

## Implementation of Teacher Metacognition to Improve the Quality of Christian Religious Learning in Schools

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**Abstract.** This study assesses the implementation of teacher metacognition to improve the quality of the process and learning outcomes of Christianity in schools. The research focus is directed at three main aspects (1) the teacher's actions in overcoming Christian religious learning problems, with five supporting indicators; (2) the appreciation of teacher metacognition in learning, with six supporting indicators; and (3) individual factors and social conditions of the metacognition process of Christian religious teachers, with two supporting indicators. This research was designed using a case study method with a qualitative approach, located in two favorite public high schools in Ambon City, Maluku province. The data collection process used questionnaires, observations, interviews, and document studies by involving Christian religion education teachers as informants to describe the teacher's metacognitive abilities in learning in each school. The results of the study prove that the metacognitive abilities of Christian religion education teachers in learning have been carried out well while continuing to fix the various deficiencies found in the learning process. With the knowledge of planning, monitoring, and evaluation, we can use it to develop the Christian religious learning process. With the problems encountered in classroom learning, the teacher continues to make improvements in terms of the conceptual aspects of the material, learning methods or strategies as well as guidance in motivating students to learn well.

**Keywords:** implementation, teacher metacognition, improve quality, christian religious learning

### Introduction

In the world of education, an educator always faces students with various characteristics. These characteristics include differences in the level of intelligence, behavior, and physical condition. With these conditions, each individual will be different in building their attitudes and knowledge (Kurniawan, 2020). The teacher is a very dominant and important factor in formal education in general because, for students, teachers are often used as role models and even become self-identification figures. Therefore, teachers should have sufficient behavior and competence to develop students as a whole (Arsyad, 2019). Teachers are a source of information that is trusted to be true and responsible for what is conveyed and its impact on their students and society in general (Amtu, 2016). In the learning process, a teacher needs to design a learning program in advance, meaning that before teaching a teacher needs to design a clear learning material organization, design classroom management, design learning strategies, design learning media, and design student learning evaluations (Fitriani & Usman, 2017). Teachers who have the ability are professional teachers, who are always required to carry out their main tasks by educating, teaching, guiding, training, assessing, and evaluating students (Manik, 2016). Teachers are not only required to master their pedagogical abilities, they are also required to be able to master their abilities in the subject matter. Content knowledge is the knowledge that must be mastered by educators including mastery of subject matter which is important to be mastered by a teacher (Makaraka & Sarwah, 2018).

In today's learning process we cannot avoid what has been done conventionally where the teacher gives lectures theoretically, gives assignments then gives a final test where this will be repeated continuously because after all this will still be an integral part of the learning process teaching in the classroom is included in the subject of (CRE) Christian Religious

Education (Yulianingsih, Gaol & Marbun, 2019). The ultimate goal of learning is the formation of changes in understanding, attitudes, and behavior and skills of students towards the life phenomena that are studied both individually and socially. Change is formed from understanding the conditions in the field which is the result of students' absorption of curriculum material (Karim, 2018).

The reality of learning as this reinforces the view that teachers are one of the key factors for the success of education. No matter how well a lesson plan is drawn up, in the end, what is really expected is that the plan will be carried out well in class. Furthermore, however good a curriculum is, its realization in the classroom will largely depend on the quality of the instructional actions of the teacher himself. In such a context, it is difficult not to admit that the role of the teacher as the person in charge of learning is very decisive. As a key factor or determinant of the success of learning, it turns out that the teacher does not always act as expected. There are still teachers in schools, including CRE teachers who develop conventional learning because they consider students as objects. In addition, there are also teachers who are only oriented towards the effort to spend subject matter according to curriculum content rather than caring about aspects of formation that are favorable to students' personalities or thinking abilities.

One way to increase the ability and awareness of teachers to carry out tasks professionally is to increase their metacognitive abilities. Schraw & Dennison, (1994) as quoted by Hughes, (2017) explains that metacognitive awareness is the ability to recognize and organize a person's thinking in real-time. Metacognitive awareness is a term used to describe the ability of individuals to detail their knowledge and regulation of their cognition. Metacognitive refers to higher-order thinking which involves active control in the cognitive process of learning to solve a problem. Activities such as planning how to approach a given learning task, monitoring understanding, and evaluating the progress of task completion are natural metacognitive (Iskandar, 2016). Developing metacognitive abilities turn out to be very important for learning activities and learning and for helping students determine how they can learn to better utilize their cognitive resources (Febrina & Mukhidin, 2019). Metacognition and higher-order thinking skills activities are basic potentials that need to be developed in students. Metacognition is an important part of teaching and learning. This aspect is not getting enough attention even though it plays an important role in solving learning problems (Rivai, 2019). Metacognition ability is believed to be a high-level cognitive ability required for knowledge management where students are required to set their own learning goals and determine appropriate learning strategies to achieve these goals (Rahayu, Bakti & Saadi, 2020).

Based on the above background, this research is intended to answer the problems encountered in teaching CRE in schools, namely; (1) obtain a description of the learning actions that CRE teachers take in implementing learning; (2) obtaining factual information about the metacognition process experienced by CRE teachers when carrying out learning actions; and (3) finding aspects of individual teacher conditions and social conditions of learning that underlie the process of metacognition of CRE teachers when carrying out learning actions.

### **Method**

This research was designed using a case study method with a qualitative approach, located in two favorite public high schools in Ambon City, Maluku province. The data collection process involved CRE teachers as informants to describe the teacher's metacognitive abilities in learning in each school. The data collection technique used a questionnaire to measure the scale of attitudes about the phenomenon under study, observation, interviews and documentation to confirm data and information in the field. The data analysis technique uses descriptive analysis for all data obtained from the results of research using indicators that support each other to examine the data or information that has been collected by paying

attention to the data reduction process, data display, verification and drawing conclusions of research results as suggested by Miles & Huberman. (1992).

## Results and Discussion

### Teacher Actions in Overcoming Problems

Starting from the objective of the first proposed research, namely how the learning actions carried out by the teacher in dealing with problems that arise in the implementation of CRE learning, the five indicators studied are (1) mastery of CRE concepts/materials, (2) understanding student characteristics, (3) mastery of learning management, (4) mastery of learning strategies, (5) mastery of learning outcomes assessment. Respondents' answers are presented in the following table.

**Table 1. Teacher actions in overcoming CRE learning problems**

No	Indicator	Answer Options								$\Sigma$	
		Always		Ever		Sometimes		Never			
		F	%	F	%	F	%	F	%	F	%
1	Mastery of Concepts / CRE material	6	100	-	-	-	-	-	-	6	100
2	Understanding student characteristics	5	83.3	-	-	1	16.7	-	-	6	100
3	Mastery of Learning Management	5	83.3	-	-	1	16.7	-	-	6	100
4	Mastery of Learning Strategies	6	100	-	-	-	-	-	-	6	100
5	Mastery of learning outcomes assessment	6	100	-	-	-	-	-	-	6	100

Teachers with their experience are believed to be able to convey knowledge or CRE subject matter to students. In table 1 above, the mastery of the concept/material of CRE by the teacher is 100%, or as many as 6 teacher informants admit to being able to or mastering the concept or material of CRE. Indicators of mastery of the concept/material of CRE have two problems that were asked of the informants, namely; (1) whether the teacher relates the CRE material to everyday life situations, (2) the teacher delivers the CRE material/concept in an interesting and clear manner and uses one learning resource and other sources relevant to the CRE learning material. In other words, it can be argued that the teacher understands and knows about the concept of CRE according to the material in class X, XI, and class XII well. Mastery of the concept or material of CRE always has a relationship with problems that are relevant to everyday life. Linking CRE materials with social, educational, democracy, and church issues is an inseparable part of any CRE learning process. That is why the CRE material at the high school level is directed to shape Christian values through the character and attitudes of teenagers, they continue to grow as adult individuals who do not lose their identity.

Teachers with experience have shown good mastery of CRE material in high school. This can be seen from how the teacher wishes to present life's problems and offers for solutions, one of which is to imitate the character and attitude of Christ (Christian values) possessed by students. Attitudes that should be shown by students such as fear of God, love, honesty, exemplary in terms of truth and responsibility, positive thinking, maintaining wholeness, building friendship, mutual respect, empathy and sympathy, and living right and maintaining the sanctity of life, all of which are values in the Christian faith to be carried out by students in their daily lives. According to Hutapea (2019), the goal to be achieved through CRE which is implemented in schools is the transformation and internalization of Christian values for students. In other words, CRE is a valuable education, so it is hoped that through it

there will be changes and renewal of both understanding and attitudes and behavior. The aspect of understanding the characteristics of students is in the category of 83.3%, while the remaining 16.7% admits that sometimes they understand the characteristics of students. The indicator of understanding student characteristics has two questions that are questioned by informants about (1) whether the teacher understands the differences in students' abilities and treats them fairly, in addition to other fair treatment such as: differences in ethnicity, religion, race and class and creating close relationships with students so as to create positive interactions, (2) whether the teacher strives for learning improvements for students with low abilities.

Thus, it should be emphasized that efforts to understand the differences in student abilities do not run easily, because some teachers have treated all students as having the same abilities, meaning that students have the knowledge they have from the beginning, and the material presented will be easily understood by students. However, with the teacher's belief, this problem of different student abilities can be resolved properly as teachers always pay attention to the inability of students in the learning process, and create a learning atmosphere that helps them express their ideas and thoughts as they are in each CRE teaching and learning process. Understanding these differences in abilities also has the same meaning as differences in social, cultural and religious status of children. This means that there is no reason for teachers to differentiate between their students. Mastery of learning management by teachers is one of the problems in the CRE learning process. This is a challenge in itself for teachers who are required to professionally present useful learning for character building and student attitudes. The table above, shows that the teacher is always able to master the management of learning with the category of 83.3%, or as many as 5 informants, while the remaining 16.7% or one informant admitted that sometimes the teacher can master the management of learning. Indicators of mastery of learning management have a fundamental problem that questions informants about whether the teacher plans regular learning activities, for example; semester programs, annual programs, lesson plans, syllabus, textbooks, and worksheets.

Thus it can be explained that CRE teachers at Ambon 1 and 2 Public Senior High Schools, can always prepare systematic learning activity plans such as annual programs, semester programs, lesson plans, syllabus, textbooks and worksheets. In preparing the learning activity plan, the teacher is expected to carry out curriculum analysis, and be able to manage learning activities based on the academic calendar submitted from the Ambon City Education Office and also the school. In general, the purpose of preparing this learning activity plan is in addition to being a reference or guide for teachers in carrying out teaching and learning process activities, it is also an evaluation material with the school and the Ambon city education office in its supervision program, thus encouraging teachers to be more creative and professional in preparing and capable carry out the CRE process according to the objectives and achievement standards that have been formulated.

Based on table 1 above, it turns out that the level of mastery of the teacher in assessing learning outcomes is 100% or as many as 6 informants chose to always master the assessment of CRE learning outcomes. In this study, it will be analyzed based on indicators of whether the teacher assesses the results of student work objectively, fairly, in which it provides feedback on student assignments/work and discusses student work results and applies various assessment techniques that are considered relevant. Mastery of learning strategies is a special skill that teachers need to develop, because student learning success is also determined by the teacher's ability to use or develop learning strategies. A paradigm shift in the learning process, from teacher active teaching to student active learning. The point is a change in the orientation of learning that is centered on the teacher into learning that is centered on students. In student-centered learning, the teacher is expected to act as a facilitator because it facilitates students in learning, and students themselves must actively learn from various learning sources.

In other words, CRE teachers always apply the latest learning strategies, methods and models and use tools such as teaching aids or learning media. The use of strategies and methods or learning models refers to learning that involves students to be active, meaning that learning is centered on students. The learning encourages students to express opinions and interact in groups to discuss each material as well as solve problems given by the teacher. However, this learning strategy still follows the learning stages well, in a structured manner, the teacher can manage learning easily in regulating the classroom learning situation or atmosphere, so that the teacher also provides the opportunity to do question and answer. Judging from the aspect of mastery of student learning outcomes assessment, the CRE teacher is in the 100% category or as many as 6 informants choose to always master the assessment of learning outcomes.

This data shows that CRE teachers in Ambon 1 and 2 Public Senior High Schools always conduct an objective and fair assessment of student work results. Objective and fair assessment is interpreted as a form of assessment that refers to student test result data, meaning that the teacher's assessment is in accordance with what is given by students through their test answers. So what the child gives, that is also what is assessed. The point is that there is data on student test work that data is always subject to an objective assessment. Objective assessment also positions teachers to always base all their assessments on clear assessment procedures or assessment criteria such as measures of achievement of predetermined competencies, as well as all aspects of ability (cognitive, affective and psychomotor). This finding is in line with what Ozturk, (2017) stated that activating and developing students' metacognition is of course related to applying metacognition as an integral part of learning, and making students aware of their cognitive activities and the usefulness of these activities.

### Teacher Metacognition in Learning

The appreciation of CRE teacher metacognition in this study includes indicators; (1) declarative knowledge, (2) procedural knowledge, (3) conditional knowledge, (4) planning skills, (5) monitoring skills, and (6) evaluation skills. Based on the above indicators, the following will be shown the informants' answers related to the metacognition process that the teacher lived in when carrying out learning actions, which are presented in table form below.

**Table 2. Teachers performing learning actions**

No	Indicator	Answer Options								$\Sigma$	
		Always		Ever		Sometimes		Never			
		F	%	F	%	F	%	F	%	F	%
1	Declarative knowledge	6	100	-	-	-	-	-	-	6	100
2	Procedural knowledge	4	66,6	1	16,7	-	-	2	33,3	6	100
3	Conditional knowledge	3	55	1	16,7	1	16,7	1	16,7	6	100
4	Planning skills	5	-	1	16,7	-	-	-	-	6	100
5	Monitoring skills	5	55	-	-	1	16,7	-	-	6	100
6	Evaluation skills	5	55	1	16,7	-	-	-	-		

One form of metacognitive knowledge is declarative knowledge, which is knowledge about oneself as a learner. Declarative knowledge is factual information known to learners, which can be reported, either orally or in writing, as examples of knowledge regarding aspects of the Triune God. How the teacher's understanding of their declarative knowledge skills in table 2 above shows that the teacher's declarative knowledge of CRE is 100%, or as many as 6 informants realized that they had knowledge of the material, topics or problems related to CRE learning. This data shows that in principle CRE teachers have been able to master or know well the material, topics and problems in CRE learning. The materials, topics and problems contained in the CRE teaching materials are claimed by teachers to have understood

them well. The things that teachers do to be able to master well the topics, materials and learning problems of CRE are to improve reading or learning skills optimally, and build communication between fellow teachers subjects. Of course, teachers who encourage themselves to learn a lot from every process and problem during learning, provide a very valuable experience for teachers. With an inner awareness to strive for mastery of topics, materials and problems in learning, it shows that CRE teachers at Ambon 1 and 2 Public High Schools want to improve the quality of CRE learning, which means that the readiness and ability to master the material, topics and problems of CRE will direct the process. CRE learning in class takes place meaningfully, so that the expectation for maximum student learning outcomes can be obtained because students also experience the maximum learning process by the teacher. This can be seen from how the teacher wishes to present life's problems and offers for solutions, one of which is through the character and Christian attitudes possessed by students. Attitudes that should be shown by students such as fear of God, love, honesty, exemplary in terms of truth and responsibility, positive thinking, maintaining wholeness, building friendship, mutual respect, empathy and sympathy, and living right and maintaining the sanctity of life, all of which are values in the Christian faith to be carried out by students in their daily lives.

Other metacognitive knowledge is procedural knowledge, which is how to carry out learning strategies. For example, as a teacher, he teaches how to apply Christian values in family life, and the attitudes of teenagers (students) in facing the previously known modernization era. Furthermore, procedural knowledge is knowledge about how to use everything that is known in declarative knowledge and in learning activities to know about oneself as a learner. How teachers realize their procedural knowledge skills in the learning process can be seen in table 2 above, showing that the teacher's declarative knowledge is 66.6% or 4 teachers say they always use their procedural knowledge well in classroom learning activities, while 33.3% or 2 the teacher people say never. In other words, it is emphasized that the CRE teacher already has a high awareness of their knowledge skills, so that there are those who experience problems often forgetting, incomplete mastery of the material, difficulty knowing the right way to make students easily understand, and teacher teaching materials that are still difficult. to be understood and will be difficult to explain to students in the class. Due to this awareness, the teachers try various ways to overcome the problems that occur related to the knowledge skills they experience.

The third aspect of metacognitive knowledge is conditional knowledge. Conditional knowledge is about when to use a procedure, skill, or strategy and when these things are not used, why a procedure takes place and under what conditions it occurs, and why a procedure is better than others. In addition, conditional knowledge is also defined as knowledge of when to use a learning strategy. How teachers realize their conditional knowledge skills in the learning process in this study can be seen in table 2 above which shows that the conditional knowledge of teachers is 55% or 3 teachers always use their conditional knowledge well in classroom learning activities, while 16.7 % or only 1 teacher was not. In other words, it can be explained that CRE teachers at Ambon 1 and 2 Public High Schools have an awareness of their conditional abilities, an awareness that various mistakes and mistakes and problems in CRE learning require them to do something, namely making improvements for the success of student learning. For this reason, various ways are carried out such as replacing the lecture model, replaced by giving a little explanation, the rest is for students to explore through group discussions and build question and answer activities.

It describes when and when to use a strategy or procedure. In addition, students are directed to do cooperative learning, by learning in groups to help build a discussion process, build a habit of helping each other between capable and less fortunate friends so that the material can easily be studied by students. For this reason, the teacher asks questions about

problems with events that students often encounter in their daily lives that are relevant to the concept of the material being discussed. Furthermore, students are given the opportunity to communicate and illustrate their understanding of the concept. Thus students can construct the knowledge they already have through discussion activities to solve problems given by the teacher. How teachers realize planning, monitoring and evaluation skills in the CRE learning process in this study can be seen in table 2 above. This data shows that the skills of planning, monitoring and evaluating teachers are 88.3% or 5 teachers always use planning, monitoring and evaluation skills well in classroom learning activities, while the remaining 16.7% or 1 teacher only often use it. This means that teachers have an awareness of their planning, monitoring and evaluation abilities. These abilities are such as preparing learning tools, and monitoring whether the tools have been running well, and evaluating whether the tools are effective and do not need improvement or are not yet effective and need improvement, in order to achieve the specified learning objectives. The ability to plan, monitor and evaluate teachers in learning can be seen from the readiness of the teacher since the beginning of the preparation of the learning tools.

The ongoing learning process is also monitored so that it can be seen that the actual conditions occurring in the classroom are as desired based on the lesson plan. For evaluation, in-classroom learning, the teacher assesses both the process that has been going well and the results that are in accordance with the specified learning completeness. However, evaluation is also related to teachers realizing their shortcomings or weaknesses and trying to improve them, as well as teachers who always understand the learning situation of students who are less active and corrected. In addition, teachers are also trying to improve their learning methods and strategies so that students can understand the material well and improve student learning outcomes. This finding is in line with the idea of Kallio, et., al (2017) that metacognitive awareness allows a person to plan, sequence, and monitor their learning so that improvements can be seen directly in real action.

### Individual Factors and Social Conditions of Teacher Metacognition Process

The individual teacher conditions and the social conditions of learning in this study include the following indicators: (1) teacher interest, (2) class atmosphere and teacher interaction with students. Based on these two indicators, the following will display the informants' answers related to the individual conditions of the teacher and the social conditions of learning that underlie the metacognition process of teachers doing CRE learning while carrying out learning actions, which are presented in the following table.

**Table 3. Individual factors and social conditions of CRE teacher metacognition process**

No	Indicator	Answer Options								$\Sigma$	
		Always		Ever		Sometimes		Never			
		F	%	F	%	F	%	F	%	F	%
1	Teacher interest	5	66,6	1	16,7	-	-	-	-	6	100
2	Class atmosphere and teacher-student interaction	5	66,6	1	16,7	-	-	-	-	6	100

The individual condition of the teacher that underlies the process of metacognition of CRE teachers when carrying out learning actions, namely the teacher's interest. Teachers are encouraged to do well when they have the interest to do it. Therefore, developing teacher interest in learning is one of the continuous efforts based on the awareness that he knows his strengths and weaknesses. Teachers who have an interest can control themselves to do or not do something. In this way, it is hoped that the teacher will be more successful in carrying out

the learning process. What is the aspect of the individual condition of the teacher that underlies the process of teacher metacognition when carrying out learning actions, namely the teacher's interest in the implementation of learning as shown in table 3 above? This table shows that the aspects of teacher interest in the implementation of learning include 66.6% or as many as 5 teachers said they were always aware of their interests, while 16.7% or 1 teacher had and often used planning, monitoring, and evaluation in learning activities in class. The weight of this score is the same as an indicator of the classroom atmosphere and teacher-student interactions.

In other words, CRE teachers at high schools in Ambon city have an awareness of the ability to plan, monitor and evaluate and create a good classroom atmosphere and learning interactions. These abilities are such as preparing learning tools, and monitoring whether the tools are running well, and evaluating whether the tools are effective and do not need improvement or not yet effective and need improvement, in order to achieve the specified learning objectives. The ability to plan, monitor and evaluate teachers in learning can be seen from the readiness of teachers from the start in preparing these learning tools. Whereas in the learning process in the classroom, it appears that the teacher can adjust the learning steps that have been arranged in the lesson plan, train students with practice questions on student worksheets, organize students in cooperation in their respective groups, and use methods that condition students to be able ask and answer questions, discuss convey their respective opinions. For the monitoring process, the teacher continues to monitor the process of preparing the CRE learning device until its implementation in the classroom.

The ongoing learning process is also monitored so that it can be seen that the actual conditions occurring in the classroom are as desired based on the lesson plan. For evaluation, in teaching CRE in class, the teacher assesses both the process that has been going well, and the results that are in accordance with the determined learning completeness. However, evaluation also relates to teachers realizing their shortcomings or weaknesses and trying to improve them, as well as teachers who always understand that less active learning situations are corrected so that students can be active and enthusiastic in learning. In addition, teachers are also trying to improve their learning methods and strategies so that students can understand the material well and improve student learning outcomes. As emphasized by Andrianti, (2018) that CRE teachers are required to: 1) play a more role in taking personal approaches and providing supporting facilities and infrastructure for literacy learning so that students can understand what and the importance of literacy; 2) CRE teachers should be aware of themselves as an important component in determining the quality of the literacy learning process in schools; 3) CRE teachers need to make creative and efficient lesson plans and emphasize the use of literacy learning before starting teaching and learning activities.

### **Conclusion**

The metacognition ability of CRE teachers in learning at the high school level in Ambon city has been well implemented, while continuing to fix the various deficiencies encountered in the learning process. With knowledge of planning, monitoring and evaluation, it is possible to use it to develop the CRE learning process. With the problems encountered in CRE learning in the classroom, the teacher continues to make improvements in the conceptual aspects of the material, learning methods or strategies as well as their guidance in motivating students to learn well.

### **Recommendations**

Learning Christianity requires the seriousness of the teacher as a facilitator in the classroom. Seeing these findings, both teachers at the high school level are absolutely ready to face the learning situation of students who are increasingly developing with their respective complexities. Every Christian learning content needs to be planned and implemented

systematically, but of course it is hoped that teachers can improve their metacognitive abilities properly. Through continuous training and guidance, teachers' metacognitive abilities can be a force to drive student learning dynamics so that they can improve and develop.

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