



Regular quizzes as a teaching device to boost students' cognitive and affective behaviour

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Abstrak

Penelitian ini dilakukan untuk mengisi kesenjangan pemahaman saat ini mengenai perilaku kognitif dan afektif dalam dunia pendidikan. Peneliti menggunakan desain metode QUAN-qual atau yang juga dikenal sebagai desain metode campuran eksplanatori. Populasi dalam penelitian ini adalah mahasiswa semester enam Jurusan Pendidikan Bahasa Inggris Universitas Negeri Makassar. Sampel penelitian berjumlah 38 mahasiswa yang terdiri dari dua kelas, yaitu 18 mahasiswa dari kelas A dan 20 mahasiswa dari kelas C. Pemilihan sampel dilakukan dengan teknik cluster random sampling. Data dikumpulkan melalui kuesioner dan wawancara untuk mengetahui apakah penerapan kuis reguler dapat meningkatkan perilaku kognitif dan afektif mahasiswa atau tidak. Data dari kuesioner dianalisis secara manual sedangkan wawancara diuraikan untuk mendukung hasil analisis kuesioner. Hasil analisis data menunjukkan bahwa skor rata-rata mahasiswa kelas A adalah 64,05, sedangkan skor rata-rata mahasiswa kelas C adalah 65,44. Hasil penelitian menunjukkan bahwa kuis reguler dapat meningkatkan perilaku kognitif dan afektif mahasiswa.

Kata Kunci: Kuis reguler, kognitif, perilaku afektif.

Abstract

This research was to fill the gap in the current understanding about cognitive and affective behavior in education. The researcher applied QUAN-qual method design or also known as explanatory mixed method design. The population of the research was the six semester students of English Education Department in State University of Makassar. The total sample was 38 students that consisted of two classes which was 18 students from class A and 20 students from class C. It was taken by using cluster random sampling. The data were collected through questionnaire and interview to find out whether the implementation of regular quizzes boost students' cognitive and affective behavior or not. The data from questionnaire were analyzed by using manual calculation while the interview was elaborated to support the result analysis of the questionnaires. The result of the data analysis showed that the mean score of the students in class A was 64.05 while the mean score of the students in class C was 65.44. Based on the finding and discussion of the study, the researcher concluded that regular quizzes boost students' cognitive and affective behavior.

Keywords: Regular Quizzes, cognitive, affective behavior.

Introduction

Teaching and learning process is a planned and structure activity that involves interaction between lecturer and student in the classroom. In

teaching, lecturer has duties to share information and made the students have cognitive, affective, and psychomotoric domain. This classification is generally referred as Bloom's Taxonomy.

Cognitive domain is one of essential parts in teaching and learning process because it refers to the domain of learning that deals with the acquisition and utilization of knowledge and intellectual skills. This domain includes six hierarchical categories, which are remembering, understanding, applying, analyzing, evaluating, and creating (Krathwohl, 2010). While the affective domain involves emotional aspects of human learning, such as attitudes, motivation, values, and feelings. This domain shapes how learners respond to and internalize information, contributing to personal growth, empathy, social interaction, and learning motivation. The affective domain influences both engagement and long-term retention, especially in learner-centered environments (Bret, et al, 2018). And the psychomotor domain relates to physical movement, motor-skill coordination, and physical dexterity. It includes skills that require the integration of mental and physical activity, such as using tools, operating equipment, or performing athletic or artistic tasks.

Making students to have cognitive and affective domain is one of the target goals of education. Cognitive and affective domain cover expected knowledge, skill, attitude, and competence that students were expected to acquire at an institution or education. Hence, the focus of this research was on cognitive and affective domain.

Cognitive covers recalling knowledge and affective shows attitude or action. It connects with students' learning outcome. Based on the fact that the capacity of human brain to memorize information is limit, it is based on the decay theory. This theory assumes that if the information does not repeat, it will damage and eventually disappear. Hence, people need to recall the information received. Information received is factual knowledge that the lecturer gave in English teaching process. It is also reinforced by the problem that the researcher found when interviewing some students of English Education program in State University of Makassar about the problem that the student faced in learning English that the students easy to forget the given material. It was influence from the lack of recalling the material.

Forgetting materials by students is common problem that many lecturers face in teaching and learning process. Forgetting material usually occurred when the students did not try to recall it. Recalling has same meaning with repetition. In this case, it happened because

the students did not have a reason to recall it. It was accepted that remembering something is based on the reason. The more reason for remember, the more reason for recall. When it occurs, it will influence teaching and learning process because students will be difficult to understand the next material. Consequently, the lecturer has to explain it again and take more time automatically.

Nowadays, lecturers implement various instructional strategies to enhance student learning, leading to the development of diverse educational approaches. Among the conventional yet effective techniques for helping students retain material is the use of quizzes. In this method, the lecturer begins the class by asking questions related to the previous lesson, which encourages students to review and study the course materials consistently throughout their studies.

Kenney and Bailey (2021) found that frequent low-stakes quizzes improved both factual recall and concept understanding among college student. Extending this, Wong et al. (2024) showed that embedding low-stakes quizzes in online lectures enhanced students' engagement, self-regulation, and critical thinking skills.

Regular quizzes not only support better material retention but also encourage students to actively rehearse and reinforce what they have learned. In this context, quizzes are administered at the beginning of each class session, serving both formative and motivational purposes. Although some lecturers have implemented quizzes in English instruction, they often do so inconsistently-merely as a means to assess comprehension. Therefore, this study aims to address the gap by investigating the impact of consistently applied, regular quizzes on students' cognitive and affective learning outcomes.

So, based on the rationale above the researcher interested in conducting a research under the title: "Regular Quizzes as a Teaching Device to Boost Students' Cognitive and Affective Behavior."

Problem Statement

As stated in the background above most of students are lack in recalling the previous materials because English lecturers do not rehearse them to learn, so they are lack of recalling materials.

Based on this, the researcher formulates research question as follows:

1. What is the influence of regular quizzes on student' cognitive and affective behavior?

Objective of the Research

In relation to the problem statement, the objective of this research was to fill the gap in the current understanding about cognitive and affective behavior at tertiary education.

Significance of the Research

The result of the research was expected to have theoretical and practical contribution. Theoretically, the result of this research was expected to give advantages in helping lecturer to provide teaching device in learning. Practically, the result of this research was expected to be useful information for the teacher or lecturer and the students in learning in general and in boosting the students' cognitive and affective behavior in particular. Also, for the future researcher, the researcher hoped this research will be helpful in guiding them.

Method

This study adopted a QUAN-qual approach, also referred to as the explanatory mixed methods design, in which quantitative data were gathered first and given greater emphasis than the qualitative data (Gay, et al., 2013: 485).

The researcher used questionnaire in quantitative data and used interview in qualitative data. In taking the sample, the researcher used cluster random sampling technique. The sample was taken randomly out of two classes which was class A that consisted of 20 students and class C that consisted of 18 students. This class was taken as the sample in which the researcher assumed that each classes had the same opportunity to be taken as the sample. Two instruments were used in this research. The first was questionnaire and the second was observation.

The researcher used questionnaire to collect the real authentic data from the subjects or participants. It was used to collect data about regular quizzes that they received from lecturer

in teaching and learning process and its influence to their cognitive and affective behavior.

The questionnaire consisted of two types of statements, namely positive and negative. To analyze the responses, the researcher utilized a Likert scale. Through this scale, each participant was individually asked to respond to a series of statements by expressing their level of agreement, ranging from strongly agree (SA), agree (A), undecided (U), disagree (D), to strongly disagree (SD).

In order to get strong argument about regular quizzes, the researcher did an interview to the students by asking them some questions.

Result and Discussion

This section presents and discusses the research findings regarding the implementation of regular quizzes and their impact on students' cognitive and affective behavior. The data were collected through questionnaires and interviews with sixth-semester students in the English Education Department at the State University of Makassar.

A. Cognitive Behavior

Data from the questionnaire indicated that students perceived regular quizzes as helpful tools for enhancing their learning. In Class A, 30% of students reported a "strongly positive" attitude, and 70% a "positive" attitude. In Class C, 50% were "strongly positive," 38.89% "positive," and 11.11% "moderate." These results suggested that the majority of students appreciated the use of quizzes for reinforcing their understanding of the material.

No.	Interval	Class A		Class C		Classification
		F	5	F	5	
1.	67-80	6	30 %	9	50%	Strongly Positive
2.	54-66	14	70 %	7	38.8 9%	Positive
3.	42-53	0	0	2	11.1 1%	Moderate
4.	30-41	0	0	0	0	Negative
5.	16-29	0	0	0	0	Strongly Negative
Total		20	100 %	18	100 %	

More specifically, the questionnaire revealed that regular quizzes helped students pay more attention during lessons and made it easier

for them to comprehend and retain the material. These findings support the idea that frequent quizzes serve as cognitive reinforcement, encouraging regular study habits and reducing procrastination. It is in line with Intaniasari, et al (2023) who asserted that quiz team method contributes to improving learning outcomes that end at students' academic level.

For more detail data about the result of questionnaire will be described below:

- Item 1: 84.21% of students agreed or strongly agreed that they liked regular quizzes.
- Item 2: 92.11% of students agreed or strongly agreed that the use of regular quizzes helped them pay more attention to the material.
- Item 6: 73.68% of students felt that quizzes helped them understand the material better.
- Item 14: A combined 73.68% of students disagreed or strongly disagreed with the statement that quizzes did not help them understand the material easily, indicating agreement with the positive impact of quizzes.
- Item 10: 86.84% of students disagreed or strongly disagreed with the idea that quizzes did not help them focus, further reinforcing that quizzes increased their attention in class.

Those findings reinforce that the students perceived quizzes to boost their cognitive behavior. This also in line with interview responses which was done by the researcher. Most of interview response stated that regular quizzes motivated the students to review materials regularly. It can be proved by the statements of the interviewees:

A: *Bagaimana pendapat Anda tentang penerapan kuis didalam kelas?*

What do you think about the quizzes implementation in the classroom?

B: *"Saya rasa kuis memang efektif untuk memicu mahasiswa agar mengulang-ulangi materi yang telah diperoleh."*

I feel quizzes are effective to make the students rehearse the given materials.

C: *"Menurut saya penerapan kuis dalam kelas itu sangat membantu karena dengan adanya kuis kita bisa termotivasi untuk belajar."*

In my opinion, the implementation of quizzes in the classroom motivate us to study.

Those statements highlighted how regular quizzes fostered cognitive behavior by prompting

students to review and recall previously taught material.

b. Affective Behavior

Data from the questionnaire and interviews indicated that regular quizzes also positively influenced students' affective behavior, particularly in terms of punctuality and classroom engagement.

Students noted that the quizzes created a sense of urgency and accountability, which encouraged them to come to class on time. This supports the findings of DePaolo and Wilkinson (2012), who found that quizzes positively affect student attendance and participation. The interviews reinforced this result. Several students admitted that they made extra efforts to be punctual when they knew a quiz would be held. It can be seen in the statements below:

A: *Apakah Anda akan datang tepat waktu ke kelas karena mengetahui akan diadakan kuis? Mengapa?*

Do you come on time to the classroom because you have already known that the quizzes will be held? Why?

B: *"Iya karena jika tidak, kita akan memiliki sedikit waktu dalam menyelesaikan kuis yang diberikan."* Yes because if not, we would have a little time to finish the quizzes.

C: *Iya karena jika tidak saya akan memiliki sedikit waktu untuk menyelesaikan kuis yang diberikan."* Yes because I did not have enough time to finish the quizzes.

D: *"Ya, saya akan datang tepat waktu karena jika telat ditakutkan tidak dapat mengikuti kuis."* Yes, I will come on time because if I came late I afraid cannot follow the quizzes.

Those responses suggested that regular quizzes indirectly shaped students' attitudes toward punctuality and class preparation. The desire not to miss or perform poorly on a quiz motivated students to arrive early and be mentally ready for the lesson.

In conclusion, the affective dimension of learning was significantly enhanced by the presence of regular quizzes. These assessments cultivated a more responsible and engaged classroom atmosphere, where students demonstrated greater commitment to their academic responsibilities.

Conclusion

Based on the result of the questionnaire and interviews support that regular quizzes positively affect both cognitive and affective behaviors of the sixth semester students of English Education Department in State University of Makassar. Cognitively, quizzes

encouraged students to study and reinforced their understanding of the material. Affectively, quizzes improved classroom behavior by fostering punctuality and motivation to study. Therefore, integrating regular quizzes into the learning process is a beneficial strategy to enhance students' overall academic engagement.

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Curriculum Vitae

Sry Wahyuni is a lecturer of Mandarin Study Program in State University of Makassar, South Sulawesi, Indonesia. Her current research interests include communication and education.