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Implementation of HOTS in English Learning with a Dayak Cultural Approach and a Christian Religious Education Perspective at Kuala Kapuas

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Abstract
This study examines the implementation of Higher Order Thinking Skills (HOTS) in English learning through a Dayak cultural approach and a Christian Religious Education perspective at State Senior High Schools and Vocational High Schools in Kuala Kapuas. It is based on the assumption that students are still in the adaptation stage of applying higher-order thinking and often experience difficulties in responding to analytical, evaluative, and creative tasks. This research employed a qualitative descriptive method to provide a comprehensive picture of current practices in schools. Data were collected from English teachers and students. The findings indicate that teachers have implemented HOTS-based learning and assessment through various activities, including essay writing, multiple-choice questions, project-based learning, group discussions, and summarizing reading texts to develop speaking and reading skills. The integration of Dayak cultural values and Christian Religious Education perspectives supports contextual and meaningful learning, encouraging students to think critically and reflect on moral values. The Independent Learning Curriculum further strengthens the development of higher-order thinking skills, such as analyzing, evaluating, and creating. However, several challenges remain, including limited vocabulary mastery and insufficient instructional time, which affect the optimal implementation of HOTS in classroom practice.

Keywords*: implementation, higher order thinking skills (HOTS), merdeka belajar curriculum*

Introduction

The current view of the learning process has undergone a significant shift from mere memorization to processes that require higher-order thinking skills (HOTS). According to Anderson and Krathwohl (2001), the revised Bloom's taxonomy places the ability to analyze, evaluate, and create at the pinnacle of cognitive skills that must be developed in modern learning. This demonstrates that learning is no longer focused solely on knowledge transfer, but rather on developing students' complex thinking skills.

HOTS is not only related to higher-order cognitive abilities, but also encompasses critical and creative thinking skills in problem-solving. Brookhart (2010) states that HOTS is the ability to transfer knowledge to new situations and process information critically and

reflectively. Therefore, HOTS is a crucial competency that students must possess to face various real-life challenges. In facing the challenges of the 21st century, higher-order thinking skills are a primary need. Trilling and Fadel (2009) emphasize that 21st-century skills include critical thinking, creativity, communication, and collaboration. Therefore, education must develop logical, reflective, metacognitive, and creative thinking skills in students so they can adapt to changing times.

Basic skills such as remembering and understanding remain an important foundation for developing HOTS. However, these skills must be developed to a higher level. According to Mayer (2002), deep understanding forms the basis for students to think critically and solve problems effectively. Without a strong understanding, students will struggle to reach higher levels of thinking. In the context of Indonesian education, learning is inseparable from the government-established curriculum. Print (2008) explains that the curriculum is a set of plans and arrangements regarding the objectives, content, and learning processes that serve as guidelines for the implementation of education. The curriculum plays a strategic role in determining the direction of learning, including the development of HOTS. The Independent Curriculum, introduced by Makarim (2022), provides space for the development of more flexible and student-centered learning. According to the Ministry of Education, Culture, Research, and Technology, the Independent Curriculum is designed to encourage students' creativity, independence, and critical thinking skills through contextual and meaningful learning. This aligns with efforts to strengthen HOTS in the learning process.

In the local context of Central Kalimantan, integrating Dayak culture into learning is crucial. Dayak culture embodies local wisdom values such as togetherness, balance with nature, and wisdom in decision-making. According to Tjilik Riwut (2007), Dayak cultural values can be a contextual and relevant learning resource for students in the region. This cultural integration can help students develop critical thinking skills based on the realities of their lives. In addition to local culture, Christian Religious Education also plays a crucial role in shaping students' character and mindset. Groome (2011) states that Christian religious education not only instills faith values but also develops reflective and critical skills in understanding life. Values such as love, justice, and responsibility can support the holistic development of HOTS.

However, based on initial observations at public high schools (SMA/SMK) in Kuala Kapuas, the implementation of HOTS in English learning is still in the adaptation stage. Students still experience difficulties in answering analytical, evaluative, and creative questions. This is due to limited vocabulary, a lack of higher-order thinking exercises, and the suboptimal integration of cultural context and religious values into learning. Furthermore, teachers have not yet fully implemented HOTS-based learning to its full potential. According to King, Goodson, and Rohani (2010), implementing HOTS requires systematically and sustainably designed learning strategies. Therefore, efforts are needed to integrate HOTS with a Dayak cultural approach and a Christian Religious Education perspective to make English learning more contextual, meaningful, and able to enhance students' higher-order thinking skills. Based on this, this study is crucial to analyze the implementation of HOTS in this context at public senior high schools (SMA/SMK) in Kuala Kapuas.

Methods

This type of research uses qualitative descriptive analysis methods. Bogdan and Taylor, in Moleong (2014), state that qualitative research is a research procedure that produces descriptive data in the form of written or spoken words from people and observable behavior. Qualitative research is based on a holistic natural setting, positions humans as research tools, conducts inductive data analysis, and prioritizes the process over the results of the research, as agreed upon by the researcher and research subjects.

The descriptive method was chosen because the research relates to ongoing events and current conditions. Nazir (2011) explains the descriptive method as follows: The descriptive method is a method for examining the status of a group of people, a subject, a set of conditions, a system of thought, or a class of events in the present. The purpose of this descriptive research is to create a systematic description, picture, or depiction of the relationships between the phenomena being investigated. In qualitative research, the researcher is the primary instrument (key instrument) in data collection and interpretation, guided by interview and observation guidelines. This is in line with Moleong (2014), who stated that in qualitative research, the researcher, either alone or with the assistance of others, is the primary data collection tool. This is because if non-human instruments were used and prepared in advance, as is commonly used in classical research, it would be impossible to adapt to the realities.

Data analysis in this study was conducted through three simultaneous activities: data reduction, data presentation, and drawing conclusions or verification (Miles and Huberman, 2005) as cited in Sugiyono (2015). Qualitative data analysis is a continuous, iterative, and ongoing endeavor. Data reduction, data presentation, and drawing conclusions are a series of sequential analysis activities. The data sources for this study were teachers and students at public high schools (SMA/SMK) in Kuala Kapuas. This data source selection was based on the fact that teachers and students are the primary actors in higher-order thinking skills (HOTS) learning. HOTS learning is an implementation of the Independent Curriculum. The use of various learning methods that support HOTS will foster students' higher-order thinking skills.

Findings and Discussion

Understanding HOTS (Higher Order Thinking Skills)

HOTS, often referred to as higher-order thinking skills (HTS), is an educational reform initiative initiated at the beginning of the 21st century. This concept was incorporated into education with the aim of preparing human resources for the industrial revolution. Human resources in the 21st century are expected not only to be workers who follow the government but also to possess skills appropriate to this century. Article 3 of the Republic of Indonesia Law on the National Education System states that "National education functions to develop abilities and shape the character and civilization of a dignified nation in order to educate the nation, aiming to develop the potential of students."

HOTS is not a subject, nor is it an exam. According to Tasrif, learning that encourages students to think at a higher level requires the use of student-centered and inquiry-based learning strategies so that students have the opportunity to observe phenomena. This approach is characteristic of the Independent Curriculum and the 2013 Curriculum (Tasrif, 2022). HOTS skills, also known as higher-order thinking skills, are thought processes that

require students to create concepts in ways that provide new understanding and meaning. According to Limpan, higher-order thinking involves creative and critical thinking driven by valid concepts that have meaning. The interdependence between critical and creative thinking, criteria, values, reasoning, and emotions.

Brookhart first defined HOTS, stating, "This model is a method for transferring knowledge, critical thinking, and problem solving. HOTS is not just a problem-solving model, but also encompasses a learning model. The teaching model must include thinking skills, while the HOTS assessment model must include thinking skills." This requires students unfamiliar with the questions or tasks given. According to Lewis and Smith, higher-order thinking (HOTS) occurs when someone has information stored in memory and acquires new information, then connects and develops that information to achieve a goal or find a solution to a confusing situation. HOTS is defined as "a higher-order way of thinking than memorizing facts, stating facts, or applying rules, formulas, and procedures" by Thomas & Thorne. Onosko & Newman state that HOTS is "non-algorithmic and is defined as the potential for using the mind to address new challenges that students have not previously considered. Underbakke states that HOTS is also referred to as strategic thinking skills. "This requires students to be unfamiliar with the questions or tasks being given (Sofyan, 2019).

According to Lewis and Smith, higher-order thinking occurs when someone has information stored in memory and acquires new information, then connects, organizes, and develops that information to achieve a goal or find possible solutions to a confusing situation. Higher-order thinking skills (HOTS) include critical thinking, creative thinking, problem solving, and decision-making (Sani, 2019). According to Thomas & Thorne, HOTS is "a higher-order way of thinking than memorizing facts, stating facts, or applying rules, formulas, and procedures. This opinion agrees with Onosko and Newman, who argue that HOTS is "non-algorithmic and is defined as the potential for using the mind to address new challenges that students have never considered before (Nugroho, 2018). According to Underbakke, HOTS is also called strategic thinking skills, which is the ability to use information to solve problems, analyze arguments, negotiate issues, or make predictions (Sani, 2019).

Higher-order thinking skills are cognitive operations that are highly required in the thought processes that comprise short-term memory. When linked to Bloom's taxonomy, higher-order thinking encompasses analysis, synthesis, and evaluation. Furthermore, these higher-order thinking skills are much more needed today than ever before (Hayon, et al., 2017). Not far from the previous definition, HOTS, according to International Standards, namely the Organization for Economic Co-operation and Development (OECD), TIMMS, and PISA, defines it as the ability to apply knowledge, skills, and values in reasoning and reflection to solve problems, make decisions, and create innovations (Nugroho, 2018).

Regulation of the Minister of Education and Culture of the Republic of Indonesia No. 54 of 2013 also explains that "Graduate competency standards are qualifications of graduate abilities that include attitudes, knowledge, and skills." Furthermore, Regulation of the Minister of Education and Culture No. 22 of 2016 concerning standards for primary and secondary education processes divides the assessment of knowledge aspects into five levels: remembering, understanding, applying, analyzing, and evaluating.

From the definitions above, it can be concluded that HOTS (High Order Thinking Skills) are high-level thinking skills that students must possess. They not only test intellectual memory but also evaluate, develop creativity, analyze, and critically think about students' understanding of a subject, emphasizing critical thinking in problem-solving. Therefore, high-level thinking skills not only test memorization of subject matter but also focus on application.

According to research, lower-order thinking skills (LOWS) and higher-order thinking skills (HOTS) are:

Table 1. Description of LOTS and HOTS Skills

LOTS	**HOTS**
Cognitive strategies	Think creatively
Understanding	Critical thinking
Concept classification	Problem solving
Differentiate	Make decision
Use routine rules	Evaluate
Simple analysis	Think logically
Simple application	Metacognitive thinking
	Reflective thinking
	Synthesis
	Complex analysis
	Systems analysis

HOTS Learning Planning and Assessment

Degeng describes lesson planning as a teacher's effort to achieve learning objectives by selecting, establishing, and creating learning methods to be used and presented in the learning module (LM) (Uno, 2016). In developing a teaching program, it is a formulation of the steps that must be taken during the learning process to achieve the learning objectives. This indicates that teachers must prepare the learning to make the learning program easier. Hidayat stated that the components of lesson planning include understanding the curriculum, mastering teaching materials, creating a teaching program, implementing the teaching, and evaluating the program and learning outcomes.

Therefore, HOTS learning planning and assessment are inseparable from planning the learning module to achieve HOTS learning objectives and assessment. The learning module or lesson plan aims to serve as a basic template for organizing student assignments, assisting teachers in implementing the learning, and ensuring that the learning and assessment process is effective. The modified Bloom's Taxonomy divides cognitive processes into lower-order thinking skills (LOT) and higher-order thinking skills (HET). Remembering, understanding, and applying are LOT skills, while HOT skills are analyzing, evaluating, and creating (Anderson and Krathwohl) (Pratiwi and Hidayah, 2016).

The teacher's ability to plan and manage effective learning to teach students rational thinking, attitud s, and skills is crucial in developing HOTS. Effective teachers have systematic lesson plans and implementation. Learning tools can be used to build and organize this preparation. Theoretically, learning tools are key ingredients in achieving learning success and creating interactive, inspiring, enjoyable, challenging, and efficient learning. motivate students

to participate actively, and provide sufficient space for creativity, and physical and psychological independence of students (Susanto and Rahmawati, 2016).

HOTS Learning

HOTS is not used as a learning method; instead, it is intended to equip students with HOTS thinking skills, such as understanding, analyzing, evaluating, creating, and discovering lesson topics or questions. Before implementing HOTS-based learning, teachers must also master and understand what HOTS learning is like. Teachers must also design and have an understanding of appropriate methods for developing HOTS learning according to the students they will face so that learning can proceed optimally and in accordance with learning objectives. This way, students will become accustomed to HOTS thinking. All students must actively think during the learning process, and it is expected that the role of students is more dominant than the teacher. The teacher only acts as a facilitator to facilitate the learning process.

According to HOTS learning, Saavedra and Opfer divide twenty-first century skills into four categories: (1) ways of thinking: innovation and creativity, critical thinking, problem solving, decision making, and learning how to learn (metacognition), (2) ways of working: communication and cooperation in groups, (3) tools for work: general knowledge and literacy of information communication technology (ITC), (4) living as a citizen: citizenship, daily life filled with national values (Sani, 2019).

According to Hidayat Rais and Yuyun Elizabeth, education must be the primary foundation and seedbed of goodness to transform individuals and renew society in the 21st century. Therefore, the skills needed for the future include effective communication skills, critical thinking skills, and the ability to communicate effectively. Similarly, Arnyana writes that in the 21st century (Sani, 2019).

Table 2. HOTS Skills

21st Century Skills	
Life and career skills	1) Flexibility and adaptability; 2) Social and cultural skills; 3) Initiative and self-direction; 4) Productivity and accountability; 5) Leadership and responsibility
Innovation and learning skills	1) Critical thinking and problem solving 2) Creativity and innovation 3) Communication and collaboration
Technology, information and media skills	1) Information literacy 2) Media literacy 3) ICT (Information, Communication, and Technology) literacy

From the table above, it can be concluded that the 21st century demands that people have HOTS skills.

HOTS Learning Principles

According to the Ministry of Education and Culture (2018), learning is oriented towards high-level thinking skills or HOTS, the teacher's role is not much explaining, instead the teacher does a lot of stimulating questions to encourage the emergence of original thoughts from students, these questions include: 1) Questions to focus attention or study to be deepened; 2) Questions to encourage students to think to find reasons or take a position of opinion; 3) Questions to clarify a concept with the direction of being able to formulate a clear definition through comparing, connecting and looking for differences in existing concepts; 4) Questions to encourage the emergence of creative and alternative ideas through imagination; 5) Questions to encourage students to look for supporting data and facts and evidence to make decisions or positions; 6) Questions to encourage students to develop their thoughts further and more deeply, by trying to apply information.

Inferential Questions

Questions that students answer immediately after observing or reviewing the material provided by the teacher. Information materials can include portraits, pictures, short texts, poems, news, etc. These questions aim to reveal what students see or learn and their understanding of the material presented by the teacher. These questions can include things like: What do you see? What do you know about this? What do you think? Did you find advantages or disadvantages from what you read? What do you think about the meaning you obtained? These inferential questions also include questions that attract attention, such as: Who is the best person in Indonesia? How is his life? For example, what do you know about corruption? Considering specific information about a? (Ministry of Education and Culture, 2018).

Interpretation Questions

These questions are intended to help students understand the consequences of a symptom or its causes. They are aimed at students who understand incomplete or missing information in the material provided by the teacher. For example, why do you have that opinion? What caused that effort to fail? What caused the massive flood that occurred in...? Interpretive questions also include: Helping people think; for example, what do you know about vandalism? What causes it? How can this problem be addressed? Structure and guide learning: are there different types of corruption, such as forced, greedy, and orchestrated? Which type is the most threatening? Evoke feelings, such as what it would be like for a poor brother who is not allowed to receive treatment at the hospital (Ministry of Education and Culture, 2018).

Transfer Questions

Transfer questions differ from the previous two types of questions, which aim to broaden insight or be horizontal. For example, what distinguishes a theory from other theories? Can you provide further explanation of your answer? In detail, how many different ideas do you have? What if your answer were separated into negative and positive ones? Transfer questions also include applying knowledge to other cases. What if this theory were

applied to the case of…? Is it possible to implement it in…? Are there other possibilities for attempting to…? (Ministry of Education and Culture, 2018).

Hypothetical Questions (Questions about Hypotheses, Generalizations, and Conclusions)

Hypothetical questions are designed to encourage students to make predictions or forecasts about the problem at hand, as well as to draw conclusions for generalization. Of course, these hypotheses and conclusions come from understanding the problem, as well as data or information that has been owned or intentionally obtained. For example: What happens when the weather changes rapidly from hot to cold? What is the effect of sleeping on a lot of nails, and what if sleeping on two or three nails? What if the odd-even vehicle policy implemented in Jakarta was implemented in your city? What needs to be changed or updated? What if supporters who commit acts of violence against their team are banned from playing? Hypothetical questions also include: Questions that ask about cause and effect, such as what will happen (Ministry of Education and Culture, 2018).

Teacher Focus on Higher Order Thinking Skills

The following table shows several things that teachers should pay attention to during the learning process oriented towards high-level thinking skills:

Table 3. Things Teachers Should and Shouldn't Do

NEEDS TO BE DONE BY THE TEACHER	NOT DONE BY TEACHER
1. Provide a brief explanation. 2. Make a habit of asking questions that encourage students to think. 3. Each learning unit begins with a problem and ends with a problem-solving formula. 4. Show students the realities of today's society. 5. Invite them to reveal the knowledge they have learned that is needed to solve the problem they are facing. 6. Give them the opportunity to discover the problem independently. 7. Give them the opportunity to construct the problem. 8. Give students the opportunity to look at problems from multiple perspectives. 9. Give students the opportunity to analyze the information and data they have collected. 10. Encourage them to search for information and data relevant to the problem they are facing.	1. Presenting students with direct problems; 2. Providing many direct answers; 3. Excessively criticizing what students say, whether statements or answers; and 4. Providing a lot of direct criticism. 5. Interrupting students. 6. Using words that demean, harass, or insult students. 7. Providing conclusions about students' opinions.

11. Encourage them to evaluate various alternatives and determine the best alternative. 12. Gie students the opportunity to formulate solutions. 13. Encourage them to search for information and data relevant to the problem they are facing. 14. Encourage them to search conclusion.	

HOTS Learning Steps

To implement HOTS learning, teachers must create a Lesson Implementation Plan (RPP) based on HOTS research before starting the lesson. The RPP must include operational terms (OW) in the GPA and list student competencies in C-4, C-5, or C-6. However, some CDs cannot be used as HOTS. If this is forced, it will be unclear and difficult for teachers to measure teaching and learning outcomes.

Use HOTS model questions for HOTS training and then conduct HOTS assessments. These questions should measure student achievement in areas C-4, C-5, and C-6 according to the Operational Worksheet specified in the Lesson Plan. Multiple-choice or essay questions can be used. Therefore, teachers must familiarize students with HOTS questions so they can improve their reasoning skills, critical thinking, and decision-making abilities. The HOTS model requires students to think critically and logically to solve problems. The problem is that most students in Indonesia only learn memorization, understanding, and application. It is not surprising that the HOTS model is considered quite difficult to implement. Students can practice HOTS model problems to improve their skills, as advanced thinking skills are required.

Determining the HOTS (Higher-Order Thinking Skills) learning model for the Implementation of the Independent Curriculum. Minister of Education and Culture Regulation No. 22/2016 concerning process standards stipulates three learning models that must shape scientific and social behavior and foster curiosity. These three models are project-based learning (PBL), model-based learning (MBL), and the discovery/inquiry model (Ministry of Education and Culture, 2018).

Independent Curriculum

The Independent Curriculum offers diverse intra curricular learning, so students have sufficient time to learn concepts and strengthen skills. Teachers can choose a variety of teaching materials to tailor learning to students' learning needs and interests (Putra, 2023). The Independent Curriculum is an educational concept that encourages students to act independently. Independence means that all students have the freedom to access the knowledge they gain from formal and non-formal education. Furthermore, because each student possesses expertise in their own field, they can choose and pursue any field of interest. The Independent Curriculum provides students with opportunities to develop their full potential.

The Independent Curriculum emphasizes character development in students aligned with the Pancasila student profile. To support the achievement of this profile, the government has implemented a project to encourage students to learn not only through reading but also through experience. The Independent Curriculum is designed to encourage student development, including their experience can be a guide in learning. There are three assessment domains: affective, cognitive, and psychomotor. Student textbooks can help students understand the material and serve as a guide in their learning. Regarding thinking skills, the cognitive domain is divided into six levels, according to Bloom: knowledge, understanding, application, analysis, synthesis, and evaluation. However, Anderson and Krathwoh revised Bloom's taxonomy. One of their revisions was that the use of educational taxonomy for assessment and curriculum planning is disproportionate to its use for learning (Douglas, 2007).

In terms of textbook presentation, it is most effective if it is tailored to the reader's cognitive abilities. Therefore, teachers must examine or analyze the book's contents, including the material and practice questions. Student workbooks typically do not categorize the practice questions based on the student's cognitive level. As a result, they may have more difficulty solving the problems or issues contained in the book. The Independent Curriculum considers critical, innovative, and creative thinking skills to solve problems. Therefore, the cognitive processes of practice questions must be structured in student textbooks. Learning that focuses on HOTS requires students to discover things that require creative and ingenious thinking processes. HOTS is expected to help students face the more complex life in the future. In line with the expert opinion above, it can be concluded that the Independent Learning Curriculum focuses learning on the topic being studied. This results in deeper learning and more time spent building students' abilities and character through independent or group learning in real-world situations.

The Independent Curriculum has the following characteristics: 1) More flexibility. The Independent Curriculum is considered more flexible than previous programs. In other words, during the learning process in schools, teachers, students, and schools are more "autonomous." For example, students are no longer simply memorizing or reading textbooks in class to learn; now they can learn through projects or their own work wherever they wish. Furthermore, in the independent curriculum, learning outcomes or skills are no longer set annually, but are instead set for each stage. An example of this is elementary school, which sets level A achievement at the end of grade 2, level B achievement at the end of grade 4, and level C achievement at the end of grade 5. This allows teachers more flexibility in adjusting the flow and pace of learning to suit students' conditions and needs. 2) There are many teaching aids available. Within the framework of the independent curriculum, teachers can use various learning resources, including learning modules, textbooks, and assessments of reading and numeracy skills. Furthermore, the Ministry of Education and Culture has launched the Independent Learning website platform and an Android application for teachers to use as needed. Furthermore, teachers and principals can take specific training courses. You should be aware of the following three aspects of the independent learning plan. These three features are very helpful for teachers and schools in making learning more enjoyable and meaningful. Students are expected to become Pancasila students who are ready for a better future through comprehensive learning through the independent curriculum (Restanti, 2022).

Components of the Independent Curriculum

Independent learning aims to provide students with the right to a high-quality education. Appropriate independent learning components are necessary to achieve this. One way to achieve this is through contextual teaching, which is part of the curriculum and encourages students to connect knowledge with real-life applications. This concept is highly appropriate for implementation in the independent curriculum.

In the process, there are clearly elements of independent learning that influence the successful achievement of these goals. In this regard, the contextual learning element is crucial. Here are six components: 1) Constructivism. This component relates to how students activate their existing knowledge so they can generate ideas and use these ideas to share experiences and practice in the field. 2) Inquiry. Students experience a transition from observation to understanding as part of this independent learning. Inquiry helps students think more critically while learning. Students can deepen and critically explore ideas when a particular theme is raised. This will undoubtedly be a beneficial experience for every student. 3) Questioning. In addition, students will be taught or accustomed to asking questions about things they don't understand. The purpose of this activity is to encourage, guide, and assess students' thinking skills. 4) Learning Community. A learning community is a group of people involved in learning activities. Students will learn to work together, which is certainly better than learning alone because students can share ideas and exchange experiences. 5) Reflection. At some point, students will think about or reflect on what they have learned. Direct statements, post-activity notes, impressions or suggestions, and other methods can be used to carry out this activity. 6) Authentic Assessment. Students' knowledge and skills will be measured and assessed in this free learning section. At each level of education, authentic or authentic assessment will vary (Khoirurrijal, et al., 2022).

Everyone, including students, teachers, and schools, must achieve learning objectives during learning activities. The minimum competency that students must possess in each subject is student learning achievement. The graduation competency standards (GCS) and content standards, such as Core Competencies (CC) and Basic Competencies (BC), contained in the Independent Curriculum, are used to develop these learning objectives. The Independent Curriculum updates core competencies and basic competencies and focuses on competency development. Each student's learning outcomes differ according to their level, from early childhood education through elementary school, junior high school, and senior high school.

In the Independent Curriculum, learning outcomes are a collection of competencies and the scope of the material covered. Mapping learning outcomes in the Independent Curriculum is tailored to students' development throughout their lives. Reducing the scope of the material and changing the formatting method to be more flexible are ways to ensure that students are not under pressure to learn (Khoirurrijal, et al., 2022).

The Dayak Cultural Approach in related to HOTS Implementation

The Dayak cultural approach to learning is a form of contextual learning that links teaching materials with the values of students' local wisdom. Dayak culture embraces values such as togetherness (*handep*), balance with nature, and wisdom in decision-making, which

can be used as learning resources. According to Banks (2008), integrating culture into learning helps students understand the material more deeply because it relates directly to their life experiences. Furthermore, Tilaar (2012) emphasizes that local culture-based education can strengthen students' identities while increasing the relevance of learning in their social environment. Thus, the Dayak cultural approach can be an important foundation for creating meaningful learning.

In English learning, the Dayak cultural approach can be implemented through the use of texts, dialogues, and project assignments that highlight local cultural themes, such as folklore, traditions, or Dayak values. This approach not only improves language skills but also encourages students to think critically and creatively. According to Brown (2007), effective language learning must be contextual and communicative, enabling students to use the language in real-life situations. Similarly, Richards (2006) states that using cultural context in language learning can increase student engagement and strengthen understanding of meaning. By utilizing Dayak culture as a context, students more easily develop ideas, analyze information, and express their thoughts in English.

The connection between the Dayak cultural approach and HOTS implementation is evident in its ability to encourage students to analyze, evaluate, and create based on real-life experiences. For example, students can be asked to analyze moral values in Dayak folktales, evaluate their relevance to modern life, and create texts or presentations in English. According to Brookhart (2010), HOTS develops when students are faced with tasks that require in-depth thinking and contextual problem-solving. Furthermore, Krathwohl (2002) emphasizes that higher-order thinking processes are more effective when linked to students' real-life experiences. Therefore, the integration of Dayak culture in English learning not only enriches the teaching materials, but also becomes an effective strategy in developing HOTS contextually and sustainably.

HOTS and Christian Religious Education Perspective

Christian Religious Education views the learning process as a means of developing students' faith, character, and reflective thinking skills. From this perspective, learning is oriented not only toward mastering knowledge but also toward developing wisdom and responsible decision-making. According to Groome (2011), Christian Religious Education emphasizes the process of critical reflection on life experiences in light of Christian faith, enabling students to understand the meaning of life more deeply. Furthermore, Knight (2006) states that Christian education aims to develop all human potential, including intellectual and spiritual aspects, which are highly relevant to the development of higher-order thinking skills (HOTS).

In English language learning, the Christian Religious Education perspective can be integrated through the use of teaching materials embodying Christian values, such as love, justice, honesty, and responsibility. This integration can be achieved through reading texts, discussions, and project-based assignments that encourage students to think critically about these values. According to Richards (2006), effective language learning must involve meaning and values to engage students cognitively and emotionally. In line with this, Brown (2007) asserts that meaningful language learning will enhance students' critical thinking skills and

creativity. Thus, English learning becomes not only a means of communication but also a medium for character development.

The link between Christian Religious Education and HOTS implementation is evident in the emphasis on reflection, moral analysis, and ethical decision-making. Students can be encouraged to analyze English texts containing moral values, evaluate the actions of characters based on Christian principles, and generate ideas or solutions to life's problems. According to Brookhart (2010), HOTS develops through activities that require deep and reflective thought. Furthermore, Ennis (2011) states that critical thinking involves the ability to evaluate arguments and make rational and ethical decisions. Therefore, integrating a Christian Religious Education perspective into English learning is an effective strategy for developing HOTS while holistically shaping students' character.

Implementation of HOTS-Contained English Material and Assessment in the Independent Curriculum

Based on interviews with several English teachers, there is generally accepted information that high schools and vocational schools in Kuala Kapuas have implemented HOTS-based assessments. The purpose of HOTS-based assessments is to measure and identify student abilities and encourage students to think broadly and deeply about a problem. Furthermore, other opinions state that the goal is to measure and develop students' higher-order thinking skills, identify strengths and weaknesses, and improve the quality of learning. It also measures problem-solving abilities, fosters higher-order thinking, enhances problem-solving skills, encourages critical thinking, and empowers conceptual understanding.

The instruments used in HOTS-based assessments, which are a combination of reading and speaking, include essays, projects, discussions, summaries of reading texts, and multiple-choice questions. Furthermore, the instrument creation process refers to the levels of analysis, evaluation, and creation. The steps are: 1) determine the competencies to be assessed; 2) create a question outline; 3) create the question format; 4) determine the answer key and assessment rubric; and 5) validate the question instrument (Khoirurrijal, et al., 2022).

Teachers believe the Independent Curriculum supports the development of higher-order thinking skills, which have been implemented in English. Another important obstacle encountered during the implementation of HOTS-based assessments is that some teachers have never participated in HOTS training. Other obstacles include: 1) teachers' lack of understanding of HOTS concepts; 2) time constraints due to excessive curriculum demands; 3) teachers' teaching habits that still emphasize memorization and literal understanding; 4) diverse student abilities; and 5) limited vocabulary.

For teachers who have participated in HOTS training, the training provides the following sample questions: 1) Example of analysis: Compare the perspectives of the main character and the antagonist in a novel! 2) Example of evaluation: Is the author's argument in this article convincing? 3) Creativity: Write a short paragraph about a hobby! Interviews with several English teachers at state senior high schools and vocational high schools in Kuala Kapuas concluded that: a) all English teachers are familiar with higher-order thinking skills; b) Different levels of understanding also affect the assessment instruments developed, but generally, the instruments used are essays based on reading texts; c) The Independent

Learning Curriculum accommodates HOTS-based learning and assessment; d) Teachers who have participated in HOTS training have implemented HOTS learning and assessment flows.

Furthermore, interviews with students also concluded that: 1) Public high school (SMA/SMK) students in Kuala Kapuas generally know about higher-order thinking skills (HOTS), but do not fully understand their implementation; 2) the assessment instruments are text analysis questions and evaluative questions; 3) the development of higher-order thinking skills in the Independent Learning Curriculum for English is still limited by students' understanding, but when properly analyzed, the HOTS concept in the Independent Learning Curriculum actually makes it easier for students to understand English material; 4) the obstacles experienced by students generally relate to limited English vocabulary, resulting in poor English reading comprehension. In conclusion, students struggle with analysis and synthesis, the core of HOTS. Another obstacle experienced by students is the limited study time available, which is only two hours, which is insufficient to accommodate the application of the HOTS concepts.

In implementing HOTS learning, there are three components that must be considered: critically analyzing information, fostering student creativity, and improving problem-solving skills. The results of the study indicate that the first component of the HOTS learning process is critically analyzing information. Thus, teachers use this apperception to encourage students to develop their high-level thinking skills and to spark their interest in learning more about the world. During learning activities, teachers are likely familiar with the term apperception.

Apperception is a pre-learning activity aimed at encouraging students to learn. Here, teachers provide students with images, videos, and case studies to critique or respond to. This research supports the notion that "critical thinking is an active process, where one thinks deeply about things, asks questions, and seeks relevant information rather than passively waiting for information to be received" (Fisher, 2009). Students don't simply sit and wait for the teacher to explain; they are also encouraged to learn more about the information provided.

In this case, there are several steps that must be taken to improve thinking skills, such as seeking as many explanations as possible, using sources that have credibility, looking for alternatives, looking for clear statements of each question, looking for reasons, trying to know the information well, paying attention to the situation and conditions as a whole, trying to stay relevant to the main idea, remembering the original and fundamental interests, and remembering the most important interests, and It is hoped that students will master critical thinking skills in solving simple to complex problems after learning is carried out according to the stages outlined by Ennis.

Students' Understanding of HOTS Content Contained in the Independent Curriculum English Learning Materials

The ability to create something new, whether from ideas or tangible results, is known as understanding and creativity. This study shows that observation, analysis, and creation are ways in which students understand. Therefore, educators ask students to create something new. The opinion that "understanding can be directed towards creative thinking, including the ability to draw conclusions, study natural conditions and events through observation, experimentation to discover facts, concepts, and discovery processes" (Balga, 2019) is

consistent with research findings. Teachers can evaluate whether students' research reports adhere to the format by providing them with problems to solve through their own observations or research.

To improve students' higher-order thinking skills, educators must help them become better problem solvers and thinkers by providing problems that allow them to use their thinking skills. In other words, through conversation, teachers pose problems and discuss them with students. Afterward, students are asked to find the root cause or solution to the problem. The results of this study are in line with Piaget's constructivism theory, which states that "knowledge will be meaningful if the process is sought and discovered by the students themselves, not by someone else, including the teacher" (Koehler and Mishra, 2009).

Obstacles Experienced by Students Regarding HOTS Contained in the Independent Curriculum English Learning Materials

The research findings indicate several challenges to implementing HOTS learning: students and teachers' unfamiliarity with HOTS, a lack of time and facilities to learn about it, and teachers' lack of training. First, HOTS-based learning is still unfamiliar to teachers and students because it was recently implemented. Furthermore, there is limited time. Furthermore, time significantly impacts the learning process, as HOTS requires high-level reasoning. Consequently, two hours of learning is insufficient.

Furthermore, there is experience participating in HOTS training, which has not previously been available, to enhance understanding of these concepts. These findings align with previous research (Berlian, 2019): the main obstacle to HOTS learning is time, as high school/vocational school students only need 45 minutes to learn, while higher-order thinking skills require significant time and training. Therefore, training and time significantly impact the HOTS learning process. Interviews indicate that, particularly in reading, more time is required to discuss a single problem because students' comprehension levels vary across classes, and some require repeated explanations to understand.

The final obstacle is the lack of HOTS learning facilities. This is particularly true for inadequate textbooks and learning media. Without textbooks, the learning process can be hampered and ineffective. Furthermore, teachers will become monotonous in delivering learning materials. The results of this study support Arsyad's (2014) opinion that "regarding the role of media in learning, which is used to demonstrate learning materials, a lack of media availability makes learning ineffective."

Implementation of HOTS in English Learning with a Dayak Cultural Approach and a Christian Religious Education Perspective

The implementation of Higher Order Thinking Skills (HOTS) in English learning using a Dayak cultural approach and a Christian Religious Education perspective demonstrates that a contextual and holistic learning process can improve students' thinking skills. HOTS, which encompass the ability to analyze, evaluate, and create, develops not only through cognitive activities but also through meaningful and life-relevant learning experiences. Anderson and Krathwohl (2001) emphasize that higher-order thinking skills develop optimally when

learning is designed systematically and contextually. Therefore, integrating local culture and religious values is a crucial strategy in strengthening HOTS implementation.

A Dayak cultural approach to English learning significantly contributes to creating contextual learning. Local wisdom values such as togetherness, balance, and wisdom can serve as learning resources that encourage students to think critically about the social realities around them. Banks (2008) states that cultural integration in learning can increase student engagement and deepen conceptual understanding. Thus, the use of the Dayak cultural context in English learning not only improves language skills but also develops students' analytical and creative abilities.

Meanwhile, the Christian Religious Education perspective strengthens the implementation of HOTS by developing students' reflective, ethical, and moral abilities. Christian values such as love, justice, and responsibility encourage students not only to think critically but also to be wise in decision-making. Groome (2011) emphasizes that Christian religious education plays a role in developing the ability to critically reflect on life experiences. The integration of these values into English learning enables students to evaluate information more deeply and create solutions grounded in moral values.

Overall, the implementation of HOTS in English learning, which integrates the Dayak cultural approach and the Christian Religious Education perspective, has been proven to create more meaningful, contextual, and character-building learning. Brookhart (2010) states that HOTS develops through tasks that require deep thinking and solving real-life problems. Therefore, collaboration between cognitive, cultural, and spiritual aspects is key to continuously improving students' higher-order thinking skills.

Implications

Theoretical Implications

The theoretical implications of this study is not only influenced by cognitive aspects alone, but also by the integration of cultural context and spiritual values in learning. Theoretically, this finding strengthens the concept of constructivism which emphasizes that knowledge is built through contextual experiences (Vygotsky, 2007), and supports the view that culturally responsive teaching can increase engagement and meaning in learning (Gay, 2010:31). In addition, the integration of the Christian Religious Education perspective enriches the theory of holistic learning that combines cognitive, affective, and spiritual dimensions in the educational process (Groome, 2011). Thus, this study provides a theoretical contribution in the form of strengthening the integrative learning model that combines HOTS, local wisdom, and religious values as an effective approach in improving students' higher-order thinking skills.

Practical Implications

The practical implication for teachers is the need to design English language learning that integrates Higher Order Thinking Skills (HOTS) with the Dayak cultural context and the values of Christian Religious Education. Teachers can use teaching materials based on local wisdom, such as Dayak folklore, traditions, and community values, combined with Christian values such as love, honesty, and responsibility. Learning strategies such as problem-based

learning, reflective discussions, and creative projects need to be implemented to encourage students to think analytically, evaluatively, and creatively. Furthermore, teachers need to continuously improve their competencies through training to develop contextual and student-centered learning.

For schools, the practical implication is the need for institutional support to create a learning environment that supports the implementation of HOTS based on culture and religious values. Schools can facilitate the development of a curriculum at the school level that accommodates the integration of Dayak culture and Christian Religious Education in various subjects, particularly English. Furthermore, providing learning facilities and infrastructure, such as contextual teaching materials and relevant learning media, is crucial to support the learning process. Schools can also organize training programs and workshops for teachers to improve the quality of HOTS-based learning.

For policymakers, the practical implication is the need to formulate education policies that support the integration of HOTS with local wisdom and religious values in the curriculum. The government and education stakeholders can develop learning guidelines that encourage the implementation of contextual approaches based on Dayak culture and Christian Religious Education. Furthermore, ongoing teacher capacity building programs are needed through training, mentoring, and evaluation of HOTS implementation in schools. Policies that support curriculum flexibility, such as the Independent Curriculum, need to be continuously strengthened to ensure that learning is more relevant, meaningful, and able to enhance students' higher-order thinking skills.

Conclusions

The conclusion of the study, "Implementation of HOTS in English Learning with a Dayak Cultural Approach and a Christian Religious Education Perspective," shows that the application of Higher Order Thinking Skills (HOTS) in English learning at public senior high schools (SMA/SMK) in Kuala Kapuas has been successful, but is still in the development stage. The integration of the Dayak cultural approach and the Christian Religious Education perspective has proven to create more contextual, meaningful, and relevant learning experiences for students. Through activities such as text analysis, discussions, and projects based on culture and Christian values, students are encouraged to develop analytical, evaluative, and creative thinking skills. However, the implementation of HOTS still faces various obstacles, such as limited student vocabulary, limited learning time, and teachers' suboptimal understanding and application of HOTS strategies. Therefore, ongoing efforts are needed to improve teacher competency, develop contextual teaching materials, and provide support from schools and education policies. By strengthening these aspects, it is hoped that HOTS-based English learning integrated with Dayak culture and Christian Religious Education can be more effective in improving high-level thinking skills while shaping students' character.

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