

SCHOOL LEADERS MATTER: THE ROLE OF SCHOOL PRINCIPALS IN IMPLEMENTING UDL IN K-12 SCHOOLS

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Abstract. *The aim of this article is to fill the gap of scientific evidence on the role of school principals in implementing UDL in K-12 schools. The case study research was conducted, and field notes were taken from one district in Lithuania, which has been implementing UDL in its schools since 2019. The data for this research was gathered using in-depth semi-structured interviews involving 5 participants. Based on an inductive thematic analysis, six themes emerged: initiating UDL as an organisational change; planning and ensuring the development of staff competencies related to didactic decisions; initiating changes in teachers' attitudes; motivating teachers to take leadership at the classroom level; promoting the sharing of experiences among teachers (successes and failures); and establishing and maintaining an organisational culture. The discussion explores the implications of the findings for the successful and effective application of UDL in K-12 schools.*

Keywords: *K-12 School, Leadership, Principal, Universal Design for Learning.*

Introduction

In the ever-changing field of education, striving for equal learning opportunities and inclusivity has emerged as a fundamental principle. At the forefront of this transformative endeavour are school leaders, whose role extends beyond administrative tasks to encompass shaping the educational ethos and practices within K-12 schools.

Universal Design for Learning (UDL) is a pedagogical approach designed to ensure all students, irrespective of their diverse abilities and learning styles, have access to equitable learning opportunities. Moreover, UDL is a strategy that increases the level of student engagement (Meyer et al., 2014) and helps to effectively address differences in student learning in the classroom (Kressler & Kressler, 2020). Overall, UDL has gained popularity in K-12 schools due to its emphasis on inclusive practices through purposeful design in teaching and learning, making it a sustainable approach for accommodating diverse learners (Fovet, 2020).

Research indicates that school leaders play a central role in helping teachers to effectively apply new educational strategies or to manage changes in their practice (Nedzinskaitė-Mačiūnienė et al., 2022; Clayton & Goodwin, 2015). The school principal's leadership in teaching also positively affects teachers' motivation, satisfaction, self-confidence, and sense of security (Grillo, 2021; Harris, 2013; Hattie, 2012). School leaders' involvement in implementing UDL in K-12 schools is essential, given their significant influence on moulding the educational environment, policies, and practices. They are responsible for modelling UDL instruction and creating a shared vision for UDL implementation in the school (Novak, Woodlock, 2021). Moreover, they are responsible for changing current teacher professional development practices in line with the UDL strategy (Fovet, 2020). School leaders are also responsible for allocating human and material resources to support the implementation of UDL. Hence, the involvement of school leaders in the UDL implementation process can enhance student achievements and promote greater inclusivity in schools (Grillo, 2021). Therefore, the main aim of this article is *to explore the role of school principals in implementing UDL in K-12 schools in Lithuania*.

The following sections of the article begin with a literature review. Then, the research methodology, which is based on an explanatory case study, is elaborated upon. Lastly, the study presents the research findings and a discussion derived from the inductive thematic analysis carried out.

Literature review

Universal Design for Learning (UDL)

UDL operates on the principle that teaching and learning cannot be standardised to a one-size-fits-all approach. It emphasises the importance of developing flexible learning environments that cater to the diverse needs of students, encompassing individuals with disabilities, different cultural backgrounds, and diverse learning styles. Most importantly, UDL is a scientifically sound framework that guides educational practices, recognising student diversity, aiming to minimise barriers to learning, and upholding high expectations for all students (CAST, n.d.).

UDL is not a solution that works universally; rather, it is a set of curriculum design principles that empower all students to reach their full learning potential by ensuring fair and equal opportunities. Meyer et al. (2014) argue that the UDL principles create three interrelated brain networks: the recognition network, the strategic network, and the affective network. First of all, learners perceive the information provided through the recognition network. Subsequently, learners engage with and act upon this information through the strategic network. Finally, learners establish emotional ties with the provided information through the affective network. Based on these interrelated brain networks, UDL incorporates

three principles: 1) providing diverse ways of representation (providing information in various formats); 2) offering diverse ways of engagement (providing multiple means for students to engage with content); and 3) providing diverse ways of expression (enabling students to showcase their comprehension skills in different ways) (Meyer et al., 2014). By applying the above principles, teachers can ensure that every student has the potential to become an expert learner. While an expert learner might not be the highest-achieving student, he/she demonstrates curiosity, motivation, and a readiness to take responsibility for his/her own decisions, persisting with experimentation of new strategies until he/she reaches his/her goals (Novak, 2019). While UDL focuses primarily on curriculum, instruction, materials, and assessment, the importance of physical spaces and school infrastructure in creating inclusive learning environments must also be recognised (Rogers-Shaw et al., 2022). In summary, UDL is a strategy for implementing inclusive education by reducing barriers to learning and promoting expert learners.

The Role of School Principals in the Context of Change

Research (e.g., Fullan, 2007; Leithwood et al., 2007) has shown that the principal is the most important factor in implementing changes and innovations in the school. Studies place great emphasis on school principals' skills and abilities, including their ability to instigate the process of change (Kin et al., 2018), their ability to manage change (Kotter, 2012), their ability to facilitate change (Fessehatsion, 2017), their ability to prepare staff for change (Baesu, Bejinaru, 2013), and various other related abilities. The role of school principals therefore goes beyond administrative tasks and plays a central role as a catalyst for change within the educational institution (Fullan, 2007).

School principals are responsible for raising awareness of the necessity for change, developing a vision and strategies for change, and communicating these to all stakeholders (Corrigan & Merry, 2022). Principals also need to provide support, motivation, and empowerment for teachers to ensure a smooth change process (Govindasamy & Mestry, 2022). Walk's (2023) research illustrates a direct correlation between leaders' resistance to change and the resistance exhibited by their followers. Furthermore, as noted by Marzano et al. (2005), school principals need to ensure that teachers have the resources, materials, and support they need to implement changes effectively.

MacFarlane and Woolfson (2013) claim that teachers' instructional behaviour is most often predicted by what they believe their principal expects. Moreover, the principal's expectations shape teachers' positive or negative attitudes or beliefs about their instructional practice (Grillo, 2021). Hence, the school principal's role as a facilitator of change is interconnected with his/her role as an instructional leader. Acting as instructional leaders, school principals are

entrusted with the duty and the official capacity to establish an environment conducive to curriculum and instruction that integrates contemporary principles of teaching and learning in schools.

However, it is essential to highlight that in the current age of complexity, district-level support and structural changes are also needed to enable principals to manage changes effectively.

Materials and methods

To offer insights into the research question of this study—*What is the role of school principals in implementing UDL in K-12 schools?*— a qualitative research design and an interpretative research paradigm were chosen.

Participants

UDL as a framework was introduced to the Lithuanian community of educators as part of the informal teacher development programme in the national project “Time for Leaders” (2019–2020). This study is based on research carried out in *one municipality* that joined the project in 2019 (a total of 20 schools of different types participated in the project). The *case study* research was conducted, and field notes were taken in *three schools*, which have continued to implement UDL after the project, and in the *Education Department* of the municipality. A total of five informants participated in this study (codes: I1- teacher, I2, I3 vice-principals, I4 - representative of the municipality, I5 principal).

Data Collection

The data forming the basis of this study were collected through *in-depth semi-structured* interviews. This type of design allowed the research problem to be explored from multiple perspectives (Creswell & Clark, 2010). In addition, this type of data collection was the most appropriate method because it allowed for the exploration of individual experiences and/or opinions regarding the phenomenon under study. The interviews consisted of a series of open-ended and closed-ended questions related to the implementation of UDL in school life. These questions were formulated in line with Novak and Rodriguez’s (2016) proposed and explained five phases of the UDL implementation process: explore, prepare, integrate, scale, and optimise.

In a study with a relatively small sample size, such as this one, the focus is not so much on comparing the cases. Therefore, the questions do not need to be very standardised and can be relatively open.

The study was conducted in 2021–2022. The interview lasted between 30 and 40 minutes.

Data Analysis

This study employed inductive thematic analysis to analyse the qualitative data (Braun & Clarke, 2006). Thematic analysis was carried out by means of the following steps: transcription, reading and familiarisation, coding, searching for themes, reviewing themes, defining, and naming themes (Braun & Clarke, 2006). All transcripts were carefully examined several times; the thematic method outlined a process for thoroughly identifying, analysing, and summarising themes within the data set to uncover recurring patterns of meaning.

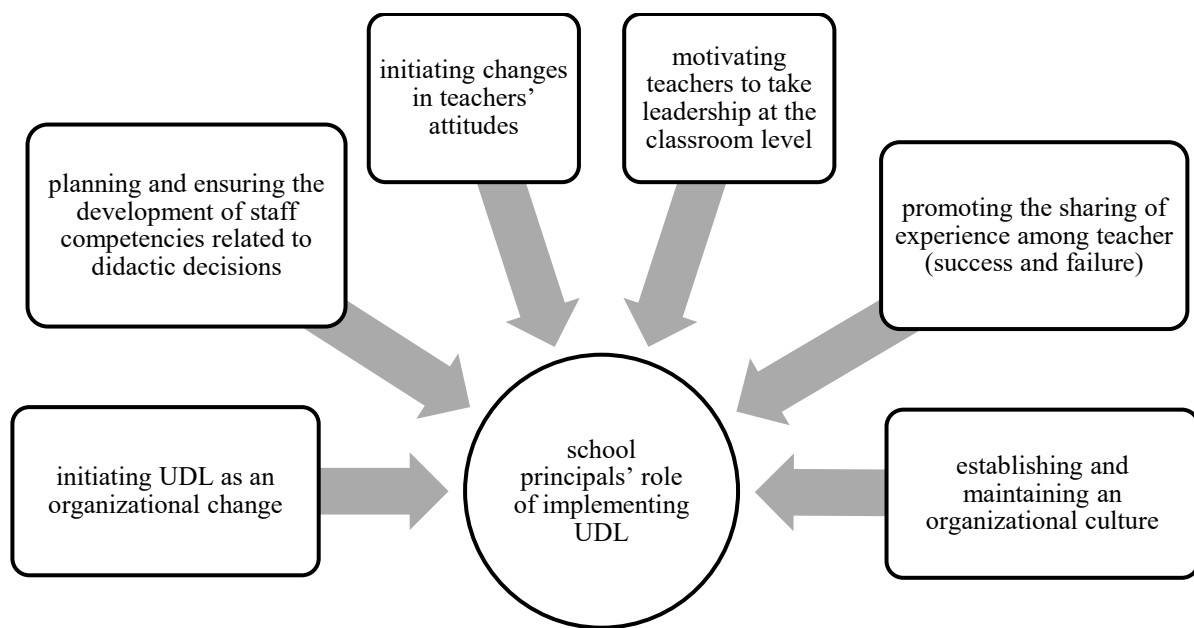


Figure 1 **Sub-theme map** (created by authors)

The data were examined and the findings were organised around the central theme—*the role of school principals in implementing UDL*. The analysis of the qualitative data revealed six sub-themes (see Figure 1).

Trustworthiness

The trustworthiness (Korstjens & Moser, 2018) of this research was ensured in several ways. All transcripts and written materials were meticulously reviewed several times by two researchers independently. The thematic method outlined a process for thoroughly identifying, analysing, and summarising themes within the data set to uncover recurring patterns of meaning. The sub-theme schemes developed by the researchers were critically reviewed by the research team; a comparative analysis was performed, and an integrated approach was established, thereby enhancing the confirmability and reliability of this research.

Research results

Initiating UDL as an organizational change

The schools participating in the study come from one region. In 2019, they all joined the project, so that a total of 20 schools of different types (preschools, primary school, basic schools, and gymnasiums) participated in the project. The basic principle was that each school should have a team consisting of the school leader (the principal or the deputy) and **volunteer** teachers. Three school representatives and one informant from the Education Department participated in the study. In all of these schools, UDL implementation processes have continued to be implemented after the project. The project involved between 3 and 10 volunteer school representatives from each school.

Planning and ensuring the development of staff competencies related to didactic decisions

Teachers who participated in the project shared their experiences with other schoolteachers; the dissemination of good practices took place in methodological groups. A large conference was also organised to introduce teachers to the UDL strategy. As one informant said, “UDL is not something completely new. Teachers have been applying many aspects of UDL, but they don’t recognise them as UDL” (I1).

“The whole community was familiarised with UDL during the project meetings. Then we looked for volunteer teachers who would try to implement UDL in the educational process. I would say that the sharing of experiences between teachers in the district was the greatest success” (I4).

“Information about the UDL strategy was provided to the pedagogical community during the teacher meetings and individually” (I3).

Initiating changes in teachers’ attitudes

Introducing innovations into the educational process is not easy, and there is often resistance to change within communities. As one informant notes, “I would call it a challenge to change teachers’ attitudes that UDL is only for students with special needs. Other teachers said they had been doing things the same way for a long time, and there was no need to change” (I2).

Another informant says: “Changing attitudes is a long and time-consuming process. I don’t think that forcing all teachers to switch to the UDL strategy would be effective. It’s important to get to know your team, to understand what they live for and what they’re interested in, and to find out who needs more encouragement, who needs a firmer word, and so on. In our school, we didn’t start implementing

UDL at the school-wide level; we started with volunteers who became leaders in implementing UDL practices” (I5).

In their statements, the informants revealed that “there are still teachers who believe that students should adapt to the teacher and not the other way round. Hence, we need to watch films, read books about the UDL strategy, and include the topic of the integration of UDL in the annual performance reviews with teachers” (I1).

“Some need to be pushed, others need to be praised and encouraged, and find ways to reach them. In general, a lot is done to change teachers’ attitudes and to see the child” (I3). An essential aspect was highlighted: “It is necessary to build teachers’ self-esteem so that they can implement UDL” (I2).

The informant from the Education Department noted that “the most important thing is that the leader is part of the team and understands where the school is heading. This is related to changing attitudes, so teachers need human support,” and at this point, the informant highlights the role of the leader (I4).

Motivating teachers to take leadership at the classroom level by implementing UDL

The research revealed that the teachers were motivated to become leaders in a number of ways. “Volunteer teachers participated in the training, were given homework, and had to try to apply in their lessons and share their experiences with other colleagues. An important condition was that students and parents should be informed about UDL” (I5).

Another strategy for motivating teachers to take on leadership was identified as classroom observation. “In this way, school leaders could see that teachers are actually using UDL elements even though they claim they are not”. The informant noted that “we need to show teachers that they are already using UDL elements and where more UDL elements could be incorporated into the educational process” (I3).

Promoting the sharing of experiences among teachers, identifying both success and failure factors

All the informants noted that it was not easy to engage unmotivated teachers in this change.

It was emphasised that “the most important factors include focusing on staff, recognising their work, praising them, and motivating them. Teachers need to feel supported by their leader because, in implementing UDL, they take on additional, previously unfamiliar, and complex tasks when they could have chosen to do nothing and work as they always have” (I2). The data analysis revealed the goal of the leaders: “We should strive that as many teachers as possible deeply

understand the UDL strategy, note its differences from differentiated instruction and individualisation, practically apply UDL or its elements, share their good experiences, and communicate about the differences” (I5). It was noted that frequent changes in various requirements related to the planning of school activities and lessons posed certain challenges in their implementation in practice. A lot of time, effort, practical experience, and a sense of meaning in the innovation were required for change and innovation to come into the classroom and become sustainable. One informant claimed that “we aim to reduce challenges and barriers by drawing on teachers’ experiences and encouraging them to share good and specific examples. In this regard, the most significant help comes from teachers’ collegial assistance and active leadership” (I4).

“Teachers who implement UDL in their work are invited to practical experience-sharing events where they share their positive experiences. Teachers who use UDL systematically and consistently experience more success in their work and are able to see the benefits of UDL by observing changes in students’ learning,” claimed the informant (I3).

Establishing and maintaining an organisational culture based on the UDL principles

In the context of implementing UDL, several aspects of changing an organisation’s culture emerged. One informant noted that “in the school’s strategic document, a direction for UDL implementation has emerged in terms of measures, goals, and the alignment of UDL with the school’s vision. For example, there is a provision that all lessons should end with reflection and that teachers should apply and focus on formative assessment” (I5).

Another informant argued that there is a long way to go before UDL becomes part of the culture of the institution. The informant doubted whether “the UDL strategy based on the school’s culture exists in the gymnasium; it’s just the beginning of the journey”. The informant noted that they encountered a sceptical attitude from many teachers: “Why should we change our approach to education? Where would we find the time for such changes? It’s complicated to implement, and it’s unclear whether UDL will improve the performance of students and others. When implementing organisational culture change, it’s important not to rush and to implement it slowly because it takes time” (I2).

It was noted that “the change in the educational process occurred to the extent that the teacher planned and implemented it. However, communication between teachers changed, i.e., teachers began to offer students a choice of learning resources, learning methods, and assessments. When these UDL elements become part of every lesson, students naturally choose learning materials, whereas the change that used to require a lot of attention becomes a standard learning environment. Integrated science tasks and long-term science

projects are prepared applying UDL. To ensure the implementation of UDL, we looked for opportunities for additional funding for this activity (both for the purchase of educational resources and for the remuneration for teachers' work). When planning activities for 2023, activities integrating UDL elements are also planned in cooperation with the pedagogical community" (I3).

The Role of School Principals

All the informants emphasised that the key role of a leader is to ensure continuous encouragement, support, consultation, assistance, and trust in teachers.

"It's important to make sure that teachers have the necessary resources. Without creating a high-quality learning environment that guarantees choices, one cannot expect systematic implementation of UDL. It's crucial to have an agreement on the application of the UDL strategy, ensuring the necessary resources for UDL-based education and the development of teacher qualifications" (I3). "Once the decision has been made to implement the UDL strategy, the role of the leader is to ensure that all teachers learn to apply UDL with students of all age groups. Preliminary agreements and funding for the provision of resources needed for the UDL strategy are important. Given the opportunity to choose resources, teachers would naturally accept the application of the UDL strategy in planning and implementing the curriculum" (I3). "I see my role as a principal as leadership in general. First and foremost, it's about motivating staff, preparing them for change, creating conditions, and empowering staff members to act and participate in changes as well as encouraging them to be leaders in the classroom and initiators of change in the school culture. All these things are important, including the implementation of UDL" (I1).

Ensuring the implementation of change and sustainability requires the school leader to actively participate and learn together with teachers, "because the leader is a supporter, a spiritual supporter, and a financial supporter, a supporter of the environment and spaces..." (I4).

The leader has the power to encourage teachers to voluntarily embark on the UDL journey, which is a voluntary process. Another important aspect is that the leader can help teachers who are implementing UDL by not overburdening them with additional activities but, where possible, freeing them from tasks. Another crucial aspect is that the sustainability of UDL depends on the leader and on how much UDL remains in schools after the project.

Discussion and conclusions

Grillo's (2021) study shows that the majority of teachers already hold favourable attitudes towards inclusivity-oriented teaching practices like UDL, but

insufficient support from the school administration hinders the successful implementation of the strategy. Therefore, presented study aimed to provide answer regarding *what is the role of school principals in implementing UDL in K-12 schools in Lithuania?*

The data of our study revealed that in implementing the UDL principles in practice, school principals envisage the importance of their leadership in the following areas: initiating UDL as an organisational change; planning and ensuring the development of staff competencies related not only to didactic decisions, but also to changes in teachers' attitudes; motivating teachers to take leadership at the classroom level by implementing UDL; as well as promoting the sharing of experiences among teachers, recognising both success and failure factors. An important aspect of school principals' activities is the provision of technologies and resources needed to change educational practices at school. The main challenge for school principals is to establish and maintain an organisational culture based on the UDL principles.

In summarising the findings of this study, it is important to note that school principals serve an important leadership function as facilitators in the process of implementing UDL (Pan & Franklin, 2011). It should also be pointed out that school leaders play a crucial role in establishing schoolwide support for UDL (Fovet, 2020). In this particular context, the importance of distributed leadership is highlighted, with a specific emphasis on collaborative practices aimed at meeting the needs of all stakeholders (Drescher et al., 2014) and increasing the efficiency of the organisation as a whole (Bergman et al., 2012; Wang et al., 2014). In addition, school principals' instructional leadership plays an important role in implementing UDL in school practice (Grillo, 2021). Research by Carson et al. (2007) shows that when the school principal exhibits instructional leadership practices, teachers are more inclined to engage in self-reflection, enhance teaching practices accordingly, take risks, adopt new teaching strategies, be more mindful of student diversity, and prepare and plan lessons more carefully.

This study expands the scope and content of management and leadership research by identifying school principals' roles, main responsibilities, and challenges implementing new practices.

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