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TEACHERS' PERSPECTIVES ON THE USE OF UNDERSTANDING BY DESIGN (UBD) IN SECONDARY SCHOOL LESSON PLANNING

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Abstrak

Penelitian ini bertujuan untuk menganalisis perspektif guru mengenai penerapan pendekatan Understanding by Design (UbD) dalam rancangan pembelajaran di tingkat SMP dan SMA. Penelitian ini menggunakan metode desain kualitatif dengan pendekatan analisis induktif. Data dikumpulkan melalui wawancara semi-terstruktur dengan tujuh partisipan yang merupakan guru bahasa Inggris di tingkat SMP dan SMA. Hasil penelitian menunjukkan bahwa mayoritas guru memiliki pemahaman yang baik hingga sangat baik tentang konsep UbD dan Backward Design, dengan hanya satu responden yang menunjukkan pemahaman rendah. Sebagian besar guru telah mengimplementasikan UbD dalam praktik pembelajaran mereka dan menunjukkan komitmen tinggi terhadap pengembangan diri dalam penerapan UbD. Namun, dua responden melaporkan tingkat pengembangan diri yang sedang. Temuan ini mengindikasikan bahwa guru-guru sudah cukup familiar dengan konsep dasar UbD, tetapi masih ada tantangan dalam pengembangan berkelanjutan. Penelitian ini menyarankan perlunya dukungan yang lebih intensif dan pelatihan berkelanjutan untuk memaksimalkan penerapan UbD di kelas..

Kata kunci : Understanding by Design (UbD); perencanaan pembelajaran; perspektif guru; pengembangan profesional; desain terbalik.

Abstract

This study aims to analyze teachers' perspectives on the implementation of the Understanding by Design (UbD) framework in lesson planning at the junior and senior high school levels. A qualitative design method with an inductive analysis approach was used in this study. Data were collected through semi-structured interviews with seven participants, all of whom are English language teachers at the junior and senior high school levels. The findings reveal that the majority of teachers have a good to very good understanding of the UbD and Backward Design concepts, with only one respondent showing a low level of understanding. Most of the teachers have implemented UbD in their teaching practices and demonstrate a high commitment to self-development in applying UbD. However, two respondents reported a moderate level of self-development. These findings indicate that teachers are relatively familiar with the basic concepts of UbD, but challenges remain in ongoing professional development. This study suggests the need for more intensive support and continuous training to maximize the implementation of UbD in the classroom.

Keywords*: Understanding by Design (UbD); lesson planning; teacher perspectives; professional development; backward design*

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I. Introduction

Understanding by Design (UbD) has become an increasingly popular pedagogical framework in contemporary education. This approach offers a new paradigm in lesson planning that emphasizes the development of deep understanding among learners. UbD begins with the establishment of clear and measurable learning goals, followed by the identification of relevant assessments and engaging, authentic learning experiences. The central purpose of UbD is to ensure that students not only memorize information but also genuinely comprehend the concepts being taught. This approach encourages students to think critically, creatively, and apply knowledge in contexts that are relevant and aligned with the demands of the modern world (Chaisa & Chinokul, 2021; Davis & Autin, 2020).

In its implementation, UbD provides teachers with the freedom to create more adaptive learning activities that consider the diverse needs, interests, and backgrounds of their students. The backward design model, which is the core of UbD, allows teachers to plan learning by first identifying the desired learning outcomes. Only after this step do they design assessments and learning activities that support the achievement of those goals. This approach ensures that all aspects of the teaching process are aligned with the intended outcomes, ultimately improving the effectiveness and relevance of the learning experience.

Several studies have shown that the application of UbD can enhance the quality of teaching and contribute to the professional development of educators. According to Utami and Bram (2023), UbD is a valuable method as it fosters teachers' professional growth and increases students' motivation to learn, creativity, and critical thinking skills. Moreover, UbD has been found to improve student learning outcomes (Rahmawati, 2023) and proves to be effective in curriculum design (Setiyawati, 2023). UbD is also said to be effective in developing the skills and knowledge of both lecturers and students in Teacher Professional Education programs in relation to curriculum design (Ramli, 2023). The backward design structure that forms the foundation of UbD enables teachers to design learning experiences that are relevant to students' lives, which in turn boosts their interest and motivation. Tomlinson (2014) further explains that UbD assists teachers in strategically planning lessons that encourage reflection and enhance their ability to design effective learning experiences. It emphasizes a deep understanding of concepts rather than mere memorization.

Furthermore, Khanum and Saeed (2020) highlight that the diverse perceptions of teachers when designing lessons can affect the implementation of UbD in the classroom. Few teachers fully apply the design, which indicates the need for greater support and training. Chin-Wen Chien (2019) also underscores the importance of innovative learning, connecting material to everyday life, integrating warm-up activities before lessons, and final tasks such as presentations or learning products. This approach suggests that teachers' development and understanding of UbD-based lesson designs can help create more meaningful and relevant learning experiences.

While most previous studies have focused on the theoretical aspects and advantages of the UbD model, as well as its general implementation, this research differs in that it specifically analyzes teachers' perspectives on applying UbD in the current educational context. This study explores how teachers design and implement lessons using this approach and examines the challenges and opportunities they encounter. It also aims to assess how UbD influences the quality of teaching and learning outcomes.

The main objective of this study is to provide a deeper analysis of the application of Understanding by Design (UbD) within the context of current education, particularly from the teachers' perspective. This research aims to provide an overview of how teachers understand and implement UbD in designing lessons and how this affects the quality of the learning process and outcomes.

The hope is that this study will offer new insights into the application of UbD in schools, particularly in enhancing the effectiveness of learning through a more structured approach that emphasizes deep conceptual understanding. The findings from this study are expected to contribute to the development of more meaningful and relevant teaching practices in the field of education. Academically, the research is anticipated to enrich the literature surrounding UbD implementation and provide practical recommendations for enhancing teacher professionalism and creating more adaptive, student-centered lesson designs.

II. Methodology

This study employs a qualitative research method with a descriptive approach, aimed at providing a deep understanding of the phenomenon occurring in the field. This qualitative research focuses on descriptive data analysis and tends to use an inductive approach to draw conclusions from the findings collected in the field (Mustafa, 2022). The approach emphasizes understanding the meaning, reasoning, and definitions of a situation or event within a specific context (Rukin, 2019). The strength of the qualitative method lies in its ability to explore information related to everyday life and its flexibility during the research process, which allows for adjustments as new data emerge during the study.

In this research, theoretical foundations are used to provide an overview of the topic being studied and to assist in deepening the findings obtained from the field. Relevant theories also play a crucial role in shaping the direction of the research and serve as a basis for analyzing the research results. This study is descriptive in nature, emphasizing not only the final results but also the process that takes place during the research. This is in line with the characteristics of the qualitative approach, which prioritizes understanding the context and phenomena under investigation over rigid final outcomes.

Qualitative research, also known as interpretative research, naturalistic research, or phenomenological research, places a significant emphasis on obtaining a deep understanding of the perspectives of individuals or groups involved in the study. The research process is dynamic, and it may change according to new findings that emerge in the field. Therefore, the sequence of research activities can be adjusted based on the progression of data obtained. This flexibility ensures that the study remains responsive to the evolving understanding of the topic being researched.

The main objective of this approach is to develop new understandings or concepts, which can ultimately enrich existing theories. This study uses a grounded theory approach, where the theory generated is derived from the data found in the field. The theory does not come predefined but develops alongside the process of data collection and analysis. The grounded theory approach allows for the emergence of new insights that are directly tied to the realities observed in the research setting.

To collect data, this study uses a questionnaire with a dichotomous scale, which presents statements with only two possible responses, such as "yes" or "no." This dichotomous scale allows respondents to provide clear answers, while also giving them the opportunity to remain neutral, avoiding any tendencies toward biased responses. This method is expected to yield more objective data, as it simplifies the response process and focuses on obtaining direct, unambiguous feedback from participants.

The selection of research participants is done purposively, involving seven English teachers who teach at both junior high school (SMP) and senior high school (SMA) levels. Participants are chosen based on their experience in implementing Understanding by Design (UbD) in their English language teaching practices at their respective schools. By involving experienced teachers, this study aims to offer a more representative picture of teachers' perceptions and the implementation of UbD in the context of current education. This approach ensures that the findings reflect a diverse range of experiences, providing valuable insights into the practical application of UbD in real classroom settings.

In summary, this study seeks to deepen our understanding of the application of UbD in schools by focusing on how teachers perceive and implement this framework in their teaching. Through its qualitative, descriptive approach, it captures the complexities of UbD's implementation and the challenges teachers face in applying this pedagogical model. By gathering data from experienced teachers, the study aims to contribute to the existing body of knowledge on UbD and offer practical recommendations for improving teaching practices.

III. Finding and Discussion

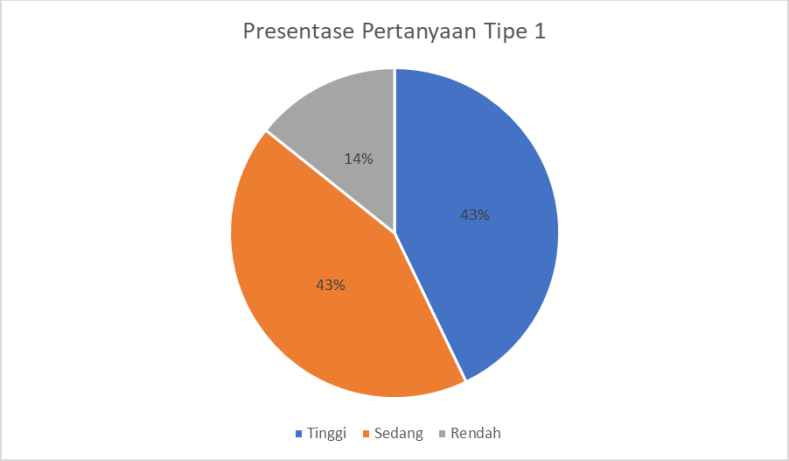
A. Finding

This study aims to analyze teachers' perspectives on the implementation of Understanding by Design (UbD) in lesson planning. Based on the results of a questionnaire distributed to seven English teachers from both junior high school (SMP) and senior high school (SMA) levels, it can be concluded that the majority of teachers have a good understanding of the concept of UbD and Backward Design and apply this approach with varying degrees in their teaching processes. Below are the detailed results obtained from the administered questionnaire.

1. Understanding of Understanding by Design (UbD)

From the results presented in Figure 1, it can be concluded that the majority of teachers have a good understanding of the concept of Understanding by Design (UbD). The percentage of teachers who have a high understanding of UbD reaches 43%, while 43% of teachers demonstrate a moderate understanding, and 14% of the surveyed teachers have a low understanding of the concept of UbD and its application in classroom teaching.

Figure 1 Understanding of UbD



This figure indicates that the majority of teachers have understood the core concept of UbD, which focuses on designing lessons oriented towards deep understanding, rather than merely mastering the material. A good understanding of UbD is crucial because this concept heavily relies on teachers' understanding of the ultimate learning goals they aim to achieve. In its implementation, a higher level of understanding of UbD will positively impact the quality of the teaching provided by educators, as they will be able to design clearer goals and more measurable learning outcomes.

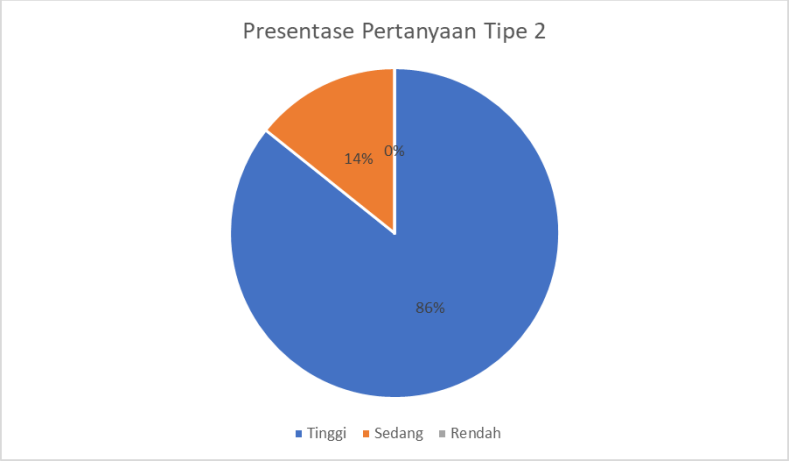
However, this result also highlights a challenge, as 14% of teachers still have a low understanding of UbD. This could be attributed to limitations in training or experience that some teachers have in using UbD as an instructional approach. Nevertheless, the 43% of teachers with moderate understanding suggest that there is room for further

development, either through additional training or collaborative learning among peers at the school.

2. The Understanding of Backward Design

Figure 2 illustrates that nearly all of the teachers who were surveyed possess a high level of understanding regarding the Backward Design approach. Specifically, 86% of the teachers demonstrated a strong grasp of how to implement this backward design framework in their teaching practices. This suggests that most teachers are familiar with the process of planning their lessons by first identifying the desired outcomes and then determining the appropriate assessments and learning activities to achieve those goals. On the other hand, 14% of the teachers exhibited a moderate understanding of Backward Design, indicating that while they are somewhat familiar with the approach, they may still require additional support or training to fully integrate it into their teaching methods.

Figure 2 Understanding Backward Design



A strong understanding of Backward Design is essential, as this approach forms the core framework of Understanding by Design. In Backward Design, the planning process begins with clearly defining the intended learning outcomes. Once these goals are established, teachers then determine the assessments that will measure whether these outcomes have been achieved, and only after that do they design the instructional activities that will facilitate the students' progress toward these goals. Teachers with a deep understanding of Backward Design are better equipped to create lesson plans that prioritize achieving specific, measurable results, ultimately fostering a deeper level of understanding and critical thinking skills among students.

The findings from this study suggest that most teachers have a relatively high level of proficiency in implementing the principles of Backward Design in their teaching practices. This indicates that these educators have recognized the importance of aligning their lesson plans with well-defined learning objectives and relevant assessments, demonstrating strategic thinking in their instructional design. However, a small portion of the teachers (14%) exhibit a moderate understanding of Backward

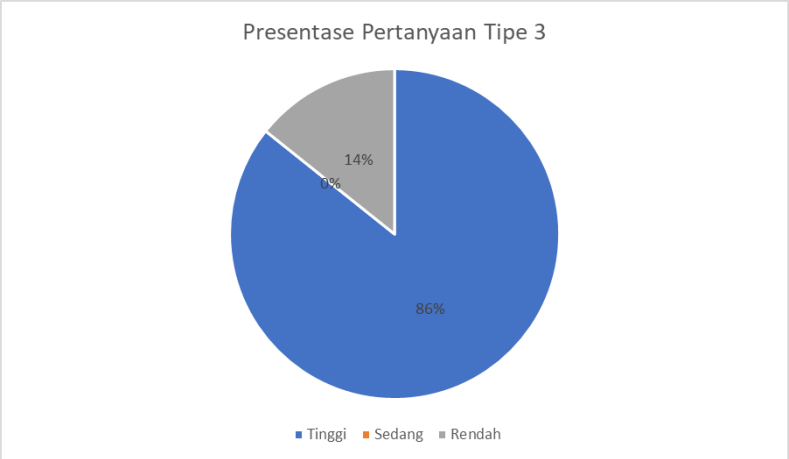
Design, which may stem from challenges in effectively connecting assessments with the specific learning goals. This gap highlights a need for further support in helping these teachers refine their understanding of how to integrate assessment strategies seamlessly into their lesson planning process.

3. The Implementation of Understanding by Design (UbD) in Teaching

From the data presented in Figure 3, it is evident that the majority of teachers, approximately 86%, have successfully implemented Understanding by Design (UbD) in their teaching practices. This substantial percentage suggests that these educators have effectively integrated the principles of UbD, ensuring that their instructional design is oriented toward promoting deep understanding and meaningful learning experiences for their students. These teachers are likely utilizing the framework of UbD to develop clear learning objectives, create relevant assessments, and design engaging and authentic learning experiences that align with the desired outcomes.

However, it is also important to note that 14% of the teachers surveyed reported a low level of implementation of UbD in their classrooms. This indicates that a portion of educators may be facing challenges in fully adopting or effectively applying the UbD framework in their teaching practices. Several factors could contribute to this, such as limited professional development opportunities, a lack of familiarity with the core principles of UbD, or the challenge of adapting the framework to their specific teaching contexts. This finding underscores the need for targeted support, training, and resources to help these teachers enhance their understanding and implementation of UbD, enabling them to better design instruction that fosters deep understanding and enhances student learning outcomes.

Figure 3 Implementation of UbD in Teaching



The high level of implementation reported in the survey suggests that the majority of teachers have begun to incorporate the principles of Understanding by Design (UbD) into their instructional practices. These educators are not merely focusing on teacher-centered instruction or the delivery of content, but are making a concerted effort to design learning experiences that foster a deeper understanding of concepts

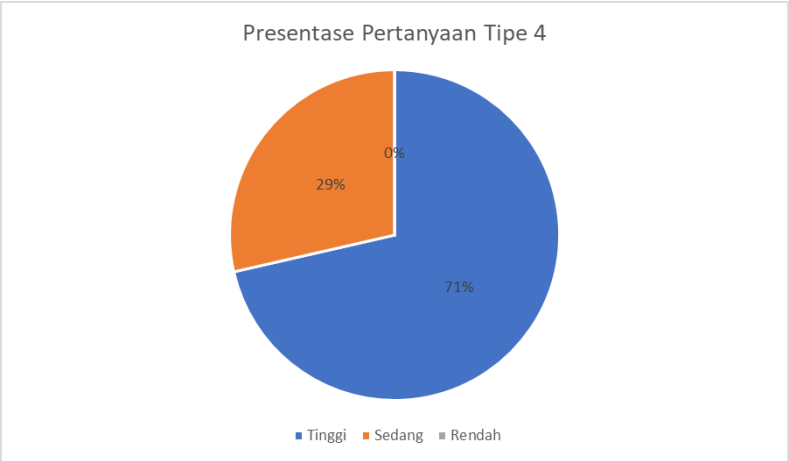
among their students. This is a critical development because the primary objective of UbD is to cultivate profound comprehension and critical thinking skills in learners, helping them to not only retain information but also to apply it meaningfully in various contexts. The shift towards such a student-centered approach highlights the growing recognition among educators of the importance of teaching for deeper learning, rather than simply transmitting knowledge.

However, despite the successful implementation of UbD by the majority of teachers, the 14% of respondents who reported low levels of implementation suggest that certain challenges remain in fully adopting this instructional model within the classroom. One possible contributing factor to the lower level of UbD adoption could be the lack of sufficient time or resources available for teachers to design lessons that align with UbD principles. Planning for deep understanding and critical thinking requires careful thought, reflection, and adequate preparation, which may not always be feasible within the constraints of a typical school schedule. Moreover, other factors such as school policies, limited access to professional development opportunities, or a lack of comprehensive training on the UbD framework could also be influencing the extent to which teachers are able to implement UbD effectively. These challenges indicate the need for targeted interventions, including time management strategies, improved access to resources, and more robust professional development programs, in order to help educators fully realize the potential of UbD and enhance the quality of their teaching.

4. Teacher Professional Development in the Implementation of Understanding by Design (UbD)

The results from Figure 4 indicate that a significant majority of the teachers exhibit a relatively high level of self-development in the implementation of Understanding by Design (UbD). Specifically, 71% of the teachers show a high degree of self-development in applying UbD principles within their classrooms, while the remaining 29% report a moderate level of self-development when implementing UbD. This suggests that most teachers are actively engaged in enhancing their skills and knowledge related to UbD, likely through continued learning, reflection, and adaptation of their teaching practices. They appear to be committed to improving the quality of their instruction and aligning their teaching strategies with UbD principles, which focus on fostering deep understanding and critical thinking among students. However, the 29% of teachers with moderate self-development may face challenges in fully embracing the UbD framework, possibly due to factors such as limited access to professional development opportunities, time constraints, or a lack of comprehensive support within their teaching environments. These findings underscore the importance of providing teachers with ongoing opportunities for professional growth and resources that can enhance their ability to effectively implement UbD in their teaching practice.

Figure 4 Teacher Professional Development in the Implementation of UbD



The high level of self-development reflected in the survey results indicates that the majority of the teachers are committed to continuous learning and improvement in enhancing the quality of their teaching practices. These teachers recognize the importance of applying Understanding by Design (UbD) as an approach that prioritizes deep understanding, rather than merely transferring knowledge. As a result, they actively seek ways to refine and enrich their teaching practices, whether through additional training, collaborating with colleagues, or engaging in literature related to UbD. This ongoing commitment to professional growth highlights their awareness of the evolving demands of effective education and their desire to ensure that their students are engaged in learning that encourages critical thinking, problem-solving, and concept mastery.

However, the 29% of teachers who report moderate levels of self-development suggest that there are still challenges in fostering a stronger commitment to continual growth, especially in relation to UbD implementation. One possible factor influencing this group is the lack of support or opportunities to engage in more intensive training on UbD. Many teachers may also face challenges in integrating new approaches into their teaching due to practical constraints, such as managing diverse classrooms, dealing with time limitations, or coping with the pressures of an already packed curriculum. These obstacles can hinder their ability to fully embrace the principles of UbD and further develop the necessary skills for effective implementation.

Based on the results, it can be concluded that Understanding by Design (UbD) and Backward Design are becoming more widely recognized and adopted by teachers in the current educational context. The majority of educators possess a solid understanding of these concepts and are making efforts to apply them in their classrooms. However, despite the relatively high levels of understanding and implementation, there remain challenges, particularly in the areas of self-development and consistent UbD application across all teachers.

It is important to note that the successful implementation of UbD requires sustained support for teachers. This can come in the form of professional development opportunities, sufficient resources, and avenues for teachers to share experiences and best practices with peers. With the right support system in place, it is anticipated that teachers' understanding and application of UbD will continue to grow, leading to more meaningful learning experiences that are centered around the development of students' deep understanding. By prioritizing such support, the implementation of UbD can become more consistent and impactful, ultimately enhancing the quality of education for all students.

Looking ahead, this research could expand its scope by involving a larger number of respondents from diverse disciplines and educational levels, as well as exploring in greater depth the factors that influence teachers' self-development in implementing Understanding by Design (UbD). By broadening the scope, this future research could provide a more comprehensive picture of both the potential and the challenges involved in applying UbD across various educational contexts. For instance, exploring the application of UbD not only within specific subjects like language arts or mathematics but also across different grade levels and types of schools (such as primary, secondary, and higher education) could reveal how UbD is adapted to various teaching environments and learner needs. Additionally, investigating the external factors, such as school policies, resource availability, and institutional support, can give a clearer understanding of how they impact the successful implementation of UbD.

Furthermore, understanding the professional development opportunities available for teachers, as well as the barriers they face in acquiring deeper knowledge of UbD, would offer insights into the ways teachers can be better supported in their growth. This could involve assessing the effectiveness of training programs, the availability of mentoring or collaborative learning communities, and the role of administrative support in fostering a culture of continuous improvement in teaching practices. By delving into these factors, the research could identify specific interventions that would help teachers strengthen their self-development and refine their UbD implementation strategies.

Thus, the findings of this study underscore the importance of both understanding and applying Understanding by Design in the context of teaching that focuses on fostering deep understanding among students. The insights gained from this research shed light on the existing challenges and opportunities in teacher professional development aimed at improving educational quality. These findings not only highlight the need for comprehensive training programs but also advocate for the continuous support systems that can sustain and enhance UbD practices. With further research, a more holistic view of UbD's application across educational contexts can emerge, contributing to more effective, student-centered teaching practices in schools worldwide.

B. Discussion

This study aims to analyze the understanding and application of Understanding by Design (UbD) in lesson planning by teachers at the junior high school (SMP) and senior high school (SMA) levels, as well as to identify the factors influencing their self-development in the context of UbD implementation. Based on the results of a questionnaire conducted with seven respondents, the majority of teachers demonstrated a good understanding of UbD and Backward Design, and have applied these approaches in their teaching practices. However, there are several challenges that need to be addressed, particularly regarding professional development and school support.

1. Understanding of UbD

From the questionnaire results, the majority of respondents demonstrated a good to excellent understanding of the UbD concept, with only one respondent (R7) showing a low understanding of UbD. This finding suggests that, in general, teachers are fairly familiar with the core principles of UbD. UbD is an instructional design approach that focuses on clear, measurable learning outcomes and aims to develop deep understanding among students. The purpose of UbD is to ensure that students not only memorize information but are also able to understand, apply, and connect the concepts they learn to real-life situations (Wiggins & McTighe, 2005).

However, despite the fact that most teachers showed a good understanding, the fact that one respondent had a low understanding of UbD indicates that there are still gaps in teachers' understanding or experience in applying this approach. It suggests that not all educators are fully equipped with the knowledge to design lessons that focus on deep understanding. This highlights the importance of providing additional professional development opportunities to ensure all teachers have the knowledge and tools necessary to implement UbD effectively. Professional development can be facilitated through workshops, seminars, or collaborative opportunities with fellow educators. Schools and educational institutions can also promote a culture of learning by encouraging teachers to share best practices and engage in reflective teaching practices (Davis & Autin, 2020).

According to several studies, when teachers grasp the principles of UbD, they are better positioned to design lessons that promote student-centered learning and foster critical thinking. For instance, research by Tomlinson (2014) emphasizes the role of UbD in promoting deep understanding and conceptual mastery, which leads to more meaningful learning experiences for students. Similarly, studies by Chien (2019) underline the importance of teacher professional development in implementing innovative instructional strategies like UbD to meet the evolving needs of students.

In this light, schools must also consider allocating sufficient time and resources to enable teachers to attend these professional development activities. Given the pressures that educators face, from large class sizes to strict curriculum requirements,

investing in professional development is essential for ensuring that UbD is successfully implemented across classrooms. Moreover, fostering an environment of ongoing collaboration among educators can significantly enhance the effectiveness of UbD by allowing teachers to share insights and improve their pedagogical practices collectively (Ramli, 2023).

Ultimately, the findings suggest that while there is a strong foundation for UbD in the classroom, there is still work to be done in ensuring that all teachers have the comprehensive understanding and practical skills to fully leverage this approach. Through continuous professional development and institutional support, UbD has the potential to become an even more integral part of educational practice, leading to a more effective and impactful learning experience for students.

2. Understanding of Backward Design

Regarding Backward Design, almost all respondents (86%) demonstrated a very good understanding of this concept. Backward Design is an instructional planning process that begins with setting the ultimate learning goals, then designing assessments to measure the achievement of those goals, and finally designing learning activities that align with the established goals and assessments. This indicates that the majority of teachers have grasped the fundamental principles of Understanding by Design (UbD), which is based on the Backward Design approach.

Backward Design is crucial to UbD because it ensures that teaching is intentionally aligned with clear, measurable outcomes. This approach emphasizes that all learning activities should be designed with the end goals in mind, allowing teachers to focus on what students need to learn and how their learning can be effectively assessed. As Wiggins and McTighe (2005) describe, this process allows teachers to reverse engineer the curriculum, starting with the desired results and working backward to ensure that the necessary instructional steps are taken. In doing so, Backward Design ensures that all elements of the teaching process—goals, assessments, and activities—are purposefully connected to one another and designed to facilitate deeper student learning.

A deep understanding of Backward Design enables teachers to create well-structured lesson plans that are both goal-oriented and competency-focused. It moves the emphasis from the mere transmission of knowledge to the development of the skills and understanding that students are expected to demonstrate by the end of the learning experience. For example, rather than focusing on delivering content for its own sake, teachers using Backward Design begin with questions such as: What should students know by the end of this lesson? How will I measure their understanding? And what activities will help them achieve this understanding? These considerations guide the overall design of the lesson plan, ensuring that the learning process is focused and effective.

In a study by Anderson and Krathwohl (2001), the authors reinforce the importance of a well-designed curriculum that is grounded in clear objectives, which is a

cornerstone of the Backward Design approach. Their work on Bloom's Taxonomy also highlights the critical thinking and application that Backward Design promotes, encouraging not just rote learning but deeper cognitive engagement with the material. Additionally, Black and Wiliam (2009) emphasize that assessment plays a pivotal role in the design process and needs to be fully integrated into the curriculum planning process. By starting with the assessment, teachers can better align their teaching practices to the desired learning outcomes.

Moreover, research by Hattie (2009) in Visible Learning supports the idea that having a clear focus on learning goals and frequent formative assessments can significantly improve student achievement. Teachers who design learning experiences using Backward Design are more likely to develop lessons that promote critical thinking, problem-solving, and real-world application of concepts. This approach helps ensure that the goals of teaching are not just about covering content but about developing students' abilities to understand and apply what they have learned in meaningful ways.

In terms of classroom implementation, teachers who are skilled in Backward Design are able to create a learning environment that is more aligned with long-term educational goals, fostering a deeper understanding of subject matter and greater student engagement. For instance, teachers may begin with big questions that challenge students to think critically, followed by assessments that require them to apply knowledge in new contexts. This process is supported by continuous feedback, which is another integral element of the Backward Design process (Hattie & Timperley, 2007).

While most of the respondents in this study demonstrated a strong understanding of Backward Design, the key challenge moving forward is ensuring that all educators have access to the necessary professional development and resources to effectively implement this approach. As some educators may struggle with integrating Backward Design into their teaching, further support from schools through targeted workshops or mentoring programs could help to overcome these obstacles. Additionally, teachers should be encouraged to collaborate and share strategies for applying Backward Design in their classrooms, thus fostering a professional learning community that supports continuous improvement (Vescio, Ross, & Adams, 2008).

By addressing these challenges and reinforcing the principles of Backward Design, educators can create a more structured and effective approach to teaching that is deeply focused on achieving meaningful and measurable learning outcomes for students.

3. Implementation of Understanding by Design (UbD) in the Classroom

The findings of the study also indicate that the majority of teachers (86%) have begun to implement Understanding by Design (UbD) in their classrooms. This strong adoption of UbD suggests that these teachers have embraced an instructional approach that focuses not only on deep understanding and skills but also on achieving

clear and measurable outcomes. The essence of UbD is that teaching goes beyond simply covering content; it emphasizes how students can apply the concepts they have learned in real-world contexts. Therefore, the implementation of UbD in the classroom is crucial for fostering deeper, more significant learning outcomes that extend beyond rote memorization.

UbD's framework is based on a "backward design" process, which begins with setting clear learning goals, followed by the identification of assessments to measure those goals, and then designing activities that support students in achieving those outcomes (Wiggins & McTighe, 2005). By using UbD, teachers aim to create a learning experience where students actively engage with the material, and their learning is guided by well-defined objectives. This student-centered approach is aligned with the principle that effective teaching should focus on what students are expected to know and be able to do at the end of the instructional period, which is a hallmark of UbD (Chiesa & Chinokul, 2021).

One of the key advantages of implementing UbD is that it ensures alignment between the goals of the lesson, the assessments used, and the instructional activities. This alignment is fundamental for students to make connections between what they are learning and its application in real life. As Hattie (2009) emphasizes in *Visible Learning*, clear and meaningful learning goals, combined with frequent formative assessments, are essential for maximizing student achievement. UbD facilitates this by helping teachers design experiences that are not just about acquiring information but about understanding and applying that information critically and creatively.

Despite the overall success of UbD implementation in the classrooms, 14% of the respondents reported low levels of implementation. This finding highlights that some teachers may face challenges in fully adopting UbD due to various factors such as limited time, insufficient resources, or a lack of institutional support. For instance, teachers may struggle to design learning activities that align with UbD principles due to constraints in the curriculum or testing schedules, which often prioritize content coverage over deeper conceptual understanding (Black & Wiliam, 2009). Additionally, some teachers may not have had access to the necessary professional development opportunities to deepen their understanding of UbD and how to effectively implement it in the classroom.

It is essential to address these barriers to UbD implementation by providing teachers with the necessary resources, time, and support. Professional development programs and workshops can be particularly effective in helping teachers better understand the principles of UbD and how to design lessons that emphasize understanding and skill development. Moreover, schools should consider fostering collaborative learning environments among teachers, where they can share best practices and support each other in implementing UbD. Peer collaboration has been shown to improve teaching quality and student outcomes by creating a shared learning community (Vescio, Ross, & Adams, 2008). Teachers who collaborate can learn from

one another's experiences, troubleshoot challenges together, and refine their UbD practices through collective reflection and feedback.

Another way to enhance UbD implementation is through the use of technology, which can provide teachers with additional resources and tools to design and deliver engaging learning experiences. Digital platforms and learning management systems (LMS) can be utilized to create more interactive, student-centered lessons that align with UbD principles. For instance, teachers can use multimedia resources, interactive quizzes, and online assessments to support learning objectives and facilitate student engagement with the content. Studies have shown that integrating technology into UbD helps teachers to create more dynamic and effective learning experiences (Hattie, 2009; Anderson & Krathwohl, 2001).

Furthermore, support from school leadership plays a crucial role in the successful implementation of UbD. When administrators recognize the value of UbD and provide teachers with the time and resources necessary to engage with this approach, it increases the likelihood that teachers will embrace UbD as an effective instructional strategy (Wiggins & McTighe, 2005). School leaders can support UbD implementation by promoting professional learning communities, providing time for collaborative planning, and offering ongoing coaching and feedback to help teachers refine their practice.

In conclusion, while the majority of teachers have successfully adopted UbD in their classrooms, there remain challenges that need to be addressed to ensure its broader and more consistent implementation. By offering targeted professional development, fostering collaboration among educators, providing sufficient resources, and creating supportive school policies, UbD's implementation can be strengthened, leading to more effective teaching practices and improved student learning outcomes.

4. Professional Development in the Implementation of Understanding by Design (UbD)

Regarding professional development, the majority of teachers (71%) demonstrated a strong commitment to continually improving themselves in the application of Understanding by Design (UbD). This reflects that most teachers are motivated to learn and enhance the quality of their teaching practices. Professional development in the context of UbD means that teachers are not just focused on delivering content but are also dedicated to improving their skills in designing effective lessons that align with UbD principles.

However, two respondents (R6 and R7) showed a moderate level of professional development. This could be attributed to a lack of opportunities to attend relevant training or workshops on UbD, or possibly due to a lack of encouragement or support from the school to help them develop their skills. Therefore, it is crucial for schools to provide greater support for teachers, both in the form of structured training programs

and by creating spaces for teachers to engage in continuous self-reflection and professional growth.

Moreover, this study indicates that UbD can be implemented across various aspects of teaching, from lesson planning and material development to instructional activities in the classroom. However, the effective application of UbD requires teachers to have a deep understanding of how to design clear learning objectives, establish appropriate assessments, and create activities that help students achieve those objectives (Natala et al., 2023). Teachers must have the necessary knowledge and skills to design UbD-based learning experiences that lead to meaningful and lasting learning outcomes.

5. The Application of UbD in the Design of Teaching Modules

In terms of applying UbD to the design of teaching modules, the process begins with determining the desired outcomes for students. Assessments used in UbD emphasize performance skills—skills that can be measured through real-world tasks or projects—rather than traditional assessments that only measure theoretical knowledge. These performance-based assessments allow teachers to evaluate how well students can apply the knowledge and skills they have learned in more complex and contextualized situations (Natala et al., 2023). This shift from traditional tests to performance-based assessments is one of the most significant advantages of UbD, as it ensures that students are prepared to use their learning beyond the classroom.

The design process in UbD does not stop at setting objectives and assessments but also includes the design of the learning sequence. UbD encourages teachers to design lessons that promote critical and creative thinking and help students make connections between the knowledge they acquire and the real world. Therefore, teachers need to plan learning activities that are not only engaging but also relevant to the lives and experiences of their students. According to Wiggins and McTighe (2005), this alignment between teaching and real-world application is essential for helping students develop the skills they need to succeed in an increasingly complex and interconnected world.

Based on the research findings, it can be concluded that the majority of teachers have a good understanding of UbD and Backward Design and have implemented this approach in their lesson planning and teaching practices. However, there are still challenges related to teacher professional development and the support provided by schools. As such, ongoing professional development is essential to help teachers further enhance their skills in applying UbD more effectively. Schools also need to provide greater support, whether through resources, training, or recognition for teachers who are committed to improving their teaching practices.

Furthermore, this research highlights the importance of implementing UbD in designing learning experiences that focus on deep understanding and skills that can be applied in real-world situations. Effective implementation of UbD can lead to more

meaningful learning for students and can ultimately enhance the overall quality of education.

IV. Conclusion

Based on the discussion in this article, it can be concluded that although many teachers have adopted various learning resources from the internet, the majority still lack a deep understanding of effective methods that align with the evolving educational needs of today. Many teachers merely replicate existing methods without truly understanding how these methods meet the needs of students in the context of deeper and understanding-based learning. One method that is particularly relevant to today's education system is Understanding by Design (UbD). However, the application of UbD is still not widely known or maximally implemented by most teachers, despite the fact that the fundamental concepts of this approach could significantly impact the effectiveness of teaching.

As educators, teachers should not only be capable of teaching but also possess critical, creative, and innovative thinking to help students achieve success in the learning process and prepare them for a better future. Therefore, it is essential to make more intensive efforts to introduce and promote the UbD method to teachers, allowing them to understand and implement it more comprehensively when designing learning processes in the classroom. Effective socialization of UbD will enable teachers to gain a deeper understanding of its principles and how to adapt the method to meet the diverse needs of students.

The findings of this research indicate that teachers' understanding of UbD has indeed improved, although there are still significant challenges in its application. Many teachers still rely on pre-existing learning resources that are often not aligned with current educational developments and fail to truly grasp the core essence of the UbD method itself. This suggests that greater efforts are needed to enhance teachers' understanding and capacity to design UbD-based learning experiences. Correct implementation of UbD could lead to a significant improvement in the quality of teaching, which in turn would positively influence student learning outcomes.

To achieve this goal, there is a need for continuous professional development and training programs for teachers, focusing not only on theoretical aspects but also on the practical application of UbD. Such training can be complemented with the development of supporting teaching materials, as well as opportunities for teachers to discuss and share their experiences of implementing UbD in the classroom. Additionally, support from schools and educational institutions is crucial. Schools need to provide sufficient resources, including time, facilities, and access to relevant UbD-related materials. It is also important for schools to foster a collaborative culture among teachers, which can accelerate the process of adapting to the UbD method.

Further research is also necessary to identify the factors that affect the successful implementation of UbD in the classroom and its impact on improving student learning outcomes. Factors such as the level of teacher understanding, availability of

resources, and support from school management need to be explored more deeply in order to find solutions that can improve the effectiveness of UbD implementation.

Overall, the application of UbD holds significant potential to enhance the quality of teaching and student learning outcomes, as it promotes more meaningful and understanding-based learning. However, its success largely depends on the commitment and preparedness of teachers, adequate support from schools, and the provision of necessary resources. By continuously developing teachers' competencies in applying UbD and providing the required support, we can realize a more quality, relevant, and future-ready education system that addresses the challenges of the 21st century.

V. References

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