







Analysis of Student Critical Thinking Ability in Records Management Course

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Abstract. The ability to think critically is an essential skill that students must possess when facing challenges in the academic and professional world. Records Management courses require critical thinking skills to understand the basic concepts of records management and apply them effectively in authentic contexts. This study aims to analyse students' critical thinking skills in the Archives Management course. The research method used is descriptive research with a quantitative approach. The research sample consisted of 77 students who were taking Archives Management courses. The research instrument used is a critical thinking ability test that has been adapted from a measuring tool that has been tested for its validity. The analysis results show that most students still have critical thinking skills that need to be improved, as evidenced by the average critical thinking ability in the archives management course of 57.71% in the less urgent category. Students facing problems analysing archival information, evaluating management decisions, and making the right decisions also need improvement. Several factors affect students' critical thinking skills, including the need for more use of learning media and learning approaches used by lecturers so students' thinking abilities could be more optimal.

Keywords: Critical Thinking, Records Management, Ability, Critical

1 Introduction

Education is one of the most important things because it will produce quality output or personnel and advance the Indonesian nation. The existence of education has a huge impact on human resources; the Indonesian government strives to continuously improve the quality of education in Indonesia according to the times [1]. Higher education as a producer of human resources has a big challenge to become one of the producers of quality human resources and can compete with other countries. The learning process carried out in lectures is expected to be able to create and develop students' hard skills and soft skills [2]. Student-owned field learning is a complex skill that only accepts material, theory, and formulas. Critical thinking ability, an indicator of soft skills, still needs to be possessed by students. Soft skills in the form of critical

thinking skills and the ability to solve problems for students are essential in the development of 21st Century Education [3]–[6].

Learning in the 21st century is expected to train students to welcome the Industrial Revolution 4.0. Critical thinking skills include critical thinking, creative thinking, communication, collaboration and problem-solving. Learning no longer teaches Low Order Thinking Skills (LOTS) but has been directed towards High Order Thinking Skills (HOTS). Higher-order thinking skills (Order Thinking Skills/ HOTS) provide opportunities for students to improve their ability to solve various problems. They are expected to be able to solve problems with the best solutions [7]–[9]. Students must have critical thinking skills to be able to solve everyday problems. Necessary thinking skills need to be taught in records management courses.

Critical thinking is vital in education because it is helpful as a means of encouraging students to understand more complex information. Advanced necessary thinking skills enable students to find and close their understanding and facilitate the world of work [10]. Students who can communicate their ideas to others through exchanging ideas also describe better social thinking skills [11], [12]. Besides that, critical thinking skills are essential because they can support achieving high learning outcomes. Students with high-level critical thinking skills will perform better than those with low critical thinking skills [13].

Critical thinking skills are needed to make decisions in doing or believing in something that begins with reasoned and reflective thinking [14], [15]. Critical thinking aims to give credence or not to a given claim. Critical thinking consists of cognitive abilities and dispositions. Disposition can be seen as an attitude, habit, curiosity, flexibility, tendency to seek reasons, desire, and willingness to seek diverse points of view [16]. Critical thinking skills need to be trained in the learning process because they can allow students to learn through discovery. Critical thinking skills can help students see problems from various perspectives so they can analyse these problems appropriately [17]. Critical thinking skills also help students understand and apply concepts in everyday life [18].

Students often need help understanding and applying records management's basic concepts and principles. Complex and abstract material can hinder developing a deep understanding and using this knowledge in real situations. This can impair students' ability to analyse archival information, evaluate archival policies, and make decisions based on critical thinking.

The learning approach used in the Archives Management course can also affect students' critical thinking skills. Teaching methods that are too passive and only focus on absorbing information can hinder the development of critical thinking skills. Lack of interaction, discussion, and practical application in learning can also hinder students from developing critical thinking skills.

The Office Administration Education Study Program records management course is taken in semester 4. This course is one of the KKNI-based compulsory courses that aims to provide an understanding of the process of administering archive systems, archive facilities and infrastructure, archive management and cycles record management. Through archiving courses, students can learn and understand filing management activities in an office. Later graduates of the Office Administration Education

Study Program, apart from being teachers, can also work in offices of government and private agencies.

Activities in the archives learning process that are carried out are not only taught about theory but can be carried out with implementation activities or practically using a learning media [19]–[22]. Through practice using learning media, they will better understand the concepts and theories being taught, thus making students more competent and able to think critically in carrying out an activity related to their area of expertise.

The development of Science and Technology does not only have an impact on the industrial world but also the world of education in Indonesia. Technology has a positive impact not only on social life but also on education. When technology is used in educational institutions, educators are expected to use digital tools to support teaching and learning in the classroom [23]–[25]. Interactive learning media is considered very meaningful; media is a tool that influences the atmosphere and conditions of the learning environment. The existence of "media" technology can make teaching and learning activities no longer concentrated on the teacher but will focus more on the activeness of students; in the learning process, the teacher is no longer a source of learning, but the teacher is only a facilitator who help students to build their knowledge [26]. The participation of technology in teaching and learning activities is proven to increase students' understanding of the subject matter they are studying [27].

This study aimed to analyse students' critical thinking skills in the Archives Management course. By doing this analysis, it is expected to better understand the level of students' necessary thinking skills and the factors that influence them. This research is expected to provide a more comprehensive experience of students' critical thinking skills in the Archives Management course and provide recommendations for improving a more effective learning approach.

2 Method

This study uses a quantitative method and is descriptive in nature. In descriptive qualitative research, the researcher highlights notes that provide comprehensive, sentence-by-sentence explanations of the real circumstance in order to bolster the data presentation [28]. The research began by determining the research subjects, namely 77 undergraduate students in Office Administration Education, Faculty of Teacher Training and Education, Sebelas Maret University, Surakarta . Then, proceed with compiling research instruments to identify students' critical thinking skills.

The research instrument consisted of test questions and rubrics for indicators of critical thinking skills. The test items consist of 6 case study questions in accordance with Facione's essential skills of thinking indicators, including interpretation, analysis, evaluation, inference, explanation, and self-regulation [14]. Student test results are then analysed using the critical thinking ability indicators criterion to determine the percentage of achievement in each hand. The data obtained comes from working on questions based on tests of necessary thinking skills, which are processed by calculat-

ing the rate of scores obtained by students on each indicator. The data that has been received is scored as follows:

$$Score = \frac{R}{N} \times 100$$

Information:

- Score** = Critical Thinking Ability percentage value
- R** = Number of marks obtained by students
- N** = Total value of the maximum score of the test

Table 1. Category Percentage of Critical Thinking Ability [29]

| Percentage (%) | Category |
|----------------|-----------------|
| 80% - 100% | Critical Sting |
| 70% - 79% | Critical |
| 60% - 69% | Pretty Critical |
| 50% - 59% | Less Critical |
| 0% - 49% | Not Critical |

3 Results and Discussion

This study aims to determine students' critical thinking skills in the Records Management course in the Office Administration Education Study Program, Faculty of Teaching and Education, Sebelas Maret University, Surakarta. The test carried out is in the form of case study questions totaling six items, which refer to indicators of students' critical thinking skills.

The indicators used are 6: interpretation, analysis, evaluation, inference, explanation, and self-regulation. More details can be seen in Table 2.

Table 2. Results of Students' Critical Thinking Ability

| Aspects of Critical Thinking Ability | No Question | Percentage of Achievement (%) | Critical Thinking Ability Category |
|--------------------------------------|-------------|-------------------------------|------------------------------------|
| Interpretation | 1 | 59 | Less Critical |
| Analysis | 2 | 58 | Less Critical |
| Evaluation | 3 | 56 | Less Critical |
| Inference | 4 | 57 | Less Critical |
| Explanation | 5 | 59 | Less Critical |
| Self-Regulation | 6 | 58 | Less Critical |

| Aspects of Critical Thinking Ability | No Question | Percentage of Achievement (%) | Critical Thinking Ability Category |
|--------------------------------------|-------------|-------------------------------|------------------------------------|
| | Average | 57,71 | Less Critical |

The table above shows the percentage of the six indicators of students' critical thinking skills. In the first indicator, namely interpretation, critical thinking skills were obtained by 59%; the second indicator, namely analysis, was acquired by 58%, the third indicator, namely evaluation, was obtained by 56%; the fourth indicator, namely inference, was obtained by 57%, the fifth indicator, namely explanation, was acquired by 59%, and on the sixth indicator, namely self-regulation obtained by 58%. Based on the six hands of students' thinking skills, 57.71% is received in the lacking critical thinking skills category.

From the information above, it can be concluded that students need to be more capable of critical thinking skills in the learning process. This happens because students are less accustomed to being trained in using their thinking skills to analyse a discourse or problem in the learning process. Students' critical thinking skills must always be taught so that students are familiar with how to analyse a problem and can draw appropriate conclusions and solutions in solving a problem they face [3], [30], [31]. For this reason, the role of the lecturer must be more to provide questions that can encourage students to be more active in thinking and analysing a problem from the discourse or case studies given in the learning process in class.

The analysis results show that most students have critical thinking skills that still need improvement. Understanding the basic concepts and principles of records management is still limited, and students experience difficulties applying this knowledge in real situations. The ability to analyse archival information, evaluate management decisions, and make the right decisions must also be improved.

Several factors affect students' critical thinking skills in the Archives Management course, including previous educational background, lack of use of learning media and learning approaches used by lecturers, so students' thinking abilities could be more optimal. Learning that is active, collaborative, and encourages problem-solving can help students develop their critical thinking skills. Media use in the learning process is always considered essential and can increase learning effectiveness. The word media is a means of information between a source and recipient of a message to show that the media is an intermediary and liaison between two parties, namely the start of the news and the recipient of the report or information [32]. To improve students' critical thinking skills, enhancing the teaching and assessment approaches in the Archives Management course is necessary. Increasing conceptual understanding through case studies, group discussions, and project-based assignments can effectively develop students' critical thinking skills in this course.

The ability to think critically is essential to be further improved because the ability to think critically is a provision for students to be able to face the progress of the times and technological developments proliferating. The learning process in the field of education will continue to progress and develop to a more challenging level so that students must be able to balance the critical thinking skills possessed by students,

especially in facing the 21st century, so that Students need to have provisions on how to think critically in dealing with problems in the 21st century [33]–[35].

There are several things that lecturers can do as educators to be able to train students' critical thinking skills by designing enjoyable learning so that students can be more focused and interested in developing thinking skills and students can follow every teaching and learning process in the classroom [36], [37]. Lecturers can also familiarise students with various case study questions and invite all students in the learning process to play an active role in providing responses and conclusions from each question the lecturer gives. In addition, the use of learning media by lecturers can also be one of the factors that can develop students' critical thinking skills [38]–[40].

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