

# Suggestions for Lecture Assessment Items in College Settings

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**Abstract:** Lecture assessments in higher education settings are widely practiced to measure teaching quality and to improve professors' instructional skills. Though the majority of universities in South Korea currently performs the assessments, they do not tend to thoroughly assess lecture types other than theory-based ones. The aim of the study is to provide a series of questioning items for each of various lecture types conducted in college settings, including flipped learning, discussion-based lectures, and problem-based learning, etc. Extracting data from 11 legitimate journal publishers and four university-based websites on teaching methods and higher education, the study investigated 34 articles published since 2013 in relation to lecture assessments. Results suggested different lecture assessment items that well match distinct features each lecture type entails; college instructors are encouraged to apply the findings to their specific lecture types accordingly. Further implications are made based on the lecture assessment items that the study suggests.

**Keywords:** college education, course evaluation items, application for lectures, course types

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## 1. Introduction

Educational systems that provide no feedback to instructors are likely to fail instructors as well as students. Assessments that are poorly conducted about college lectures could impinge the lecture quality. Without students' proper assessment, instructors can hardly identify problems they may entail, resulting in continuing substandard performance in their lectures. In this respect, student assessments on instructors' teaching effectiveness are believed to keep education level high [1].

In the United States, lecture assessments began in 1960's in order to meet college students' demands and needs, ensuring a higher level of accountability in college education, and to improve the education quality they were to receive [2]. Since 1980s, public discussions have emerged on the assessment system for professors' lectures in Korea, and since the early 1990s, various universities have begun to conduct such assessment on lectures. As student-centered education began to be highlighted, schools began to introduce a lecture assessment system in universities in Seoul metropolitan area, and the importance of lecture assessment is emphasized enough that a large number of universities across the country are currently implementing the system. Furthermore, as the results of the lecture evaluation are reflected in the professors' performance [3].

The purpose of the study to enhance question items used for lecture assessment conducted at universities in South Korea, and to make suggestions of utilizing its results [4]. It is almost irrational to evaluate the quality of each lecture as well as that of professor based on a sole series of lecture assessment items. A considerable number of universities currently implement not only theory-based learning, but other types such as flipped learning, discussion-based classes, problem-based learning, team-teaching, capstone design, e-learning, and practice-oriented classes [5]. Hence, the series of lecture assessment question items suggested in the study are expected to be utilized in accordance with the unique needs of each type of lectures in college settings.

## **2. Literature Review**

### ***2.1. The Purpose of College Lecture Assessment***

The role of the lecture assessment at a university level is to encourage professors to prepare for lectures in student-centered education and to have the improve the lectures based on the student feedback provided. In other words, its purpose is to enhance the professors' teaching expertise and improve the quality of lectures, and most universities also use the results of the lecture assessment as an indicator of personnel management [6]. The results of the lecture assessment and utilization measures are also used as major indicators in the assessment to select various financial support projects implemented by the government. Rather than simply evaluating courses and professors, a good assessment of lectures is the main purpose of improving the level of lectures [7].

Lecture assessment has two main objectives: formative and summative purposes. Formative assessment refers to collected data designed to improve lecture quality through a lecture evaluation, and the results of summative assessment are used to re-format the courses, to decide whether promoting professors or not, re-contracting instructors or not, etc[8]. There are a few perspectives existing toward the current status quo of lecture assessment: i) the assessment generally ensures the credibility of its results because the students rate the lectures, ii) the assessment needs much improvement for more accurate results, and iii) the assessment rather reduces the accurate evaluation of the lectures. So, it is hard to say that lecture assessment that heavily relies on students' opinions lacks credibility; on the other hand, it is hard to regard lecture assessment as a perfectly reliable mark [9,10].

### ***2.2 Problems Related to Lecture Assessment***

Although the lecture assessment results are used as major marks to evaluate the lecture quality, as described previously, it is difficult to determine the complexity of its related problems, including the assessment system, assessment tools, and question items.

First, when the lecture assessment lacks credibility, the results may not be able to accurately reflect the lecture performance of the lecturers [11]. In many cases, universities in Korea implement the lecture assessment questions that are used in the United States, but the university environments could be completely different, which may cause a high level of confusion as to the results of the lectures [7]. Second, many of the lecture assessment items fail to correctly evaluate the feasibility of assignments given, overall satisfaction of students, and appropriateness of the grades given [12]. Although these factors entail the validity in quantifying lecturers' teaching techniques, the items aforementioned often neglect whether the students learn the contents delivered during the lectures.

### ***2.3. The Validity and Reliability of Lecture Assessment Results***

The validity of the lecture assessment refers to the degree to which the assessment tool meets the purpose in relation to the evaluation purpose. To secure the credibility of the lecture assessment, it is necessary to clearly state the purpose of the lecture assessment, and to clarify the factors of the lecture assessment [13,14]. The purpose of the lecture assessment is to improve the lecture by providing feedback to professors, and to have them use it as a basic material for compensation and punishment. In order for the assessment tools to be valid, they must meet this purpose. Reliability is the degree to which the results of the lecture assessment are reliable. To verify it, the reliability of the test-re-test to verify the stability of the test results, the reliability of the test to measure the homogeneity of the test, and the consistency of the questions within the question [15].

### ***2.4. Analysis of the Lecture Assessment Results***

A number of studies have been conducted to examine factors that affect the assessment result scores of lectures [16-19]. In particular, the number of students in each lecture has been considered as a steady component affecting the assessment results [20]; the smaller class sizes, the higher scores, and the lowest scores were resulted from a lecture that contains between 90 and 100 students. Such

findings may suggest that there could exist a wide range of variables that could possibly affect the quality of lectures.

### 3. Methods

The study attempted to improve lecture assessment question items for various types of lectures that can be implemented in college settings, and to utilize the results improve the lectures as well as professors' teaching expertise. To this end, the author categorized the various types of lectures conducted in Korean university settings; such types included theory-based lectures, flipped learning, and discussion-based lectures, and problem-based learning (PBL), and experimental lectures. In fact, the main target of the method is to determine the replicability of the study. Extracting data from 11 legitimate journal publishers and four (4) university-level websites on themes of teaching methods and evaluation in higher education settings, the study investigated 34 articles published since 2013. The articles that seemed irrelevant to the purpose of the study were excluded. The categories of each lecture type included 'Evaluation on the Lecturer', but other factors that the searched article suggested, and the questions proposed in the articles are presented in the Results section.

### 4. Results

#### 4.1. Theory-based Lectures

The theory-based lectures contain the following assessment question items as shown in [Table 1] [21-23]. Additionally, this would be used as a common set of assessment items that are applied to all lecture types.

**Table 1.** Lecture Assessment Items for Theory-based Lectures [21-23]

Category	Content
Organization of Expectation for the Lecture	1) Learning objectives were clearly stated.
	2) This course was systematically managed and proceeded according to the learning objectives.
	3) The lectures were conducted to achieve the initially stated learning objectives.
Textbooks, Grades, and Lecture Management	4) The textbook and other supplementary material were applied properly.
	5) The examinations, quizzes, and assignments were helpful to achieve the initially stated learning objectives.
	6) The course's level of difficulty was managed appropriately.
	7) The amount of contents conveyed during lectures was appropriate.
Evaluation on the Lecturer	8) The feedback the lecturer provided regarding the assignment or examination was helpful.
	9) The lecturer demonstrated proper amount of knowledge for the course.
	10) The lecturer did not cancel a lecture. When necessary, s/he provided a make-up lecture.

#### 4.2. Flipped Learning

The flipped learning contains the following assessment question items as shown in [Table 2] [24].

**Table 2.** Lecture Assessment Items for Flipped Learning [24]

Category	Content
Improvement of My Competencies	1) I was able to improve my analysis skill.
	2) I was able to improve my problem-solving skill.
	3) I was able to improve my skill of suggesting solutions for unfamiliar problems.
Cooperation with the Colleagues	4) I learned that my contribution to the team as a member is important.
	5) I learned that it is important for me to cooperate with the team members in order to successfully carry out a team project.
Evaluation on the Lecturer	6) The lecturer sufficiently explained about the teaching and learning method of flipped learning.
	7) The lecturer attempted to engage uninterested learners in the lectures.

#### 4.3. Discussion-based Lectures

The discussion-based lectures contain the following assessment question items as shown in [Table 3] [25,26].

**Table 3.** Lecture Assessment Items for Discussion-based Lectures [25,26]

Category	Content
Improvement of My Competencies	1) I was able to organized my thoughts and verbally express myself to the others.
	2) I was able to improve my skill of accommodating various perspectives.
	3) I was able to improve my critical thinking skill.
Evaluation on the Lecturer	4) The lecturer attempted to provide the students with an equal amount of opportunities to freely speak.
	5) The lecturer successfully played a role of moderator the discussion was conducted in a balanced fashion.
	6) The lecturer prepared appropriate themes for the discussion.
	7) The lecturer attempted to engage uninterested learners in the lectures.

#### 4.4. Problem-based Learning (PBL)

The problem-based learning (PBL) lectures contain the following assessment question items as shown in [Table 4] [27].

**Table 4.** Lecture Assessment Items for Problem-based Learning [27]

Category	Content
Improvement of My Competencies	1) I was able to improve planning skills prior to performing.
	2) I was able to improve problem-solving skills without relying on others.
Evaluation on the Lecturer	3) The lecturer showed more interests in my problem-approaching methods than my memorizing skills.
	4) The lecturer suggested a wide range of problems to students.
	5) The problems the lecturer suggested were close to real- and everyday- lives.
	6) The lecturer encouraged the students to suggest problems they wish to resolve.
	7) The lecturer emphasized that there exists more than one way to resolve the problems.

**4.5. Experimental Lectures**

The experimental lectures contain the following assessment question items as shown in [Table 5] [28].

**Table 5.** Lecture Assessment Items for Experimental Lectures [28]

Category	Content
Improvement of My Competencies	1) I was able to improve the capabilities necessary to plan and proceed with the experiment.
	2) I was able to improve my ability to analyze and conclude the results of the experiment.
Evaluation on the Lecturer	3) The lecturer devotedly prepared the experimental tools for students.
	4) The lecturer systematically demonstrated how each experiment is conducted along with demonstration.
	5) The lecturer did his/her best for students' safety.
	6) The lecturer provided the students with proper instructions so that the students can easily follow the experiments.

**5. Discussion**

The study attempted to develop lecture assessment question items that could accurately reflect the distinct features of various types of lectures conducted in Korean universities, resulting in improving teaching quality and effectiveness of instructors. In order to enhance the reliability and validity of the lecture evaluation, the lecture questions were composed of common questions and lecture type questions by including the question items that could correctly reflect the characteristics of each lecture type in the assessment. However, such attempts add the number of type-specific question items, resulting in negatively affecting the lecture assessment results because it may increase students' fatigue as they answer all the items. In order to cope with such possible problems, additional measures may be necessary to ensure the reliability of the lecture evaluation if the lecture assessment is conducted by adding questions by type. The assessment question items suggested in the study

include self-assessment items for students. Since the score of the self-assessment question items is not included in the lecture assessment score, it is not directly reflected in the score, but it can be used as a data to improve the lecture as it can identify students' participation in the class.

## 6. Conclusion and Implications

The lecture assessment systems currently conducted in college settings are mostly regarding individual instructor's performance level that students perceive. Considering the fact that there exists a number of systematical and environmental factors influencing the lecture assessment results based on its types, it could be difficult to assess the overall education quality solely individual instructor's teaching effectiveness. To cope with such circumstances, university-level policy makers need to place efforts on refining lecture assessment questioning items as well as examining both instructors' and students' needs for each lecture type. Though the major purpose of improving question items for lecture assessment is to improve instructors' teaching effectiveness, it should aim to heighten students' satisfaction as well.

Future researchers interested in pursuing this matter may consider the following implications. First, in order to enhance validity of lecture assessment items, a wider range of evaluation criteria needs to be studied. Its examples include self-assessment, peer evaluation, evaluation by fellow instructors, etc. It is also considered important to encourage students to participate in answering lecture assessment question items actively and sincerely. Second, researchers need to study how instructors could more effectively utilize the lecture assessment results (e.g., to what degree should the results be revealed, how the results should be utilized to reflect the instructors' reputation, etc.). Third, in addition to the attempts to accurately assess lecture quality, a series of university-level supports need to be practiced to improve instructors' teaching effectiveness.

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