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LEARNING IMPLEMENTATION PLAN IN THE COURSE OF LEARNING SYSTEM PLANNING STRATEGIES TO REALIZE PEDAGOGICAL COMPETENCIES OF EDUCATION STUDENTS

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ABSTRACT

Instructional System Planning is a foundational course for pre-service teachers to build professional pedagogical competence. One of the crucial outcomes of this course is the ability to develop an adaptive, systematic, and student-centered Lesson Plan (RPP). This article discusses the restructuring and implementation strategies of RPP development in the Instructional System Planning course to meet modern curriculum challenges. Using a descriptive qualitative approach, this article analyzes how technology integration, authentic assessment, and differentiated learning are formulated into RPP components by students. The review indicates that a strong theoretical mastery of instructional system design (such as the ADDIE or Dick and Carey models) is directly proportional to the quality of the generated lesson plans. This article recommends peer-feedback-based mentoring models and real-case studies in schools to enhance students' practical skills in designing effective and meaningful learning.

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INTRODUCTION

Quality education begins with thorough planning . In the context of formal education , this planning is concretely expressed in a Learning Implementation Plan (RPP). The RPP is not merely an administrative document , but rather a roadmap (blueprint) for educators to ensure that the process of knowledge transformation is effective , efficient , and measurable . Without systematic planning , classroom learning runs the risk of becoming disorganized and failing to achieve the intended learning outcomes .

The Learning Systems Planning course plays a vital role in the curriculum of prospective educators . It is designed to provide students with a deep understanding of instructional design , from needs analysis and the formulation of learning objectives , the selection of materials and methods , to the development of evaluation instruments . The ability to develop lesson plans is a key indicator of students' success in internalizing these learning systems planning theories .

However , the challenges of modern education demand more dynamic lesson plans . Today's educators are not only required to master the material , but also to be able to integrate information technology , accommodate diverse student learning styles (differentiated learning), and implement innovative , student - centered learning models . This is often a weakness for prospective teacher students , who tend to get stuck in rigid formats without understanding the philosophical essence of each component of the plan they create .

Based on these conditions , this article aims to examine in depth the process of developing lesson plans in the Learning Systems Planning course . Through this analysis , it is hoped that appropriate strategies can be found to improve the quality of learning designs created by students , so that they are not only theoretically prepared but also have practical skills that are adaptive to future curriculum changes .

DISCUSSION

Internalization of Theoretical Foundations in the RPP Structure

The Lesson Implementation Plan (RPP) prepared in the Learning Systems Planning course is often misunderstood by prospective teacher students as merely fulfilling rigid administrative documents . However , epistemologically , every sentence line and activity design in the RPP is a crystallization of various pedagogical theoretical foundations and instructional designs . Without a strong theoretical understanding , the resulting RPP will simply be a pile of random instructions that lack a clear direction for cognitive achievement . Therefore , this course emphasizes that every component of the RPP — from indicators to learning scenarios — must be rooted in relevant learning theory .

Historically and applicatively , students are invited to dissect how the Behaviorism , Cognitivism , and Constructivism paradigms influence the anatomy of a learning plan .

Learning Theory Paradigms in Learning Scenario Design

In the early stages of design , students must be able to identify when a material requires a behaviorist approach and when it should use a constructivist approach . The implementation of Behaviorism theory , which emphasizes behavioral changes as a result of stimulus and response , is materialized in the procedural and habituation aspects of the lesson plan . This is clearly seen in the determination of learning conditions (Condition) and the level of success (Degree) in the formulation of learning objectives . In addition , the provision of positive and negative reinforcement in the learning steps reflects Skinner 's theory . However , this course directs students to avoid being trapped in a rigid behaviorist pattern that makes students passive .

On the other hand , the implementation of Cognitivism theory — specifically Robert Gagne 's information processing theory — is internalized into nine instructional events (Gagne's Nine Events of Instruction). Students are trained to develop introductory activities that gain attention , inform learners of the objective , and stimulate recall of prior learning .

As the main axis of modern learning , the Constructivist principles of Piaget and Vygotsky must dominate the core activities of the lesson plan. Students are challenged to design scenarios in which the teacher no longer acts as a provider of information (teacher-centered), but rather as a facilitator who provides scaffolding or gradual assistance . In the lesson plan document , this must be explicitly stated through the design of group work , problem - based discussions , and

independent exploration activities that allow students to construct their own knowledge based on empirical experiences in the classroom .

Implementation of the Revised Bloom's Taxonomy (Anderson & Krathwohl)

One of the most crucial indicators that show the theoretical depth of students in the lesson plan is the sharpness of choosing Operational Verbs (KKO) when formulating Competency Achievement Indicators (IPK) and Learning Objectives . The Learning System Planning course radically dissects the use of Bloom 's Taxonomy revised by Lorin Anderson and David Krathwohl. Student teachers are often trapped in the use of biased , abstract , and unmeasurable verbs , such as " students understand ..." or " students know ... " . Through the internalization of this cognitive theory , students are forced to shift from merely the realm of Lower Order Thinking Skills (LOTS) to Higher Order Thinking Skills (HOTS).

In the operational narrative of the lesson plan, these cognitive levels must be arranged in a hierarchical and logical manner . At the most basic level , namely Remembering (C1), students are trained to use verbs such as identifying , mentioning , or matching to test students' long - term memory . Continuing to the Understanding stage (C2), the lesson plan is directed to include activities such as explaining , summarizing , or classifying to build meaning from the instructional process . Once the basic foundation is formed , students can increase the intensity at the Applying stage (C3) by using verbs such as implementing , calculating , or modifying procedures in new situations .

The biggest challenge in this course is to stimulate students to develop indicators at the HOTS level. At the Analyze level (C4), students are required to design activities that ask them to break down material into its smallest parts using verbs such as distinguishing , organizing , or detecting relationships between concepts . Next , at the Evaluate level (C5), the learning scenario in the lesson plan must facilitate students to make decisions based on certain criteria with verbs such as criticizing , defending , or validating arguments . Finally , at the Create level (C6), students must be able to design instructions that challenge students to combine elements into a functional work or whole , using operational verbs such as designing , constructing , or formulating an innovative project . This logical bridge between cognitive levels trains the systematic thinking skills of prospective teacher students .

Integration of Instructional Systems Design (ISD) Models

Furthermore , the theoretical basis for writing this lesson plan refers to macro frameworks such as the ADDIE Model (Analysis, Design, Development, Implementation, Evaluation) or the Dick and Carey Model. Before touching the lesson plan worksheet , students are taught to conduct an in -depth analysis phase . This phase requires students to analyze student characteristics — whether they tend to be visual, auditory , or kinesthetic learners — and analyze the complexity of the teaching material to be delivered .

The results of the analysis then become the basis for the Design phase , namely determining the strategy for delivering material in the lesson plan scenario. Internalization of this instructional system design theory provides students with a full awareness that each component in the lesson plan is interdependent . If the analysis of student characteristics shows that the class they will face has a low level of focus on conventional lecture methods , then in the lesson plan scenario component , students must dare to design a game -based learning model or direct practicum . Thus , the lesson plan is no longer seen as a mere formality , but as a holistic system that is

logical , scientific , and can be accounted for its academic effectiveness when implemented in the field .

Core Component Analysis : Synchronizing the " Golden Triangle " of Learning

After mastering the theoretical foundations of instructional design , the biggest practical challenge for students in the Learning Systems Planning course is establishing internal consistency across components within the lesson plan. In the world of curriculum and learning planning , there is a concept known as the " Golden Triangle " of Learning or the principle of constructive alignment. This principle states that an effective lesson plan must demonstrate an unbroken linear relationship between three core elements: learning objectives , learning activities , and evaluation or assessment . In the classroom, student teachers often fail to see this connection , resulting in flawed lesson plans — where what is tested does not match what is taught , and what is taught does not reflect the original objectives .

Reconstruction of Learning Objective Formulation (Objectives)

The ideal lesson plan always starts from the downstream , namely by clearly defining what students must master by the end of the session . A classic problem found in the initial draft of students ' lesson plans is the formulation of objectives that are too broad , biased, and abstract . For example , students often write objectives such as " Students can understand the concept of ecosystems ." From a learning system planning perspective , the word " understand " is a black trap because it does not indicate real behavioral indicators that can be observed and measured in the field .

To overcome this , students are trained to use the ABCD formula (Audience, Behavior, Condition, Degree). Through this systematic approach , the abstract objectives are reconstructed into more operational ones , for example : " Through observing the school environment (Condition), seventh grade students (Audience) can describe at least three biotic and abiotic components (Behavior) with a 90% accuracy rate (Degree)." This specific writing forces students to think tactically from the start . They are forced to realize that each operational verb chosen in the Behavior element automatically locks and determines how the core activities and assessment instruments should be designed on the following pages .

Synchronization of Learning Models with Material Characteristics (Activities)

The second component of the Golden Triangle is the learning steps or scenarios . After setting goals , students are required to design learning experiences that can help them achieve those goals . A common mistake students make is choosing modern learning models — such as Problem Based Learning (PBL) or Project Based Learning (PjBL)—simply because they are popular or favored by lecturers , without analyzing whether the model is relevant to the characteristics of the material and the available time allocation .

The Learning Systems Planning course emphasizes that no single learning model is suitable for all types of material (no one size fits all). Students are taught to dissect the nature of the material , whether it falls into the category of facts , concepts , principles , or procedures . If the learning objectives are in the procedural realm (for example , the steps for conducting a chemical titration or the procedure for praying), then the most logical model to include in the lesson plan is Direct Instruction (hands-on learning) combined with demonstrations , not PBL which allows students to discover the procedure themselves without direction . Conversely , if the

material relates to social issues or environmental problem solving , then the syntax of PBL or Discovery Learning must be outlined in detail in the core activities of the lesson plan. Accuracy in describing the learning steps according to the syntax of the chosen model is what proves the depth of the student's methodological competence .

Valid Authentic Assessment Design (Assessment)

The final element of the Golden Triangle is evaluation . In developing the assessment section of lesson plans, student teachers often experience a disconnection or break in the instructional logic . Many cases are found where the learning objectives in the lesson plan require psychomotor or skill domains (for example , " designing a speech text "), but in the evaluation section , the instrument provided to students is actually a multiple -choice question that only tests students' theoretical memorization of speech structure . This misalignment undermines the entire learning system that has been designed .

Therefore , in this course , students are equipped with the ability to develop authentic assessment instruments . If the learning objectives are in the higher -order cognitive (HOTS) or psychomotor domain , students are required to include an objective performance assessment rubric (rubric-based assessment), complete with assessment criteria , a score scale , and clear performance descriptors . Students are also trained to differentiate and balance between process assessment (formative assessment) placed in the middle of core activities to monitor student understanding , with outcome assessment (summative assessment) at the end of the learning . By synchronizing these evaluation sheets to reflect the initial objectives , students successfully tie the three corners of the Golden Triangle of Learning into a unified lesson plan that is complete , logical , valid, and ready to be implemented in microteaching practices and in real schools .

Integration of Technology and Media in the Digital Age: The TPACK Approach

The exponential development of information and communication technology in the 21st century demands a radical reorientation in the design of learning plans . In the Learning Systems Planning course , prospective teacher students are no longer simply taught to incorporate conventional learning media such as whiteboards , printed images , or textbooks into the lesson plan. More than that , they are challenged to be able to carry out meaningful and structured technology integration . The main framework used as an analytical tool in compiling media components and learning resources in the lesson plan is the Technological Pedagogical Content Knowledge (TPACK) approach . Through this approach , technology is not seen as a mere attached element or visual complement , but rather as a cognitive bridge that is closely linked to teaching methods (pedagogy) and the characteristics of the subject matter (content).
TPACK Paradigm Construction in Learning Planning

A fundamental obstacle often encountered in the initial drafts of students' lesson plans is the phenomenon of " technology for the sake of technology ." Students often write about the use of sophisticated devices such as projectors , laptops, or digital platforms like Quizizz and Canva in their lesson plans , but when the core activity scenarios are dissected , the use of these technologies does not change the essence of learning which is still teacher-centered. For example , laptops and projectors are only used by teachers to display long texts transferred from printed books to digital screens . This shows that students only touch the Technological Knowledge (TK) dimension in isolation , without linking it with Pedagogical Knowledge (PK) and Content Knowledge (CK).

Through this course , students are guided to slice the three domains into a unified TPACK within the lesson plan. Students are trained to ask critical questions before writing media in their lesson plans : Can the selected digital technology help facilitate the visualization of abstract material ? And does the technology provide space for students to actively interact ? If the material being taught is abstract and micro , such as cell division in biology or the movement of tectonic plates in geography , then the appropriate integration of TPACK within the lesson plan is to include virtual simulation - based media or Augmented Reality (AR). Learning scenarios are then designed so that students explore the simulation independently in groups , rather than simply watching the teacher demonstrate in front of the class .

Media Selection Based on Instructional Message Design Principles

The inclusion of media components in the lesson plan must be based on theoretical principles of instructional message design and scientific media selection criteria . Students are taught that digital media selection must consider cognitive efficiency and students' cognitive load (cognitive load theory). In the lesson plan document , students must be able to explain the logical reasons why a media is chosen , how the media is accessed , and its explicit role in the learning process .

In today's digital era , students are encouraged to utilize Learning Management Systems (LMS) such as Google Classroom, Moodle, or local university/ school platforms to design blended learning . This integration should be clearly visible in the learning steps section of the lesson plan, where pre-learning activities (such as reading material or watching introductory videos) are carried out asynchronously through the LMS, so that the allocation of face -to - face class time can be optimized for interactive synchronous activities , such as in -depth discussions , project collaboration , or problem- solving . In addition , students are trained to write valid digital learning resources , including including active hyperlinks , to ensure that the lesson plan is applicable and easily accessible to anyone who will use it .

Technology-Based Evaluation Transformation (Digital Assessment)

Technology integration in lesson plans should not be limited to media components and core learning steps , but should also extend to evaluation components . The TPACK approach requires students to be creative in designing interactive yet valid digital-based assessment instruments . Students are taught to abandon conventional , often tedious , paper-and-pencil tests for formative assessment and instead utilize gamification platforms like Kahoot, Wordwall , or Nearpod.

However , this course emphasizes that the aesthetic and fun aspects of gamification should not sacrifice the quality of the questions . Students are still required to compile a strict question grid and ensure that the questions in the digital application still test the high -level cognitive indicators (HOTS) that have been determined at the beginning of the lesson plan. In the lesson plan draft , the steps for completing this digital quiz , the immediate feedback scheme from the system , and how teachers utilize the analytical data generated by the platform to carry out remediation or enrichment must be described in detail . Through this comprehensive TPACK integration , the lesson plan produced by students is transformed into a modern instructional design that is relevant to the characteristics of generations z and alpha, and ready to answer the challenges of the digitalization of formal education .

CONCLUSION AND SUGGESTIONS

Conclusion

Based on the analysis and discussion that has been described , it can be concluded that the preparation of the Learning Implementation Plan (RPP) in the Learning System Planning course is not just an activity to fulfill rigid administrative documents . The RPP is an epistemological crystallization of a critical bridge that connects the theoretical foundations of pedagogy with real practices in the classroom . Students' mastery of the integration of learning theories (Behaviorism , Cognitivism , and Constructivism) and their sharpness in operationalizing the revised Bloom's Taxonomy are the main indicators in training the systematic thinking skills of prospective educators .

The success of an instructional plan depends heavily on strong internal consistency within the " Golden Triangle " of learning , namely the absolute alignment between the formulation of objectives based on the ABCD formula, the selection of learning models relevant to the characteristics of the material , and the design of authentic assessment instruments . Furthermore , the demands of 21st - century education require prospective teacher students to not only master the content , but also be able to integrate the TPACK approach meaningfully so that technology acts as an interactive cognitive bridge . By absorbing the flexibility of the Independent Curriculum and implementing differentiated learning strategies (content , process, and product) based on initial diagnostic assessments , the resulting lesson plan is transformed into an inclusive , adaptive document that is fully centered on the unique characteristics of students .

Suggestion

1. For Lecturers Teaching Courses : It is recommended to reconstruct the lecture strategy by increasing the analysis of case studies (case-based method) on less effective RPP drafts , as well as providing specific feedback on each detail of the student's design components , not just oriented towards the final document grade .
2. For Student Teacher Candidates: It is expected not only to stick to the standard format of the RPP sheet , but to continue to sharpen the sharpness of analysis in choosing measured operational verbs (HOTS), as well as to expand digital literacy to explore virtual simulation media that are adaptive for the needs of modern classes .
3. For LPTK Educational Institutions : It is necessary to facilitate microteaching laboratories with the latest instructional technology devices and to periodically align course curricula with the national curriculum regulations in force in schools , so that the RPP designs made by students are always applicable and contextual .

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