Saddle River, NJ: Pearson Education

Creswell, J. W. (2012). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Sage.

Cramp, A. (2016). Enhancing school leadership through an international study visit. *Professional Development in Education*. https://doi.org/10.1080/19415257.2015.1127271

Dall'Alba, G., & Sandberg, J. (2006). Unveiling professional development: A critical review of stage models. *Review of Educational Research*, *76*(3), 383-412. https://doi.org/10.3102/00346543076003383

Daniëls, E., Hondeghem, A., & Dochy, F. (2019). A review on leadership and leadership development in educational settings. *Educational Research Review*, *27*, 110-125. https://doi.org/10.1016/j.edurev.2019.02.003

Dearnley, C. (2005). A reflection on the use of semi-structured interviews. *Nurse Researcher*,

13(1), 19–28. https://doi.org/10.7748/nr2005.07.13.1.19.c5997

De Weerdt, S., Bouwen, R., Corthouts, F., & Martens, H. (2006). Identity transformation as an intercontextual process. *Industry and Higher Education*, *20*(5), 317-326. https://doi-org.proxy.library.uu.nl/10.5367/000000006778702373

Dilts, R. (1998). *Modelling with NLP.* Cupertino, California: Meta Publications.

Doornbos, A. J., Bolhuis, S., & Simons, P. R. J. (2004). Modelling work-related learning on the basis of intentionality and developmental relatedness: A non-educational perspective. *Human Resource Development Review, 3*(3), 250–274. https://doi.org/10.1177/1534484304268107

Doornbos, A. J., Simons, R. J., & Denessen, E. (2008). Relations between characteristics of workplace practices and types of informal work-related learning: A survey study among Dutch Police. *Human Resource Development Quarterly*, *19*(2), 129-151. https://doi-org.proxy.library.uu.nl/10.1002/hrdq.1231

Ellström, P. E. (2001). Integrating learning and work: Problems and prospects. *Human Resource Development Quarterly 12*, 421–435. https://doi-org.proxy.library.uu.nl/10.1002/hrdq.1006

Eraut, M. (2004). Informal learning in the workplace. *Studies in Continuing Education*, *26*(2), 247–273. https://doi.org/10.1080/158037042000225245

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1-4. https://doi.org/10.11648/j.ajtas.20160501.11

Gerring, J. (2017). Qualitative methods. *Annual Review of Political Science*, *20*, 15-36. https://doi-org.proxy.library.uu.nl/10.1146/annurev-polisci-092415-024158

Glasman, N. (1984). Student achievement and the school principal. *Educational Evaluation and Policy Analysis, 6*(3), 283–296. https://doi-org.proxy.library.uu.nl/10.3102/01623737006003283

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*(1), 59-82. https://doi-org.proxy.library.uu.nl/10.1177/1525822X05279903

Hager, P. (1998). Understanding workplace learning: General perspectives. In D. Boud (Ed.), *Current issues and new agendas in workplace learning* (pp. 31–46). Springfield, VA: NCVER.

Hallinger, P. (2005). Instructional leadership and the school principal: A passing fancy that

refuses to fade away. *Leadership and Policy in Schools, 4*(3), 221-239. https://doi-org.proxy.library.uu.nl/10.1080/15700760500244793

Harris, A., Day, C., & Hadfield, M. (2003). Teachers' perspectives on effective school leadership. *Teachers and Teaching*, *9*(1), 67-77. https://doi-org.proxy.library.uu.nl/10.1080/1354060032000049913

Harvey-Jordan, S., & Long, S. (2001). The process and the pitfalls of semi-structured interviews. *Community Practitioner*, *74*(6), 219.

Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning.* London: Routledge.

Hennink, M., Kaiser, B. N., & Marconi, V. C. (2017). Code saturation versus meaning saturation. *Qualitative Health Research*, *27*(4), 591–608. https://doi.org/10.1177/1049732316665344

Hodkinson, H., & Hodkinson, P. (2005). Improving schoolteachers' workplace learning. *Research Papers in Education*, *20*(2), 109-131. https://doi-org.proxy.library.uu.nl/10.1080/02671520500077921

Huber, S. G. (2003). School leader development: Current trends from a global perspective. In *Reshaping the landscape of school leadership development* (pp. 289-304). Taylor & Francis.

Huber, S. G. (2004). Preparing school leaders for the 21st century: An international comparison of development programs in 15 countries. In *Routledge eBooks*. http://ci.nii.ac.jp/ncid/BA67873179

Hulsbos, F. A., Evers, A. T., & Kessels, J. W. M. (2016). Learn to lead: Mapping workplace learning of school leaders. *Vocations and Learning*, *9*(1), 21-42. https://doi-org.proxy.library.uu.nl/10.1007/s12186-015-9140-5

Imants, J., & van Veen, K. (2010). Teacher learning as workplace learning. *Elsevier eBooks*, 569–574. https://doi.org/10.1016/b978-0-08-044894-7.00657-6

Kochan, F. K., Bredeson, P. V., & Riehl, C. (2005). Rethinking the professional development of school leaders. *The Yearbook of the National Society for the Study of Education*, *101*(1), 289–306. https://doi.org/10.1111/j.1744-7984.2002.tb00013.x

Kotter, J. (1988). *The leadership factor.* Amsterdam University Press.

Kyndt, E., Gijbels, D., Grosemans, I., & Donche, V. (2016). Teachers' everyday professional development: Mapping informal learning activities, antecedents, and learning outcomes. *Review of Educational Research*, *86*(4), 1111-1150. https://doi-org.proxy.library.uu.nl/10.3102/0034654315627864

Lambert, S. D., & Loiselle, C. G. (2008). Combining individual interviews and focus groups to enhance data richness. *Journal of Advanced Nursing, 62*, 228–237. https://doi-org.proxy.library.uu.nl/10.1111/j.1365-2648.2007.04559.x

Lohman, M. C. (2005). A survey of factors influencing the engagement of two professional groups in informal workplace learning activities. *Human Resource Development Quarterly*, 16(4), 501-527. https://doi-org.proxy.library.uu.nl/10.1002/hrdq.1153

Loseke, D. R. (2017). *Methodological thinking* (2nd ed.). Thousand Oaks, CA Sage.

Matthews, P. (1999). Workplace learning: Developing an holistic model. *The Learning Organization, 6*(1), 18-29. https://doi.org/10.1108/09696479910255684

Malcolm, J., Hodkinson, P., & Colley, H. (2003), The interrelationships between informal and formal learning. *Journal of Workplace Learning, 15* (7/8), 313-318. https://doi.org/10.1108/13665620310504783

Marsick, V. (2006). Informal strategic learning in the workplace. In *Work-related learning* (pp. 51-69). Springer, Dordrecht. https://doi.org/10.1007/1-4020-3939-5_2

Marsick, V. J., & Volpe, M. (1999). The nature and need for informal learning. *Advances in Developing Human Resources*, *1*(3), 1-9. https://doi.org/10.1177/152342239900100302

McIntosh, M. J., & Morse, J. M. (2015). Situating and constructing diversity in semi-structured interviews. *Global Qualitative Nursing Research*, *2*, 233339361559767. https://doi-org.proxy.library.uu.nl/10.1177/2333393615597674

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.

Mortelmans, D. (2020). *Handboek kwalitatieve onderzoeksmethoden*. Acco.

Moss, J. M., Gibson, D. M., & Dollarhide, C. T. (2014). Professional identity development: A grounded theory of transformational tasks of counselors. *Journal of counseling & development*, *92*(1), 3-12. https://doi-org.proxy.library.uu.nl/10.1002/j.1556-6676.2014.00124.x

Murphy, E., & Dingwall, R. (2003). *Qualitative methods and health policy research.* Aldine De Gruyter, New York NY.

Nicolaidou, M., & Petridou, A. (2011). Echoing school leaders' voices in Cyprus: A study of novice school leaders' perceptions regarding leadership professional development. *Professional Development in Education*, *37*(5), 721–740. https://doi.org/10.1080/19415257.2011.564051

Nielsen, K., & Randall, R. (2013). Opening the black box: Presenting a model for evaluating

organizational-level interventions. *European Journal of Work and Organizational Psychology, 22*(5), 601-617. https://doi.org/10.1080/1359432X.2012.690556

Notman, R., & Henry, D. A. (2011). Building and sustaining successful school leadership in New Zealand. *Leadership and Policy in Schools*, *10*(4), 375–394. https://doi.org/10.1080/15700763.2011.610555

Paterson, M., Higgs, J., Wilcox, S., & Villenuve, M. (2002). Clinical reasoning and self-directed learning: Key dimensions in professional education and professional socialization. *Focus on Health Professional Education 4*(2) 5–21. https://doi.org/10.3316/aeipt.126095

Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *PubMed*, *34*(5 Pt 2), 1189–1208. https://pubmed.ncbi.nlm.gov/10591279

Pistrang, N., & Barker, C. (2012). Varieties of qualitative research: A pragmatic approach to selecting methods. In *American Psychological Association eBooks* (pp. 5–18). https://doi.org/10.1037/13620-001

Reid, W. (1994). Reframing the epistemological debate. In E. Sherman & W. Reid (Eds.), *Qualitative research in social work* (pp. 464-481). New York: Columbia University Press.

Rijksoverheid (n.d.). *Plannen voor onderwijs. https://www.rijksoverheid.nl/onderwerpen/prinsjesdag/onderwijs*

Roberts, P., & Priest, H. (2006). Reliability and validity in research. *Nursing Standard*, *20*(44), 41–45. https://doi.org/10.7748/ns2006.07.20.44.41.c6560

Robinson, V., Lloyd, K., & Rowe, J. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly, 44*(5), 635–674. https://doi-org.proxy.library.uu.nl/10.1177/0013161X08321509

Rodriguez-Gomez, D., Ion, G., Juan, C. M., & López-Crespo, S. (2020). Factors promoting informal and formal learning strategies among school leaders. *Studies in Continuing Education*, *42*(2), 240–255. https://doi.org/10.1080/0158037x.2019.1600492

Rothwell, A., & Charleston, B. (2013). International volunteering: employability, leadership and more. *Journal of Education and Training*, *55*(2), 159–173. https://doi.org/10.1108/00400911311304805

Rowan, M., & Huston, P. (1997). Qualitative research articles: Information for authors and peer reviewers. *PubMed*, *157*(10), 1442–1446. https://pubmed.ncbi.nlm.gov/9371080

Rubin, H. J., & Rubin, I. S. (2005). *Qualitative interviewing: The art of hearing data*

(2nd ed.). Thousand Oaks, CA: SAGE.

Schmidt, F. L., Hunter, J. E., & Outerbridge, A. N. (1986). Impact of job experience and ability on job knowledge, work sample performance, and supervisory ratings of job performance. *Journal of Applied Psychology, 71*(3), 432–439. https://doi-org.proxy.library.uu.nl/10.1037/0021-9010.71.3.432

Simkins, T., Coldwell, M., Close, P., & Morgan, A. (2009). Outcomes of in-school leadership development work: A study of three NCSL programmes. *Educational Management Administration Leadership, 37*(1), 29–50. https://doi-org.proxy.library.uu.nl/10.1177/1741143208098163

Smith, R. G. (2007). Developing professional identities and knowledge: Becoming primary teachers. *Teachers and Teaching: Theory and Practice, 13*, 377–397. https://doi-org.proxy.library.uu.nl/10.1080/13540600701391937

Stavru, S. (2014). A critical examination of recent industrial surveys on agile method usage. *Journal of Systems and Software*, *94*, 87-97. https://doi.org/10.1016/j.jss.2014.03.041

Stogdill, R. M. (1950). Leadership, membership and organization. *Psychological Bulletin*, *47*(1), 1. https://doi-org.proxy.library.uu.nl/10.1037/h0053857

Thurmond, V. A. (2001). The point of triangulation. *Journal of Nursing Scholarship*, *33*(3), 253-258. https://doi-org.proxy.library.uu.nl/10.1111/j.1547-5069.2001.00253.x

Tynjälä, P. (2008). Perspectives into learning at the workplace. *Educational Research Review*, *3*(2), 130-154. https://doi.org/10.1016/j.edurev.2007.12.001

Tynjälä, P. (2013). Toward a 3-P model of workplace learning: A literature review. *Vocations and Learning*, *6*(1), 11-36.

Volckmann, R. (2012). Fresh perspective: Barbara Kellerman and the leadership industry. *Articles from Integral Leadership Review*, *6*(8).

Wester, F. (2019). Interview-onderzoek in hoofdlijnen. *KWALON, 24*(2), 43. https://doi.org/10.5117/2019.024.002.008

Whittemore, R., Chase, S. K., & Mandle, C. L. (2001). Validity in qualitative research. *Qualitative Health Research*, *11*(4), 522-537. https://doi-org.proxy.library.uu.nl/10.1177/104973201129119299

Willemse, T. M., Ten Dam, G., Geijsel, F., Van Wessum, L., & Volman, M. (2015). Fostering teachers' professional development for citizenship education. *Teaching and Teacher Education*, *49*, 118-127. https://doi.org/10.1016/j.tate.2015.03.008

Wilson, M., & Xue, X. (2013). School leader perspectives on leadership learning preparation

and continuing professional development in the Chinese province of Fujian: An exploratory study. *Educational Management Administration & Leadership*, *41*(6), 800-818. https://doi-org.proxy.library.uu.nl/10.1177/1741143213494187

Woo, H., Storlie, C. A., & Baltrinic, E. R. (2016). Perceptions of professional identity development from counselor educators in leadership positions. *Counselor Education and Supervision*, *55*(4), 278-293. https://doi-org.proxy.library.uu.nl/10.1002/ceas.12054

Wong, L. P. (2008). Data analysis in qualitative research: A brief guide to using NVivo. *PubMed*, *3*(1), 14-20. https://pubmed.ncbi.nlm.nih.gov/25606106

Yukl, G. (2002). *Leadership in organisations.* Prentice Hall, Upper Saddle River.

Zhang, W., & Brundrett, M., (2010). School leaders' perspectives on leadership learning: The case for informal and experiential learning. *Management in Education 24*(4), 154–158. https://doi-org.proxy.library.uu.nl/10.1177/0892020610376792

Appendices

Appendix A: Informed consent letter

Proefpersoneninformatie voor deelname aan (sociaal)-wetenschappelijk onderzoek:
'The Influence of School Leaders' Informal Learning on their Professional Identity in Primary, Secondary and Higher Education'

Stijn Kuhlmann

Salamancapad 381

3584 DX Utrecht

Utrecht, 28 maart 2023

Betreft: toestemming deelname master thesis onderzoek

Geachte heer, mevrouw,

Middels deze brief willen we u toestemming vragen om mee te doen aan het onderzoek 'The Influence of School Leaders' Informal Learning on their Professional Identity in Primary, Secondary and Higher Education'. Dit onderzoek heeft tot doel meer informatie te verkrijgen over de invloed van informeel leren op de professionele identiteit van schoolleiders. Het informeel leren is te omschrijven als het spontaan opdoen van nieuwe inzichten tussen het werken door, bijvoorbeeld in een gesprek met een collega. Met de invloed van informeel leren op de professionele identiteit bedoel ik hoe nieuwe inzichten hebben bijgedragen aan het zelfbeeld van de leider.

Opzet/uitvoering van het onderzoek
Voor mijn onderzoek ben ik op zoek naar schoolleiders in het basis en middelbaar onderwijs met minstens twee jaar ervaring in de functie van schoolleider of directeur. Door middel van interviews zullen er geanonimiseerde ervaringen en verhalen verzameld worden over informeel leren en het effect op de professionele ontwikkeling van de schoolleider. Na het interview maak ik een transcriptie van het gesprek en stuur ik deze ter controle naar de geïnterviewde schoolleider of directeur.

Achtergrond onderzoek
Het betreft een master thesis onderzoek voor de faculteit Educational Sciences van de Universiteit Utrecht.

Wat wordt van u als participant verwacht
De interviews zijn laagdrempelige gesprekken die geen voorbereiding vereisen van de respondent. Het interview duurt ongeveer 35 minuten. De interviews zullen plaatsvinden in de periode van 29 maart tot en met 21 april.

Mogelijke voor- en nadelen van het onderzoek voor u als participant
Vergoeding/beloning
De data wordt geanonimiseerd en zal geen schadelijke informatie bevatten voor u als respondent. Er zal geen beloning zijn voor deelname aan het onderzoek, enkel dat de thesis respondenten concrete suggesties kan geven over hoe beroepsgenoten hun informeel leren vormgeven op scholen. Daarnaast faciliteren de interviews tot nadenken over uw eigen functioneren.

Vertrouwelijkheid verwerking van uw gegevens
Persoonsgegevens van dit onderzoek worden na contact en transcriptie van de data verwijderd. Alle persoonlijke informatie die u redelijkerwijs zou kunnen identificeren, zal worden verwijderd of gewijzigd voordat de bestanden met andere onderzoekers worden gedeeld of de resultaten openbaar worden gemaakt. Persoonlijke informatie zal dan niet meer te herleiden zijn naar de oorspronkelijke bron. De geanonimiseerde transcripten met onderzoeksgegevens worden opgeslagen op YODA, beveiligde servers van de UU. Deze gegevens worden opgeslagen volgens de veiligheidsnormen van de UU en alleen de betrokken onderzoeker heeft toegang tot deze gegevens. De onderzoeksgegevens zelf (zonder uw contactgegevens) zullen voor minimaal 10 jaar bewaard worden. Dit is volgens de daartoe bestemde richtlijnen van de Universiteiten van Nederland (voorheen VSNU).

Vrijwilligheid deelname
Deelname aan dit onderzoek is vrijwillig. U kunt op elk gewenst moment, zonder opgave van reden en zonder voor u nadelige gevolgen, stoppen met het onderzoek. De tot dan toe verzamelde gegevens worden wel gebruikt voor het onderzoek.

Contactadres voor vragen en/of klachten
Als u vragen of opmerkingen over het onderzoek heeft, kunt u contact opnemen

met s.p.kuhlmann@students.uu.nl en voor verdere vragen kunt u contact opnemen met mijn

supervisor Ellen Daniëls via e.e.daniels@uu.nl.

Als u een officiële klacht heeft over het onderzoek, dan kunt u een mail sturen naar de klachtenfunctionaris via klachtenfunctionaris-fetcsocwet@uu.nl

Vragen over privacy:
Als u vragen heeft over de verwerking van uw persoonsgegevens kunt u deze richten aan privacy@uu.nl Graag verwijzen wij ook naar de algemene privacyverklaring van de UU: Privacyverklaring Universiteit Utrecht - Organisatie - Universiteit Utrecht (uu.nl)
Meer informatie over privacy kunt u lezen op de website van de Autoriteit Persoonsgegevens: https://autoriteitpersoonsgegevens.nl/nl/onderwerpen/avg-europese-privacywetgeving.

Als u na het lezen van deze informatiebrief besluit tot deelname aan het onderzoek verzoek ik u bijgevoegd antwoordstrookje te ondertekenen en in te leveren bij de onderzoeker.

Vriendelijke groet,

Stijn Kuhlmann

Toestemmingsverklaring:

Hierbij verklaar ik de informatiebrief m.b.t. onderzoek ‘The Influence of School Leaders’ Informal Learning on their Professional Identity in Primary, Secondary and Higher Education’ gelezen te hebben en akkoord te gaan met deelname aan het onderzoek.

Dit betekent dat ik instem met:
1) deelname aan het onderzoek
2) verzamelen van mijn contactgegevens

"Ik ga ermee akkoord dat de voor het onderzoek verzamelde onderzoeksgegevens mogen worden gepubliceerd of beschikbaar gesteld, mits mijn naam of andere identificerende informatie niet wordt gebruikt."

"Ik begrijp dat de onderzoeksgegevens, zonder enige persoonlijke informatie die mij zou kunnen identificeren (niet aan mij gekoppeld), met anderen mogen worden gedeeld."

Datum

Naam

Handtekening of digitaal vinkje voor akkoord bij onlineonderzoek.

Appendix B: Interview guide (Interview will be conducted in Dutch, so the interview guide is written in Dutch)

Interview guide master thesis

1	Gastheerschap:
	Verwelkom de geïnterviewde. Voorstellen, ijs breken
2	Introductie op het interview
	Bedanken dat de geïnterviewde is gekomen voor het interview. Uitleggen wat het doel is van het gesprek. Uitleg gang van zaken: (topics; wat gebeurt er met de gegevens; anonimiteit; terugkoppeling, e.v.t. opnemen van het gesprek) Vragen van de geïnterviewde?
	E.v.t. tekst die er gebruikt kan worden: Allereerst wil ik u bedanken dat u hier aanwezig bent voor dit interview. Voor dit interview hebben we ongeveer 30 à 40 minuten uitgetrokken. Ik wil het interview graag opnemen, dit vergemakkelijkt de uitwerking van het interview. Is dit voor u een bezwaar?

	Ook al neem ik het interview op, dan zal ik af en toe ook steekwoorden noteren, dit helpt mij bij het luisteren en eventueel bij het samenvatten. Is dit akkoord voor u? De onderwerpen die wij zullen bespreken in dit interview zijn een korte bespreking van uw functie binnen de school en carrière tot aan uw huidige positie, uw professionele zelfbeeld en hoe informele leeractiviteiten hieraan hebben bijgedragen. Als we volgens u belangrijke onderwerpen daarna nog niet besproken hebben is daar aan het einde van het interview ook nog ruimte voor. Heeft u nog vragen? Nee, dan wil ik nu graag starten met het interview.

3	**Topic: Functie binnen school**
	Startvraag: Hoe zou u uw functie binnen de school omschrijven?
	Subtopics: - Carrière schoolleider: Wat heeft u allemaal gedaan voordat u als schoolleider op deze school belande? - Takenpakket: Wat zijn uw taken binnen de school? - Jaren ervaring: Hoelang zit u al in de positie van schoolleider? - Drvrg: En hoelang bent u al actief op deze school? - Uitdagingen binnen het werk: Met wat voor uitdagingen krijgt u te maken binnen uw werk? - Leiderschapsstijl: Hoe zou u uw leiderschapsstijl opschrijven?

4	**Topic: Professionele ontwikkeling** RQ: How do school leaders view their professional identity development in their respective careers?
	Startvraag: Wat zijn uw kwaliteiten als schoolleider?
	Definitie professionele identiteit:

	Het professionele zelfbeeld van de schoolleider.
	Subtopics: - Hoe vaardigheden en kennis uitbreiden: Hoe breidt u uw vaardigheden en kennis uit? - Sterke kanten van leider: Wat zijn uw kwaliteiten als schoolleider? - Verbeterpunten van leider: Waar ziet uw zichzelf nog in groeien in uw rol als schoolleider? - Normen en waarden van de leider: Aan welke normen en waarden hecht u belang als schoolleider? (Wat zijn kernwaarden die aan uw functioneren gekoppeld zijn?) (Stel dat een leerkracht naar uw functioneren kijkt welke normen en waarden zou die dan benoemen?) - Aansluiting persoonlijke normen en waarden school: Hoe sluiten ze aan bij de school? - Eigen mening over rol en carrière als leider: Hoe kijkt u terug op uw carrière als schoolleider?

5	**Topic: Informele werkplek leeractiviteiten** RQ: Which informal workplace activities do school leaders undertake? RQ: What workplace activities influence the development of school leader professional identity?
	Startvraag: Kunt u mij een voorbeeld geven waarin tussen uw werk door spontaan nieuwe inzichten opdeed?
	Definitie formeel leren: Een intentionele vorm van leren, die plaatsvindt in een educatieve setting met een bepaalde structuur en tijdslimiet. Het individu heeft geen

	controle over het leerproces, het wordt extern begeleid. Denk hierbij bijvoorbeeld aan het leren in een training of cursus. Definitie informeel leren: Al het leren dat spontaan buiten formele geplande activiteiten plaatsvindt. Het is impliciet, ongepland en afhankelijk van de context. De activiteiten zijn spontaan en leiden tot nieuwe inzichten.
	Subtopics: Voorbeelden van die situaties van informeel leren (krachtige manier) (3x) - Drvrg: Wat zorgde ervoor dat u nieuwe inzichten opdeed? Voorbeelden ter ondersteuning: - Een situatie waarin uw spontaan reflectie heeft gebruikt en hierdoor tot nieuwe inzichten kwam? - Situatie waarin uw een nieuw inzicht opdeed tijdens het bespreken van een casus met een collega? - Een situatie waarin u tussen het werken door iets oppikte van een collega door hem te observeren? - Situatie waarin iets heeft geleerd doormiddel van discussie met collega? - Drvrg: Wat deed u na deze situatie anders in uw werk? - Na elke situatie omschrijving koppeling professionele identiteit: Hoe hebben deze activiteiten bijgedragen aan uw professionele zelfbeeld?

	Samenvatting geven (We hebben een fijn gesprek gehad, ik heb veel van u geleerd) Heeft u nog aanvullingen? Dan wil ik dit onderwerp afsluiten. Afsluiting van het gesprek We hebben nu gesproken over uw carrière als schoolleider, uw professionele zelfbeeld en de invloeden van informeel leren hierop. kort en bondig; objectief; afsluiten met checkvraag (Is er nog iets wat u heeft gemist?) In de komende dagen zullen er nog meer interviews afgenomen worden en dan zal er worden gecodeerd en zullen de resultaten worden opgesteld. Hebt u interesse om het transcript van het interview te ontvangen? Hebt u daarnaast ook interesse om de master thesis te ontvangen zodra die wordt gepubliceerd?

	Ik wil u/je hartelijk bedanken. Heeft u verder nog vragen? (evt apparatuur uitzetten) Hoe was het interview voor u? Dan wil ik u nogmaals hartelijk bedanken voor uw waardevolle bijdrage

Appendix C: Coding tree (will be elaborated based on the findings)

Theme	Code	Description
1 Professional development	Profdevelop	Activities are undertaken by individuals that seek to keep up with recent changes in their field, to enhance their skills or to support a change in their organization (Dall'Alba & Sandberg, 2006).
1.1 Informal workplace activities	Infworkact	*Learning activities that take place in an informal setting**
1.1.1 Learning together	Learntogether	Mutual exchange of knowledge of which both the individual and interacting colleague benefit (Doornbos et al., 2008).
1.1.1.1 Improvement by learning together	Improvelearntogether	Improvement brought upon because of interaction with a colleague.
1.1.2 Learning from action and reflection	Learnreflect	Mental activities wherein individual analyzes or thinks about aspects of their profession (Kyndt et al., 2016).
1.1.2.1 Improvement from action and reflection	Improvelearnreflect	Improvement brought upon by the analyzation of aspects of their profession.
1.1.3 Learning from reading professional identity	Learnread	Learning from reading professional literature (Kyndt et al., 2016)
1.1.3.1 Improvement from reading	ImproveLearnread	Improvement brought upon by reading professional literature.
1.1.4 Learning from observation	Learnobserv	learning from the observation of colleagues (Billett, 1995; Doornbos et al., 2008; Hodkinson & Hodkinson, 2005; Lohman, 2005).
1.1.4.1 Learning by observation of a peer	Learnobservpeer	Learning from colleagues via observation and asking questions (Doornbos et al., 2008).
1.1.4.2 Learning by observation of a more experienced colleague	Learnobservmore	Learning from more experienced colleagues via observation and asking questions (Doornbos et al., 2008).
1.1.4.3 Learning by observation of a less	Learnobservless	Learning from new of less experienced colleagues via observation and asking questions (Doornbos et al., 2008).

experienced colleague		
1.1.5 Learning during another work activity	Learnduringact	Learning while partaking in an unrelated activity (Hodkinson & Hodkinson, 2005).
1.1.5.1 Improvement when learning during another work activity	Improvelearnduringact	Improvement achieved when learning during another work activity.
1.1.6 Learning by doing	Learndo	Individual preparation or application of something new (Doornbos et al., 2008).
1.1.6.1 Improvement from learning by doing	ImproveLearndo	Improvement brought upon by individual application of something new.
1.1.7 Learning by a discussion with a colleague	Learndiscuss	Learning from a discussion with colleagues (Billett, 1995; Doornbos et al., 2008; Hodkinson & Hodkinson, 2005; Lohman, 2005).
1.1.7.1 Improvement from a discussion with a colleague	Improvelearndiscuss	Improvement brought upon by a discussion with a colleague.
1.1.8 Learning from reading internet sources	Learninternet	Consulting information sources on the internet (Kyndt et al., 2016).
1.1.8.1	Improvelearninternet	Improvement brought upon by consulting information sources on the internet.
1.1.9 Learning during another work activity	Learnduringact	Learning while partaking in an unrelated activity (Hodkinson & Hodkinson, 2005).
1.1.9.1 Improvement from learning during another work activity	Improvelearnduringact	Improvement brought upon when learning while partaking in an unrelated activity.
2 Professional self-image	Profself	Changes undergone of professional self-image by informal workplace activities.

*Note * description of informal workplace activity will be expanded.*