Communication and Students' Needs

Measuring Students' Affect toward Teaching and Learning Process in Higher Education

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Keywords: Affective Learning, Instructional Communication, Interpersonal Communication, Teacher Evaluation.

Abstract: In achieving successful learning outcomes, educational systems should be able to fulfill not only students' academic needs but also their personal and interpersonal needs. To meet the students' needs, an effective and affective communication must be employed in the teaching and learning process. In the current study, the authors measure students' affect in regard to their affective learning experience and their evaluation toward their teachers while studying in the university. Surveys were used to collect the students' affect from 886 students in eight faculties at Universitas Pendidikan Indonesia. The following results were yielded from the data: (1) six out of eight faculties indicate a high affective learning level; (2) In terms of teachers/instructors evaluation, most students from all faculties have a high level of appreciation to their teachers' instructional communication; (3) In addition, the faculty of Art and Design Education received the highest rate on their students' affect. The study is expected to contribute in providing initial data for developing an affective based learning program.

1 INTRODUCTION

Nowadays, the term "affective" have been introduced and applied as a part of students' learning process. As described by Bloom (1964), The affective domain describes the emotional processes of learning, focusing on the learners' emotional states, values, motivations, attitudes and characters. In line with this, Smith and Ragan (in Jagger, 2013) identify affective characteristics as expressed by statements of opinions, beliefs or an assessment of worth. When the affective aspects are embbeded into the education system, it becomes a set of learning process that concern with learners' social-individual development, feelings, emotions, morals, ethics (Beane, 1990).

These aspects should not been neglected from the curriculum. The inclusion of affective components within the learning process can enhance the whole student rather than merely focusing upon cognitive development. In supporting this, a research conducted by Ferguson (2006) on primary education students proved that when school curriculum focuses solely upon the cognitive realm, the uneven development of the other domains may be enhanced, thus emphasizing the child's feeling of being 'out of sync' with his or her peers. From this the authors believe that educators need to incorporate strategies aimed at balancing the affective and cognitive learning aspects for a balanced educational outcome.

One important strategies in fulfilling the students affective needs is through interpersonal communication between teachers and their students. Most teachers attempt to satisfy the academic needs of the students. They feel an educational commitment or obligation to fulfil these needs, but other student needs such as affective needs often are neglected. However some teachers try to communicate with their students to assist them to satisfy their personal and interpersonal needs. They have been aware that if a student's personal and interpersonal needs are not met, the academic needs may never be met either (Richmond, Wrench, & Gorham, 2009).

From the aforementioned rationales, This paper attemps to measure how students affectively feel to the learning process that they have experienced in the classroom. It is expected that the results of students' affective level and their evaluation toward their teachers can serve as a basis in determining future

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learning contents that can satisfy both cognitive and affective needs of the students.

2 LITERATURE REVIEW

The current study focuses on students' affect and teacher evaluation. In this part the authors would like to review some references and other works related to the study.

2.1 Affective Learning

As previously mentioned, Affective domains are more often associated with a taxonomy introduced first by Karthwohl, Bloom, and Masia (1964). It is called affective taxonomy because it is based on the principle of internalization between both behaviors and values in an individual. This Internalization is the basic concept for understanding the taxonomy because the more values and attitudes are internalized the more it affects one's behavior.

These values and attitudes components then were categorized by them into five levels of hierarchical taxanomy. They are ranged from receiving (awareness or willingness to attend to an instructional message), responding (willingness to respond and/or actively engage instruction), valuing (seeing the significance of a particular behaviour, idea, object, or phenomenon, organizing (comparing and contrasting competing value systems in an effort to relate and synthesize values), and characterization by a value or value set (value system, characteristic life style).

The set of categories was the underlying support for the authors in the current study to measure the affective learning experienced by the students. As mentioned by , (Thweatt & Wrench, 2015) Affective learning should be viewed as multidimensional with a series of measures that tackle various aspects of the construct and should also cover the internal value changes that persist long after the learning event occurs. Moreover it should be clear then that students' affective experiences in the classroom impact their subsequent behaviours, perceptions, and outcomes in important ways. Thus, despite not measuring affective learning itself, the assessment of students' affective experiences serves to operationalize an important variable for investigation (Bolkan, 2015). Based on these assumptions, the authors then conduct the study by measuring the affective learning based on the students perception toward their learning experience.

2.2 Teacher Evaluation

This study also take teachers or lecturers performance as the center of attention. In this case, the students affect toward their teachers/lecturers is measured. One of the reasons to include teachers' performance as part of the measurement is that a teacher is a prominent stakeholder in the learning process. That is why in order to improve student learning, an evaluation becomes a must for improving teacher practice.

As argued by Goe and Little from the National Education Association (2017), the core purpose of teacher assessment and evaluation should be to reinforce the knowledge, skills, emotions, and classroom practices of professional educators. This goal serves to promote student growth and learning while also inspiring great teachers to remain in the classroom.

Teachers need to be evaluated to see the teacers performance and how they can relate to their students affectively. Evaluation concerns itself with more than how well a teacher teaches. It is also about how a teacher works with the classes of students that make up a teacher's teaching assignments. Teaching also concerns itself with the rapport a teacher has with the whole class, and not just with those in the class who understand and comport themselves in the manner thought by the teacher to be most appropriate (Coulombe, 2011).

In other words, a teacher's responsibilities should include respect for all students, attention to best teaching practices, and dedication to the cause of teaching all of the students in class so that they will achieves mastery.

2.3 Related Studies

Numerous previous studies indicate that affective component and teachers communicating style are two of the most influencing factors in fulfilling the students' needs in any level of education including in a higher education setting.

The authors initial study on freshmen students communication anxiety indicates that one of the factors that can ease their anxiety is the teachers interpersonal skills (Effendi & Sukmayadi, 2016). The study analyzed fresmen students communication apprehension from 11 departments. The conclusion showed that one of the important factors aside from having a suitable academic environment is the fulfillment of students' affective needs.

In case of affective learning measurement, a team of researcher from Texas Shave analyzed how

affective domain can be measured using writing assessment. He employed content analysis of 83 reflective writing samples was used to analyze affective learning at the levels of receiving, responding, valuing, organization, and characterization University (Barry L, Kim, and Felton, 2006. The results indicated that that some students expressed affective learning at higher levels of the affective taxonomy and increased their level of reflective writing in the process.

In addition, Smith, Mann and Shephard (2011) argued that the affective assessment should consist of the abilities categorization (to receive, to respond, to value, to organise and to internalize) provides an excellent and forward-looking framework within which to explore the measurement of affective attributes. Related to the current study, the authors will analyze not only the student's affective domain but also evaluate the teachers performance based on the students perspective.

3 METHODS

The study is quantitative by nature and the authors have employed survey method in collecting the data. The sample consist of 886 undergraduate students in Universitas Pendidikan Indonesia (Indonesia University of Education or UPI). The samples were randomly selected to take the survey from all eight faculties in the university. The faculties are Faculty of Education Science (FIP), Faculty of Social Science Education (FPIPS), Faculty of Languages and Literature Education (FPBS), Faculty of Mathematics and Natural Science Education (FPMIPA), Faculty of Technology and Vocational Skills Education (FPTK), Faculty of Economics and Business (FPEB) and lastly, the Faculty of Arts and Design Education (FPSD). All students voluntarily participated in the study.

In analyzing the data the authors used the affective learning and teacher evaluation assessment scale developed by McCroskey, J. C. (1994). The instrument consist of 16 items. It has four categories (each with four bipolar scales). The four measures are; (1) Affect toward content measures, (2) Affect toward classes for students in this content, (3) Affect toward instructor measure, (4) Affect toward taking courses with the specific instructor. As emphasized by McCroskey (1994), the first two measures can also be applied together as a measure of affective Learning. In similar fashion, the third and fourth measures can be jointly used as a measure of Instructor Evaluation. The instrument was distributed

to the students, and they circled the number on each items that best represent their feelings.

All of the categories were assessed and in computing score on the measures, the authors used the scoring formula by McCroskey (1994) after the total score is collected for each of the measures, the next step is scoring for affective learning and instructor evaluation. The affective learning score is resulted from summing up the total score of "affect toward content" and "affect toward classes in the particular content". Then, for the teacher evaluation, the score is obtained from summing up "Affect toward instructor" and "Affect toward taking classes with this instructor". The final score is ranged from 20 (bad) to 85 and above (Very Good).

4 RESULTS AND DISCUSSION

The McCroskey (1994) instrument measures students' attitudes toward (1) instructor of the course (teacher evaluation), (2) content of the course (affective learning), along with measures of higher order levels of student affect, (3) taking additional classes in the subject matter, and (4) taking additional classes with the teacher. Dimensions two and three are in line with Krathwohl, Bloom, and Masia's (1956) conceptualization of the affective domain in learning while dimensions one and four represent teacher evaluation. The following figure 1 is the measure of affective learning.
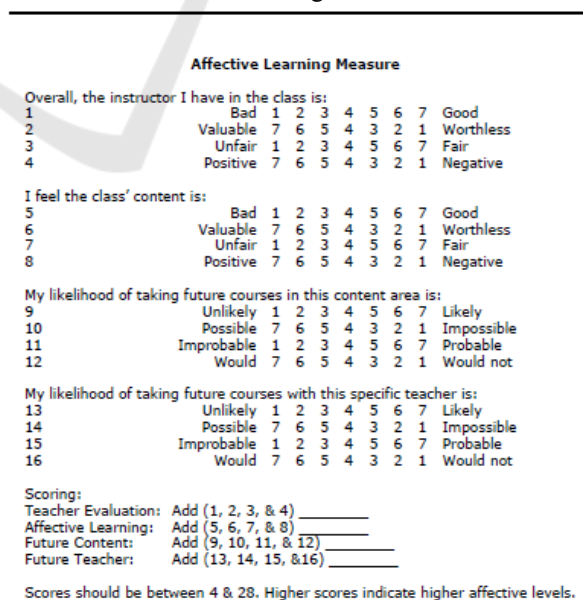

Figure 1: Affective learning measure.

Regarding to the current study, the results of the initial affective measurement are described in the following table 1:

Table 1: Measuring results.

Faculty	Toward Content	Toward Teacher	Future Content	Future Teacher
FIP	20.38	18.34	22.46	18.34
FPIPS	23.4	16.5	24	18.2
FPBS	22.53	16.23	26.32	18.03
FPEB	22	12.77	22.5	16.59
FPOK	24	12.27	24.62	17.76
FPMIPA	21.53	19.31	22.66	19.83
FPTK	22.23	16.45	23.68	19
FPSD	22	23.33	26.5	20

The table represents the partial score based on the four categories. It can be seen that in terms of students affect toward the class content, the faculty of sport science (FPOK) got the highest score by 24. While the faculty of Arts and design (FPSD) achieved the highest rank for students affect toward their instructors.

However, as mentioned previously, the scoring for affective learning and teacher evaluation is separated. The score above is the partial score. It does not mean that the faculty with the highest score get the highest affective learning level.

Upon computing the partial score, the scoring of teacher evaluation and affective learning can be then calculated. The sum of "affect toward content" and "affect toward classes in the particular content" is for the affective learning score. Furthermore, the total sum of "Affect toward instructor" and "Affect toward taking classes with this instructor" recorded as the score for teacher evaluation. The result of the calculation can be seen in the next table 2.

Table 2: Affective learning and teacher evaluation.

Faculty	Affective Learning	Teacher Evaluation	Sum
FIP	42.84	36.68	79.52
FPIPS	47.4	34.7	82.1
FPBS	48.85	34.26	83.11
FPEB	44.5	29.36	73.86
FPOK	48.62	30.03	78.65
FPMIPA	44.19	39.14	83.33
FPTK	45.91	35.45	81.36
FPSD	48.5	43.33	91.83

In determining the overall score, all of the two subscores were added and the scoring range should be between 30 and 100 with the following interpretation:
  a) Scores between 83 and 100 indicate a high level of students affect.
  b) Scores between 55 and 83 indicate a moderate level of students affect.
  c) Scores between 30 and 55 indicate a low level of students affect.

According to the results derived from the Affective learning and teacher evaluation measurements, it can be seen that most of the faculty scored a moderate level of students affect. Five out of the eight faculties received a score which range from 73.86 (FPEB) to 82.10 (FPIPS).

In spite of the moderate rank achieved by the faculty of economics and business education (FPEB), they got the lowest score among the other faculties. This is due to the low score of student affect toward their lecturers. As suggested by Richmond, Wrench, and Gorham (2009), when the instructors' control, social, and affection performance are not met the student's intellectual, academic, and interpersonal communication skills, the student affect toward the class might suffer.

Moving on to the higher rank of the measurement scores, it is noticeable that the faculty of arts and design education (FPSD) gets the highest score with 91.83.

While the score for the faculty of mathematics and Science education (83.33) is roughly equal to that of the faculty of language education and literature (83.11). What is interesting with FPSD, although they did not gain the highest score in affective learning rank, their students affect toward the lecturers is much higher than the other faculties.

Thus, this study suggest that teachers' performance play a significant role in developing a more affective learning. All of the faculties in the high level cluster are also contributed by the high students' appreciation toward their lecturers.

5 CONCLUSIONS

Overall, the measure is beneficial to determine how students affectively feel in our classroom. A good learning system along with the lecturers' competent interpersonal skills proved to be the key factor in shaping a suitable affective learning.

It is also expected that the study can contribute in providing useful initial data for higher education institutions to develop a learning program focusing on affective learning. Moreover the measurement can also be employed as an instrument for evaluating the teachers or lecturers performance.

For further research, the authors suggest to elaborate more on the topic of why they perceived that why toward the class content and the lecturers. It

is suggested that the results can be used as the starting point to conduct a qualitative study to explore the subtle meanings beyond the students' responses.

Finally, students who feel their teachers as able to satisfy some of their affective needs are tend to be more satisfied with their lecturer, the course, and eventually the university as a whole.

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