

# A CASE STUDY: THE APPLICATION OF REACT LEARNING MODEL IN ACCOUNTING EDUCATION

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**Abstract:** This study aimed to describe the application of the REACT (relating, experiencing, applying, cooperating, transferring) learning model in Accounting Education in one of the state universities in Indonesia. This study was a qualitative descriptive used case studies approach to the application of learning using the REACT learning model in the Accounting Education study program. The data of this study were obtained from observations, lecturers deep interview about the implementation of the REACT learning model application, the strength and weakness in the learning process, accounting education students deep interview in one of the state universities in Indonesia about the application of the REACT learning model and the advantages, and also from the documentation. The findings of this study on the application of REACT learning model showed that by using the react learning model, students an understand the concept of lecture material well and not only memorized it. Students can implement their knowledge in their daily activities with REACT learning model in accounting education. According to the Accounting Education lecturer deep interview, students learning outcomes were also better when using the REACT learning model than conventional learning, and students were also more active in the learning process. The application of learning using this react model is expected to be applied in other departments at other universities for further research.

Keywords: REACT, Learning Model, Accounting Education

#### Introduction

To improve the quality of learning, a lecturer must be able to improve the quality of his teaching in the lecture process. In order for the process to be carried out, the role of the lecturer is needed as the director of the lecture activities so that students not only gain knowledge but are also able to build knowledge for themselves, so that student-centered learning is not only centered on the lecturer. According to several previous studies, the learning model also determines the achievement of learning objectives. The Universitas Negeri Malang currently adheres to the paradigm of life-based learning where learning is contextualized in real life. Therefore, the learning process carried out must be in accordance with the paradigm. One of the accounting learning models proposed to support this is the REACT learning model which stands for relating (experiencing), experiencing (applying), applying (applying), cooperating (grouping), and transferring (moving). According to (Selamet, Sadia, & Suma, 2013) learning with the REACT model gives results that are different from conventional, students will have a different understanding. According to (Crawford, 2001). This learning model is based on the understanding of contextual and constructive learning that emphasizes the meaningfulness of learning. Research from (Durotulaila, Kimia, & 2014, n.d.) also explains that the REACT model is day or provide the area of the basic understanding that is expected to emerge at the 'Applying' stage and an in-depth understanding of the 'Transferring' stage. Gradual understanding can help streamline students' thinking skills, so this model is expected to overcome difficulties in accounting learning.

To transfer knowledge or material to accounting students in accordance with their learning styles so that learning objectives can be achieved optimally, various learning models are needed. In practice, the accounting lecturer must remember that there is no learning model that is most appropriate for all situations and conditions. Therefore, in choosing the right learning model must pay attention to the condition of students, the nature of teaching materials, available media facilities, and the conditions of the lecturers themselves.

In accounting learning at the Universitas Negeri Malang, students are required to determine their own concepts, so that students do not just memorize. Accounting learning in essence requires an understanding of a strong concept so that students will easily learn in all subjects in the field of accounting and can transfer their knowledge into their daily lives. Therefore, in accounting learning at the Universitas Negeri Malang, one of the learning models is applied to achieve the learning objectives with the REACT learning model (relating, experiencing, applying, cooperating, transferring).

## **Literature Review**

#### Learning Model

According to (Gunter, Estes, & Schwab, 1990) an instructional model is a step-by-step procedure that leads to specific learning outcomes. Joyce & Weil (1980) define the learning model as a conceptual framework that is used as a guide in learning. An instructional strategy is a method for delivering instruction that is intended to help students achieve a learning objective (Burden & Byrd, 1999: 85). Thus, the learning model is a conceptual framework that describes systematic procedures in organizing learning experiences to achieve learning goals. So, learning models tend to be prescriptive, which is relatively difficult to distinguish from learning strategies. According to (Slavin, 2008) the learning model is a reference to a learning approach including its purpose, syntax, environment, and management system. Sedana with (Arends & Kilcher, 2010) which argues that the learning model refers to the approach used to include the objectives of learning, the stages in learning activities, the learning environment, and classroom management.

In addition to paying attention to the theoretical rationales, objectives, and results to be achieved, the learning model has five basic elements (Joyce & Weil (1980), namely (1) syntax,

namely operational learning steps, (2) social system, is the atmosphere and norms that applies in learning, (3) principles of reaction, describes how teachers should view, treat, and respond to students, (4) support systems, all means, materials, tools, or learning environments that support learning, and (5) instructional and nurturant effects - learning outcomes obtained directly based on targeted goals (instructional effects) and learning outcomes outside of the target (nurturant effects).

From the expert opinion above, researchers conclude that the learning model is a pattern or plan designed to create classroom learning effectively and efficiently to achieve learning goals. Learning models can be used as a way to improve the quality of classroom learning.

## REACT

REACT is a series of activities carried out by lecturers and students in learning that implements five components, namely linking, experiencing, implementing, collaborating and transferring the acquired knowledge (Kurniasih, 2017). This learning model is under the understanding of constructivism learning which emphasizes that knowledge is built into the minds of students and this learning model emphasizes the meaningfulness of learning. Trianto (2007) states that contextual learning is a learning concept that helps teachers associate the material they teach with the real-world situation of students and encourage students to make connections between their knowledge and application in everyday life. Learning that is truly contextual will occur if students (students) are able to process new information or knowledge in such a way that is in accordance with students' mind references (Collaborative for Excellence Teaching, 2007). From these opinions, we can adapt it to lectures so that the learning objectives are maximized.

	Table 1. KLAC I and Descriptions of Each Step
	Description
Relating	learning in the context of one's life experiences or preexisting
_	knowledge
Experiencing	learning by doing, or through exploration, discovery, and invention
Applying	learning by putting the concepts to use
Cooperating	learning in the context of sharing, responding, and communicating
	with other learners
Transferring	using knowledge in a new context or novel situation—one that has not
	been covered in class
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 Table 1. REACT and Descriptions of Each Step

Source: (Ültay, Durukan, and, & 2015, n.d.)

#### Relating

Relating is the most powerful contextual teaching strategy. It is also at the heart of constructivism. Relating is learning in the context of one's life experiences or preexisting knowledge (Crawford, 2001)

#### Experiencing

Relating connects new information to life experiences or prior knowledge that students bring with them to the classroom. But this approach is not possible if students do not have relevant experience or prior knowledge. Teachers can overcome this obstacle and help students construct new knowledge with orchestrated, hands-on experiences that take place inside the classroom. This strategy is called experiencing. It is learning by doing— through exploration, discovery, and invention. In-class hands-on experiences can include the use of manipulatives, problem-solving activities, and laboratories (Crawford, 2001)

REACT learning is not a stage that must be done sequentially, or all existing components must be done in a classroom learning. However, according to the learning needs to be carried out. REACT learning can be carried out following the design needed in learning so that learning occurs more varied and challenges students.

### Applying

Applying (means), meaning a stage of learning how to put a concept to use. Students who have knowledge and experience will enable the student to apply it in solving problems. (Fielker, 1986) states that students will be better taught how to express the right questions. Lecturers do not need to transfer all knowledge to students but invite students to think and find their own answers to the problems given by the lecturers and students themselves. This method will train application skills and problem-solving.

#### Cooperating

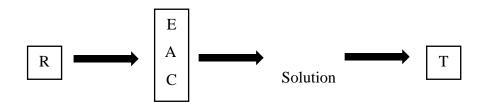
Students who work individually in solving a problem often do not show significant development. Sometimes they feel frustrated unless the lecturer gives step-by-step instructions. Conversely, students who work in groups can often solve complex problems with little help. The experience of collaboration is not only helping students learn teaching materials but is consistent with the real world. Working with peers in small groups will improve student readiness in explaining concept understanding and suggesting a problem-solving approach for the group. By listening to the opinions of others in one group, students will reevaluate and formulate their conceptual understanding. Students will learn to judge the opinions of others because sometimes the difference in strategies used will result in better problem-solving. When a group reaches its goal, the group members will gain high self-confidence and motivation. The American Association for the Advancement of Science (in Crawford, 2001) states the following.

"Learning often takes place best when students have opportunities to express ideas and get feedback from their peers."

The statement gives a meaning that the learning process will take place very well when students are given the opportunity to express their opinions and get feedback from their peers. In reality, there are several weaknesses in the use of group learning. For example, some students do not participate optimally in their groups, while some others dominate, some group members sometimes show disapproval and are less responsible for their group, even the possibility of students being faced with conflicts between group members.

## **Transferring**

Crawford (2001) defines transferring as the use of knowledge in a new context. In the learning process, transfer or transfer of knowledge is rare because students are not interested in linking and applying the concepts they have in other learning contexts. The ability of students to apply concepts in other situations is one form of evaluation of the success of the learning process which gives an indication that students have understood the concept comprehensively. Students need thinking skills, so they can move things. The role of the lecturer needs to be expanded by making various learning experiences with a focus on understanding, not on memorization. Students should be empowered to transfer all knowledge gained in school into their daily lives or apply what is learned from one subject to another. If students have been able to move and apply their knowledge in daily life, then it can be said that the student has had a deep understanding. Students are required to have the ability to think critically and creatively so that what they have learned is not stopped there but can be developed to solve learning problems.



Figures. 1 The Cyclic Process Of REACT

## Methods

This study uses a case study approach that aims to answer the question how the REACT (*relating, experiencing, applying, cooperating, transferring*) learning model applicated in accounting education in Universitas Negeri Malang. Case studies linked to empirical phenomena in real-life contexts have not clearly defined the boundaries between phenomena and their contexts, and require multiple sources of evidence (Yin, 2011). The phenomenon that became the case in this research is the application of blended learning in realizing life-based learning. Case study research describes an issue explored in one or more cases within a bounded system (Cresswell, 2017)

The sample of this study is Class D in Accounting Department. The data of this study were obtained from observations, lecturers deep interview about the implementation of the REACT learning model application, the advantages and disadvantages in the learning process, accounting education students deep interview in one of the state universities in Indonesia about the application of the REACT learning model and the advantages, and also from the documentation.

Testing the validity of data is done by triangulation. Triangulation can be done by matching different sources of information by examining the evidence from the source and using it to coherently justify themes (Creswell, 2017).

Triangulation in this research consists of triangulation technique and time. Triangulation techniques are used to test the credibility of data by checking the same source data with different techniques. Interview results are checked with observation and document collection. Time triangulation is done by interviewing, observing, and collecting documents with different times and situations. Data analysis techniques in the study include the theory of induction and data reduction. In the stage of induction theory, the theory will be built based on the findings of data in the field, while the data reduction stage, data analysis takes place simultaneously with the data collection process.

## **Findings and Discussion**

Contextual learning has long been applied in the accounting department of the State University of Malang. Some accounting lecturers use contextual learning with REACT models to achieve their learning goals. The desired learning objectives in accounting are that students can bring their knowledge into the context of their daily lives in accordance with the life-based learning paradigm used at the Universitas Negeri Malang.

Learning with the REACT model is carried out for one semester. This is done because to shape the student's thinking style because it forms a student's thinking style requires sufficient time. In the implementation, the lecturer prepares before the lecture takes place, starting with preparing teaching materials and syllabus. With careful preparation, the implementation of learning with the REACT model will be well implemented.

The results of the interviews of the participants who had gone through the triangulation process found that the application of the REACT learning model in the accounting department of Universitas Negeri Malang had problems. The first problem, not all students have an interest in finding out about the concept of the material being discussed, because of the different characteristics of students, so there are still passive students in the classroom. The second problem, students sometimes tend to be crowded because in learning with the REACT model, students are free to find out the concept of the material being discussed from various references and sources, for example from their gadgets. So sometimes classes are difficult to condition. The following is the interview result from one of the participants (lecturer) related to the constraints in applying the REACT learning model in the accounting department of the State University of Malang:

... "Yeah, all learning models must have problems when applied. Sometimes in class when the REACT model is applied, students are still passive and sometimes chat with friends. But so far it can still be overcome, and the learning objectives are still achieved. "

One subject that uses the REACT model is an introductory macroeconomics course in accounting. Following is the application of REACT in the accounting department of the Universitas Negeri Malang:

#### Relating

At the other stage, the lecturer connects the concepts with macroeconomic material owned by students. At this stage, students learn based on experience in daily life and relate it to lectures. As a REACT developer, (Crawford, 2001) states that relating is a form of learning that connects concepts learned with the material knowledge that students have in the context of real life or real experience. Learning is a means to connect everyday situations with new information learned. For example, in the introduction to Karo economics, students relate to price increases with their daily activities in terms of buying goods.

#### Experiencing

In experiencing stage, namely learning through exploration, discovery, and invention activities. At this stage, the lecturer motivates students by using various methods and learning media. The learning process will occur if students can use tools and materials as well as other forms of media in active learning in introductory macroeconomics courses. Here the lecturer gives a video show related to the current macroeconomic case.

## Applying

The application of concepts and information in a meaningful context is needed by students in their daily lives and the world of work. So that in the applying phase, the lecturer gives the application of concepts to skill activities, for example observing what sector is suitable at this time to be developed so that students are encouraged to become entrepreneurs because in the discussion of macroeconomic material unemployment is emphasized. Students are not just learning certain theories, but students are also guided to be able to apply the concepts they have learned into the context of their use in real life.

### Cooperating

In this stage, students are given the opportunity by lecturers to learn to share experiences, provide responses and communicate with other students. The experience of working together not only helps students learn the material, but also helps students to always be consistent with real life. Group discussion is an essential activity that develops the ability to cooperate. Students work with other students to find the concept of the subject matter of the macroeconomic introductory subject being discussed. The number of students belonging to the group usually consists of 3-4 students. The success of group discussions requires the division of tasks, observations, and opportunities to express opinions. Therefore, the quality of group discussions carried out in groups depends on the activities and performance of group members. Students must be able to work together in both small groups and large groups. Working in pairs or small groups (3-4 people) is an effective strategy to encourage students to work together in teams.

## **Transferring**

At the transferring stage, transfer of knowledge is done by students based on the knowledge they already have. The lecturer then develops students' self-confidence by building new learning experiences based on the knowledge and experience that students have. Transferring can be realized in the form of problem-solving in new contexts and situations but still related to the material discussed.

The following is an interview with one of the participants (students) related to their experience when the lecturer applied the REACT learning model in the accounting department of Malang State University, especially in their class:

.... "I was very excited when the lecturer gave interesting themes to discuss with friends in class. With our willingness to be able to explore the material and find our own concepts, even guests benefit from what we learn into our daily lives. "

## Conclusion

The application of the REACT learning model (relating, experiencing, applying, cooperating, transferring) in the accounting department of Universitas Negeri Malang is able to make students not only understand lecture material, but students can also connect what they already know with their daily lives. In the application of the REACT learning model, the lecturer must make preparations for learning well so that the implementation is in accordance with the learning objectives. This REACT learning model application is also in accordance with the paradigm used by the Universitas Negeri Malang, namely life-based learning because in learning the REACT model students can connect material with the context of their daily lives, even applying it in their daily lives. In the implementation of the REACT model, students are very enthusiastic to attend lectures, because non-monotonous lectures are only lecturers' explanations, but students themselves will later find concepts and relate them to their daily lives. Besides that, there are also some minor problems in the classroom are also maximally achieved.

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