

Critical Discourse Analysis on Portraying the CODE-PLAN Model to Create Lesson Plan

Shofiah Nur Azizah

English Education, Faculty of Languages, Arts, and Cultures, Universitas Negeri Yogyakarta

Email: shofiahnur.2022@student.uny.ac.id

Abstract

This qualitative research examines the cognitive skills necessary for effective lesson planning within the CODE-PLAN model framework. The study investigates how the CODE-PLAN model is implemented to shape lesson planning. Using a qualitative descriptive-analytical approach and content analysis of relevant literature, the research identifies six key strands: content transformation, task creation, adaptation to learning disposition, clarity of learning objectives, unit contextualization, and phasing. The findings reveal that the CODE-PLAN model can enhance instructional practices by addressing the cognitive demands involved in lesson planning, ultimately improving educational quality and student outcomes. Challenges such as teacher training and resource limitations were also noted, highlighting the need for targeted interventions. This research contributes a valuable framework for understanding and improving cognitive demands in lesson planning, offering insights for curriculum design and teacher training programs.

Keywords: CODE-PLAN Model, Cognitive Skills, Lesson Plan.

Abstrak

Penelitian kualitatif ini mengkaji keterampilan kognitif yang diperlukan untuk perencanaan pelajaran yang efektif dalam kerangka model CODE-PLAN. Studi ini menyelidiki bagaimana model CODE-PLAN diterapkan secara kognitif untuk membentuk perencanaan pelajaran. Menggunakan pendekatan deskriptif-analitis kualitatif dan analisis konten dari literatur terkait, penelitian ini mengidentifikasi enam elemen kunci: transformasi konten, pembuatan tugas, adaptasi terhadap disposisi belajar, kejelasan tujuan pembelajaran, kontekstualisasi unit, dan tahapan. Temuan menunjukkan bahwa model CODE-PLAN dapat meningkatkan praktik pengajaran dengan menangani tuntutan kognitif yang terlibat dalam perencanaan pelajaran, yang pada akhirnya meningkatkan kualitas pendidikan dan hasil belajar siswa. Tantangan seperti pelatihan guru dan keterbatasan sumber daya juga dicatat, menyoroti perlunya intervensi yang terarah. Penelitian ini menyumbangkan kerangka kerja yang berharga untuk memahami dan meningkatkan tuntutan kognitif dalam perencanaan pelajaran, serta menawarkan wawasan untuk desain kurikulum dan program pelatihan guru.

Kata Kunci: Model CODE-PLAN, Keterampilan Kognitif, Rencana Pelajaran.

INTRODUCTION

“Lesson planning determines student learning.”¹ Based on the quotation, lesson planning will impact the quality of education provided to the students. Besides, the teacher’s role will be the main actor in creating the lesson plan. Therefore, is there any specific skill the teacher can achieve when creating a lesson plan? If any, what specific skills do teachers need to meet in creating a lesson plan? This paper proposed to present the situation of teachers’ specific skill needs to be met in lesson plans.

A lesson plan is directly related to critical discourse analysis (CDA), which focuses on examining how language and text are used to shape social practices.² The lesson plan is crucial to plan out in detail how a given class will go, what students learn, and what kinds of activities will indeed be implemented.³ However, there are obstacles met by the teacher in constructing lesson plans, such as asserting the objective of learning, creating a correlation between the objective of learning and the main competencies, building up learning materials based on learning indicators, selecting media depending on learning objective, learning material, and assessment.⁴ Therefore, cognitive skills could be a key component in addressing challenges associated with constructing effective lesson plans.⁵

Moreover, cognitive skills emphasize knowledge acquisition, production, interpretation, analysis, and dissemination.⁶ Effective organization and clear communication are essential for developing lesson plans that are structured, engaging, and adaptable, ensuring that they meet educational goals and address student needs.⁷ Supporting these findings, the importance of these

¹ María José González, Pedro Gómez & Andrés Pinzón, “Characterising lesson planning: a case study with mathematics teachers,” *Teaching Education* 31, No. 3 (September 29, 2018): 260-278, <https://doi.org/10.1080/10476210.2018.1539071>.

² Fairclough, “*Language and Power*,” (New York: Longman, 1989), 17.

³ Erin Peters-Burton, Peter Jacob Rich, Anastasia Kitsantas, Laura Laclede and Stephanie M. Stehle, “High School Science Teacher Use of Planning Tools to Integrate Computational Thinking,” *Journal of Science Teacher Education* 33, No. 6 (2022): 598-620, <https://doi.org/10.1080/1046560X.2021.1970088>.

⁴ Fitriani and Budiarta, “An Analysis of Teacher’s Lesson Plan For Learning English Through Google Classroom in Junior High School.” *Jurnal Pendidikan Bahasa Inggris Undiksha* 9, No. 1 (2021): 98, <https://doi.org/10.23887/jpbi.v9i1.36343>.

⁵ Johannes König, Albert Bremerich-Vos, Christiane Buchholtz, Ilka Fladung and Nina Glutsch, “Pre-Service Teachers’ Generic and Subject-Specific Lesson-Planning Skills: On Learning Adaptive Teaching During Initial Teacher Education,” *European Journal of Teacher Education* 43, No.2 (2020): 132, <https://doi.org/10.1080/02619768.2019.1679115>.

⁶ Johannes König, Albert Bremerich-Vos, Christiane Buchholtz, Ilka Fladung and Nina Glutsch, “Pre-Service Teachers’ Generic and Subject-Specific Lesson-Planning Skills: On Learning Adaptive Teaching During Initial Teacher Education,” *European Journal of Teacher Education* 43, No.2 (2020): 134, <https://doi.org/10.1080/02619768.2019.1679115>.

⁷ Johan Westerman, “Post-Educational Motivation to Learn Cognitive Skills in Three European Labour Markets. A Comparative Analysis of The PIAAC,” *Journal of Education and Work* 34, No.4 (2021): 459-471, <https://doi.org/10.1080/13639080.2021.1953693>.

cognitive skills in overcoming challenges associated with lesson planning emphasizes that a well-rounded approach to cognitive skill development can enhance the quality of lesson plans.⁸ Additionally, the integration of cognitive skills into lesson planning not only improves instructional effectiveness but also contributes to better student outcomes by aligning teaching practices with learning objectives and adapting to diverse classroom dynamics.⁹

In this study, the role of cognitive skills in lesson planning is explored through the lens of the CODE-PLAN (Cognitive Demands of Lesson Planing) Model, which emphasizes content, social, and time dimensions in instructional design.¹⁰ The analysis addresses three key aspects of cognitive skills such as knowledge acquisition, which helps teachers integrate current educational standards, production and interpretation, which aid in developing innovative instructional materials and analysis and dissemination, which enhance the evaluation and communication of lesson plans.

This research aims to demonstrate how these cognitive skills can be effectively utilized within the CODE-PLAN framework to tackle common challenges in lesson planning. By examining how cognitive skills contribute to each dimension of the CODE-PLAN Model, the study seeks to provide a comprehensive understanding of their role in creating well-structured, engaging, and adaptable lesson plans. However, this study lies in its critical discourse analysis of the CODE-PLAN Model, offering new insights into how cognitive skills enhance the quality and effectiveness of lesson planning. Ultimately, the research proposes to present practical strategies for integrating cognitive skills with the CODE-PLAN Model to improve instructional effectiveness and student learning experiences.

METHOD

This study employed a qualitative descriptive-analytical approach to investigate the cognitive skills required for lesson planning. Data were collected through a comprehensive review of existing literature, including books, academic journals, and previous research studies. The criteria for selecting literature included relevance to cognitive skills in lesson planning,

⁸ Miriam J. Knoef, Adrie J. Visscher, Hanno van Keulen & Martine A. R. Gijzel, "Integrated Language and Science & Technology Instruction: A Cognitive Task Analysis of the Required Teacher Expertise A Cognitive Task Analysis of the Required Teacher Expertise." *Journal of Science Teacher Education*: 3, <https://doi.org/10.1080/1046560X.2024.2361980>.

⁹ Matthias Krepf & Johannes König, "Structuring The Lesson: An Empirical Investigation Of Pre-Service Teacher Decision-Making During The Planning Of A Demonstration Lesson." *Journal of Education for Teaching* 49, No. 5: 922, <https://doi.org/10.1080/02607476.2022.2151877>.

¹⁰ Johannes König, Matthias Krepf, Albert Bremerich-Vos, and Christiane Buchhultz, "Meeting Cognitive Demands Of Lesson Planning: Introducing The Code-Plan Model To Describe and Analyze Teachers' Planning Competence." *Teacher Educator* 56, No. 4 2021: 478, <https://doi.org/10.1080/08878730.2021.1938324>.

credibility of sources, and recency of publication to ensure the inclusion of up-to-date research. A total of 14 documents, comprising 12 journal articles and two books, were reviewed to ensure a broad and thorough examination of the topic. The content analysis technique was utilized to analyze the collected data systematically. Documentation methods were employed to gather relevant documents from library resources. The analysis followed the qualitative data analysis framework proposed by Miles, Huberman, and Saldana, which involves data reduction, data display, and conclusion drawing/verification.¹¹

THE IMPLEMENTATION OF CODE-PLAN MODEL

Generally, the student's classroom sociological is a social system. The social system of classroom teaching-learning could be described through three dimensions, content, social, and time, as involved in the CODE-PLAN Model.¹² Furthermore, each dimension raises for different content to strand. Such as, the content dimension refers to the teaching as the subject matter, the social dimension refers to the setting that prioritizes social communication and cooperation, and the time dimension refers to a clearly defined order with earlier and later units that all have a beginning and an end.

Given this setting, our efforts center primarily on investigating teachers' skill levels. Specifically, the interesting research assigns to the notion of teacher planning as a process in which teachers generate decisions. In addition to knowledge of the educational context and the learning group, teachers are also required to use professional knowledge for teaching. Research on teacher accreditation has recently confirmed this.¹³ In the most up-to-date empirical studies in the field of education, a teacher's competencies are context-specific, cognitive performance dispositions that are functionally sensitive to situations and demands in certain domains.¹⁴ The competencies indicate that in some contexts and with specific demands, teachers' skills are adaptive and responsive. Based on Shulman's taxonomy of teacher knowledge, contemporary researchers often distinguish between instructors' content knowledge (CK), pedagogical content knowledge (PCK), and general

¹¹ Matthew B. Miles, A. Michael Huberman and Jhonny Saldana, "Qualitative Data Analysis A Methods Sourcebook" (United States of America, 2014).

¹² Johannes König, Mattias Krepf, Albert Bremerich-Vos, and Christiane Buchhultz, "Meeting Cognitive Demands Of Lesson Planning: Introducing The Code-Plan Model To Describe and Analyze Teachers' Planning Competence." *Teacher Educator* 56, 2021 No. 4: 481, <https://doi.org/10.1080/08878730.2021.1938324>.

¹³ Sigrid Blömeke,¹ Jan-Eric Gustafsson,^{1,2} and Richard J. Shavelson, "Beyond Dichotomies: Competence Viewed As A Continuum." *Zeitschrift für Psychologie / Journal of Psychology* 223, No. 1 (2015): 3-13, <https://doi.org/10.1027/2151-2604/a000194>.

¹⁴ Gabriele Kaiser and Johannes König, "Competence Measurement in (Mathematics) Teacher Education and Beyond: Implications for Policy." *High Educ Policy* 32, 597-615 (2019). <https://doi.org/10.1057/s41307-019-00139>.

pedagogical knowledge (GPK).¹⁵ To do their jobs well, teachers must draw from their extensive bodies of expertise and distill it into easily digestible understandings and transferable skills.¹⁶ Research on teachers' abilities has also shifted toward methods of assessment that take context-specific skills into account.¹⁷ Because of how context-specific the expertise needed for classroom management is.¹⁸ Both teacher knowledge and competence research offer promising avenues for expanding empirical methods used in lesson design. However, a theoretical framework that can envision the cognitive demands that are essential to be fulfilled throughout the lesson preparation process is required before investigating teachers' lesson planning skills.

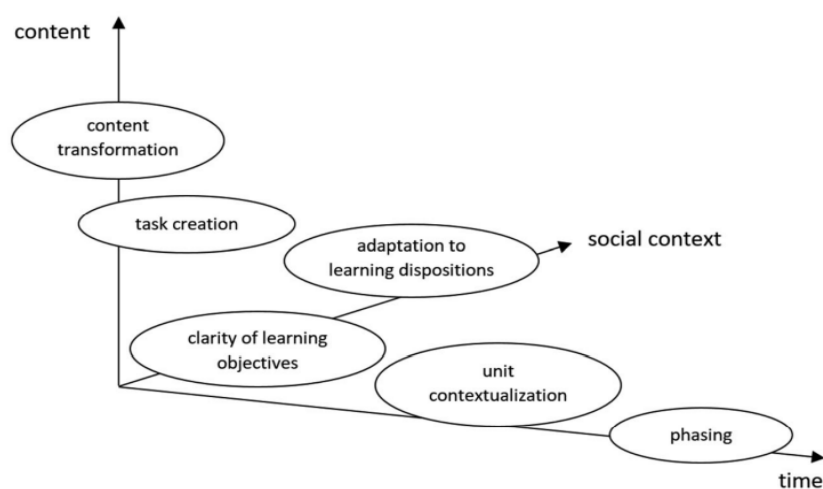


Figure 1. A simplified diagram of the CODE-PLAN model

Three dimensions serve as the coordination key in the CODE-PLAN model, which is used to focus more on cognitive demands involved with the lesson plan. At this point, the teacher is tasked with meeting all three criteria of the lesson planning phase. Its primary function is to facilitate the process of illustrating the lesson plan. The teacher's primary focus should be on the six strands, including material transformation, task generation, adjustment to learning disposition, clarity of learning objectives, unit contextualization, and phasing, and the student's learning should be phased in.

¹⁵ Sonia Gerriero, "Pedagogical Knowledge And The Changing Nature Of The Teaching Profession." (Paris: OECD Publishing, 2017), 40, <http://dx.doi.org/10.1787/9789264270695-en>.

¹⁶ Lee S. Shulman, "Knowledge And Teaching: Foundations Of The New Reform" *Harvard Education Review* 57, No. 1 (1987). 1-23, <http://dx.doi.org/10.17763/haer.57.1.j463w79r56455411>.

¹⁷ Sigrid Blömeke, Jan-Eric Gustafsson, and Richard J. Shavelson, "Beyond Dichotomies: Competence Viewed As a Continuum." *Zeitschrift fur Psychologie / Journal of Psychology* 223, No. 1 (2015): 4, <https://doi.org/10.1027/2151-2604/a000194>.

¹⁸ Trevor Mutton, Hazel Hagger & Katharine Burn (2011) "Learning To Plan, Planning To Learn: The Developing Expertise Of Beginning Teachers," *Teachers and Teaching*, 17:4, 399-416, <https://doi.org/10.1080/13540602.2011.580516>.

Content Transformation

The form of transformation is signified as pedagogical reasoning to elaborate the content. For instance, the content of transformation involves carefully examining and choosing instructional materials and representations, thinking through essential concepts and how they could be effectively expressed, such as through examples or analogies.¹⁹

Moreover, the teacher could transform the content of the teaching-learning process to design high-quality instruction, which would lead to the improvement of the teaching-learning process.²⁰ For instance, a teacher of English could select a sustainable level of reading strategies to implement into a session while focusing on a particular work of literature. The teacher would only implement those reading techniques from the huge number of options that are currently available to them that they believe are crucial to the academic growth of their class (such as repeated reading and the elaboration strategy) and compare the strategic reader to a “detective” to emphasize how important these strategies are to their student’s learning.

Furthermore, there are many different ways that content could be transformed, and appropriate considerations might be considered for the construction of lesson plans in each of these ways. Prior requirements, such as advanced content analysis and derivation of an appropriate topic for a learning context (subject-specific deduction), must be met before moving on to the second requirement, which is to align the lesson topic with the curriculum and transform a topical content to a learning content while providing justifications for the transformation.²¹ As a third potential outcome of the transformation of content during lesson preparation, a reduction in the amount of information that is well-founded didactically is

¹⁹ Johannes König, Matthias Krepf, Albert Bremerich-Vos, and Christiane Buchhultz, “Meeting Cognitive Demands Of Lesson Planning: Introducing The Code-Plan Model To Describe and Analyze Teachers’ Planning Competence.” *Teacher Educator* 56, (2021) No. 4: 470, <https://doi.org/10.1080/08878730.2021.1938324>.

²⁰ Anita Stender, Maja Brückmann & Knut Neumann, “Transformation Of Topic-Specific Professional Knowledge Into Personal Pedagogical Content Knowledge Through Lesson Planning.” *International Journal of Science Education* 39, No. 12 (2017), 1690–1714, <https://doi.org/10.1080/09500693.2017.1351645>.

²¹ Johannes König, Matthias Krepf, Albert Bremerich-Vos, and Christiane Buchhultz, “Meeting Cognitive Demands Of Lesson Planning: Introducing The Code-Plan Model To Describe and Analyze Teachers’ Planning Competence.” *Teacher Educator* 56, (2021) No. 4: 470, <https://doi.org/10.1080/08878730.2021.1938324>.

possible (e.g., a method to reduce the degree of difficulty or complexity to facilitate teaching and learning).

Task Creation

When developing a lesson plan, one of the most important aspects to focus on is the creation of learning activities that are going to be incorporated into the activities that students would be engaged in while in the classroom. At a specific time and setting, a task directs students to be active and construct their comprehension of the material.²² Therefore, demanding task creation could cover numerous difficulty levels in different dimensions. Moreover, a more concrete and effective representation of curriculum content and learning objectives for specific learning could be constructed by creating a task.

Adaption to Student Learning Disposition

Understanding the students' characteristics is necessary to create effective lesson planning. In this context, the teacher would be directed to gain the connection between the task and the student's prior knowledge.²³ Therefore, the student's attention could be gained easily in the teaching-learning process in fit with their disposition. Furthermore, the glorious discourse could be constructed based on students' learning disposition.

Learning Objectives Clarity

Through careful and efficient preparation of teaching and learning, it should be possible to meet the learning objectives. For teaching and learning to be effective, teachers need to be able to articulate learning objectives. It helps students understand what is expected of them.²⁴ When the students have a clear understanding of the learning objectives, they will have the opportunity to actively engage in the formation of their learning intentions and aims. Therefore, to establish clear expectations,

²² Hosun Kang, "Preservice Teachers' Learning to Plan Intellectually Challenging Tasks." *Journal of Teacher Education* 68, No.1 (2017), 55-68, <https://doi.org/10.1177/0022487116676313>.

²³ Johannes König, Albert Bremerich-Vos, Christiane Buchholtz, Ilka Fladung and Nina Glutsch, "Pre-Service Teachers' Generic and Subject-Specific Lesson-Planning Skills: On Learning Adaptive Teaching During Initial Teacher Education," *European Journal of Teacher Education* 43, No.2 (2020): 134, <https://doi.org/10.1080/02619768.2019.1679115>.

²⁴ Ridwan Maulana, Michelle Helms-Lorenz, and Wim Van de Grift. 2016. "Validating a Model of Effective Teaching Behaviour of Pre-Service Teachers." *Teachers and Teaching* 23 (4): 471-93. doi:10.1080/13540602.2016.1211102.

teachers should either share the learning objectives at the beginning of the class with their students or provide them with a preview of how the lesson will progress. In addition, it is essential to keep the students informed of the strategies, activities, and evaluations that would be implemented in the classroom, as well as the importance of doing so.

Unit Contextualization

Constructing contextualization of lesson units is necessary. It relates to the dimension of the time since, obviously referenced, each lesson in the schedule of the lesson would be positioned in the same way. Therefore, the unit should be referenced in the written lesson plan so that the topic selected for the unit and how it would be decomposed into subthemes might well be made clear.²⁵ To ensure that students fully comprehend the lesson unit, it is also essential to explain how the lesson's specific material varies from and contributes to the unit in general. The unit's context and explanation need to be well-structured, however, to help students learn.

Phasing

Phasing serves as an important aspect of preparation and time management in the teaching-learning process. Usually, phasing schemes are related to the pattern of classroom activities such as presentations, seatwork, etc.²⁶ Moreover, lesson planning should be created based on students' competencies to provide the appropriate activities in phasing the teaching-learning process. However, providing lesson planning by looking at the students' competencies would direct the effective teaching-learning process.

Teachers are expected to have the ability to synthesize information and methodology while developing lessons. Teachers need to accommodate their lessons to their students' variable concentrations on subject familiarity, conceptual comprehension, and misconceptions. The cognitive demands of lesson preparation are complicated by the interplay of several contents, social, and temporal contexts, all of which must be taken into account when addressing the issue of double necessity in classroom communication. On the other hand, lesson plans place even

²⁵ Johannes Konig, Mattias Krepf, Albert Bremerich-Vos, and Christiane Buchhultz, "Meeting Cognitive Demands Of Lesson Planning: Introducing The Code-Plan Model To Describe and Analyze Teachers' Planning Competence." *Teacher Educator* 56, (2021) No. 4: 472, <https://doi.org/10.1080/08878730.2021.1938324>.

²⁶ Johannes Konig, Mattias Krepf, Albert Bremerich-Vos, and Christiane Buchhultz, "Meeting Cognitive Demands Of Lesson Planning: Introducing The Code-Plan Model To Describe and Analyze Teachers' Planning Competence." *Teacher Educator* 56, (2021) No. 4: 473, <https://doi.org/10.1080/08878730.2021.1938324>.

greater cognitive demands on teachers, as they require them to contextualize units to the time dimension of the CODE-PLAN model and to consider how these factors might influence students' views on the

clarity and usefulness of the lessons they would be taught.²⁷

The CODE-PLAN is a structural model developed by Konig et al.²⁸ The model demonstrated that teachers might acquire the knowledge and abilities necessary to create effective lesson plans effectively. It is believed that evidence produced through content transformation, task creation, adaptation to learning disposition, clarity of learning objectives, unit contextualization, and phasing is crucial in constructing the validity of lesson plans.²⁹ Furthermore, research on teacher planning was conducted between the 1970s and the 1990s, and he thought that the research lines on teacher competency, teacher expertise, and teacher cognition enable empirical approaches with significant potential for advancing the scientific understanding of lesson planning. However, the CODE PLAN could serve as a blueprint for a course outline.³⁰

POTENTIAL BENEFITS AND CHALLENGES OF LESSON PLAN

The Benefit of Lesson Planning

The design of lesson planning is an essential element of the learning process in educational institutions. It is widely agreed that the key to delivering a successful lesson is careful preparation beforehand.³¹ The situation should make it possible for students to learn while they are in the classroom so that they can acquire certain competencies after the teaching-learning process has been completed. It should also provide an acceptable quality toward language acquisition so that students can gain both the value of language abilities and the value of learning the language. In addition, it is crucial to ensure that the actual teaching and learning are conducted

²⁷ Konig, J., Krepf, M., Bremerich-Vos, A., & Buchholtz, C, "Meeting Cognitive Demands Of Lesson Planning: Introducing The Code-Plan Model To Describe and Analyze Teachers' Planning Competence." *Teacher Educator* 56, (2021) No. 4: 480, <https://doi.org/10.1080/08878730.2021.1938324>.

²⁸ Johannes Konig, Mattias Krepf, Albert Bremerich-Vos, and Christiane Buchholtz, "Meeting Cognitive Demands Of Lesson Planning: Introducing The Code-Plan Model To Describe and Analyze Teachers' Planning Competence." *Teacher Educator* 56, (2021) No. 4: 473, <https://doi.org/10.1080/08878730.2021.1938324>.

²⁹ Denny Borsboom., Gideon J. Mellenbergh, & van Jaap Heerden. "The Concept of Validity." *Psychological Review*, 111, No. 4 (2004). 1061–1071. <https://doi.org/10.1037/0033-295X.111.4.1061>.

³⁰ Hosun Kang, "Preservice Teachers' Learning to Plan Intellectually Challenging Tasks." *Journal of Teacher Education* 68, No.1 (2017), 55, <https://doi.org/10.1177/0022487116676313>.

³¹ Jack C. Richard and David Bohlke. (2011). "Creating effective language lessons." (USA: Cambridge University Press 2011).

effectively and suitably. A variety of language-learning skills would be made available to the students, who can choose to pursue them based on their interests, intrinsic abilities, specific requirements, and available time and resources.

The teacher's lesson plan was crucial to the success of the classroom.³² There are two main reasons why a lesson plan is necessary. As a first and primary purpose, the lesson plan is intended to serve as a guide for teachers. While the lesson plan might well be modified to accommodate unexpected classroom events, it serves as a backup for teachers if things get out of track. Second, there is a connection between the teachers and the students in the lesson plan. The students would effectively respond to the teacher who has prepared a plan.

A teacher is better equipped to make effective use of his time, effort, and resources when they have a lesson plan. It should come as no surprise that formulating a plan for a set of lessons can be a challenging task that calls for a significant investment of time, effort, and energy. However, because the lesson plan that is generated may be used multiple times without the need to remember to change it, this helps teachers save a significant amount of time for the next few years. In addition to this, it gives teachers a wide variety of tools at their disposal, including a selection of activities, approaches, and resources with which to avoid making the learning process boring and repetitive. In addition to this, lesson plans can assist educators in accomplishing the set goals and aims properly, in addition to assisting them in developing high levels of self-confidence and resolving issues.

A lesson plan's function is to act as a guide for the teacher, providing them with the information they need to carry out the teaching and learning process in an effective manner. A lesson plan should fulfill one of three fundamental functions. They are as follows:

- 1) The lesson plan serves as an organizer for the ideas. Hence, lesson planning refers to the process of writing out both the purpose of a certain class and the processes that are intended to be followed for that class. Doing so can assist the instructor in better clarifying both aspects in their minds.
- 2) The purpose of the lesson plan is to act as a record of the concepts and activities that take place in the classroom. When working with children daily, teachers have a lot of information that needs to be kept in their heads, and as a result, their memory might get a little crowded at times. A written lesson plan can be consulted by the instructor at any point throughout the delivery of instruction to serve as a helpful reminder.

³² Jeremy Harmer. *"The Practice of English Language Teaching."* (Harlow: Longman, 2007).

- 3) The lesson plan acted as a guide for the classroom, providing direction not only for the teacher but also for any observers who might be present.³³

The Teachers' Challenges in Lesson Planning

However, lesson planning plays an important part in the educational process. Training on teachers' minds, knowledge, and skills has provided a significant amount of data in the past few decades, making lesson preparation a vital area for empirical investigation.³⁴ Understanding how teachers made judgments and articulated their thinking behind effective planning was made possible through the use of expert-novice comparisons.³⁵ This article showed that significant cognitive demands are placed on teachers during the class planning process. For instance, it might be challenging for teachers to adapt lessons to the specific requirements of their students' groups. Successful teacher's lesson plan using a process approach.³⁶ In addition, teachers shifted their educational decisions in light of their pupils' prior knowledge and abilities.³⁷ In contrast, inexperienced teachers are more likely to rely on an attempted method.³⁸ It is more likely that they would have trouble thinking about education as a whole, anticipating how classes would go, and settling on strategies that work best for their particular classroom.

Moreover, there are too many empirical findings to discuss. Still, one that stands out as particularly important is that teachers do not design their courses using the normative principles and prescriptive frameworks that they were taught in the schools that prepared them to be teachers.³⁹ For example, the standard techniques of lesson preparation (i.e., identifying learning objectives, selecting learning activities, structuring and assessing lessons, as

³³ Suparlan, "Module: English Lesson Plan." (Jakarta: Tamma University, 2010).

³⁴ Christopher M. Clark and Penelope L. Peterson, "Teachers' Thought Processes." In: Wittrock, M.C., ed., *Handbook of Research on Teaching*, 3rd ed. (New York: Macmillan, 1987) 255-296.

³⁵ David C. Berliner, "Describing The Behavior And Documenting The Accomplishments Of Expert Teachers," *Bulletin of Science, Technology & Society*, 24, No. 3 (2004):, 200-212, <https://doi.org/10.1177/0270467604265535>.

³⁶ James W. Stigler and Kevin F. Miller, "Expertise And Expert Performance In Teaching," In *The Cambridge Handbook of Expertise and Expert Performance*, ed. Ericsson, R. R. Hoffman, A. Kozbelt, 2nd ed., (Cambridge University Press, 2018), 431-452, <https://doi.org/10.1017/9781316480748>.

³⁷ Linda Enow and Andrew Goodwyn, "The Invisible Plan: How English Teachers Develop Their Expertise And The Special Place Of Adapting The Skills Of Lesson Planning." *English in Education*, 52, No. 2 (2018): 120-134. <https://doi.org/10.1080/04250494.2018.1438119>.

³⁸ Estella Williams Chizhik and Alexander Williams Chizhik, "Using Activity Theory To Examine How Teachers' Lesson Plans Meet Students' Learning Needs." *The Teacher Educator* 53, No. 1 (2018): 67-85. <https://doi.org/10.1080/08878730.2017.1296913>.

³⁹ Hosun Kang, "Preservice Teachers' Learning to Plan Intellectually Challenging Tasks." *Journal of Teacher Education* 68, No.1 (2017), 55, <https://doi.org/10.1177/0022487116676313>.

detailed by Tyler, supposed linearity that is not evident in the cognitive processes of instructors. In addition to this, teachers do not always begin with clearly articulated objectives.⁴⁰

CONCLUSION

This research underscores the importance of integrating cognitive skills into the CODE-PLAN Model to address common challenges in lesson planning. By examining the dimensions of content transformation, task creation, adaptation to student learning dispositions, clarity of learning objectives, unit contextualization, and phasing, the study demonstrates how cognitive skills can significantly enhance the quality and effectiveness of lesson plans. Each dimension of the CODE-PLAN Model plays a crucial role in ensuring that lesson plans are both comprehensive and adaptable, contributing to a more effective teaching-learning process.

The findings indicate that a well-structured lesson plan that incorporates cognitive skills not only facilitates better instructional delivery but also promotes greater student engagement and achievement. Teachers who adeptly apply these cognitive skills in their planning are better equipped to address diverse student needs, adapt to varying classroom dynamics, and achieve clear educational objectives. This approach supports the creation of lessons that are both informative and engaging, ultimately leading to improved educational outcomes.

Future research and practice should focus on further integrating cognitive skills with the CODE-PLAN Model to refine lesson planning methodologies. By emphasizing the cognitive demands of lesson preparation and addressing the identified challenges, educators can enhance their instructional practices. Such advancements will contribute to more effective teaching strategies and better student learning experiences, reinforcing the significance of thoughtful and informed lesson planning in education.

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⁴⁰ Christopher M. Clark and Penelope L. Peterson, "Teachers' Thought Processes." In: Wittrock, M.C., ed., *Handbook of Research on Teaching*, 3rd ed. (New York: Macmillan, 1987) 255-296.

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