An Analysis Classroom Interaction: A Case Study of International Class of Physic Department at Universitas Negeri Padang

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Article History	Abstract
This study examined classroom interactions within the International Class of the Physics Department at Universitas Negeri Padang, emphasizing both student attitudes and the characteristics of these interactions. A descriptive quantitative analysis was utilized, with data collected through observations, questionnaires, and interviews. The Flanders Interaction Analysis Categories System (FIACS) was employed to categorize the interactions between teachers and students. The sample comprised 15 students and one lecturer.The study emphasized fostering a positive and interactive classroom environment, revealing distinct interaction patterns: lecturers primarily engaged in explaining (44%) and questioning (28%), while students exhibited minimal instances of accepting feelings (11%) or giving directions (12%). Student interactions with lecturers involved more accepting feelings (33%) and responding (28%), along with questioning (16%) and initiation (23%). The study concludes that interactive teaching practices enhance the educational experience and suggests that encouraging critical engagement and improving teacher facilitation can further enrich classroom interactions and learning outcomes.

INTRODUCTION

Classroom interaction serves as a fundamental element of the learning process, involving the dynamic exchanges between teachers and students during instructional activities. This interaction encompasses various components, including turn-taking, questioning and answering, negotiation of meaning, and feedback (Choudron, 1998:10). Additional aspects include posing questions, providing praise or feedback, delivering explanations, giving directions, and exercising authority through criticism or justification (Flanders, 1970). Interaction is marked by

reciprocal processes, allowing both teachers and students to engage in meaningful dialogue. Its importance in teaching and learning is clear, as it not only improves student learning outcomes but also aids teachers in fulfilling their instructional responsibilities.

Based on my brief observation, indicate that lecturers tend to dominate classroom activities. For example, they often spend too much time explaining the material without allowing for student participation.This observation is supported by Behtash and Azarnia (as cited in Winarti, 2017), who found that lecturers spoke for approximately 75% of class time, while students contributed less than 20%. The findings suggest that lecturers are significantly more active in class compared to their students. Effective classroom interactions, however, rely on meaningful exchanges between teachers and students, including asking and answering questions, providing explanations, and so forth (Ntuli, 2019). This phenomenon is particularly relevant in the context of science classes.

This perspective is further supported by Vygotsky (1978), who emphasizes the role of classroom interaction in the learning process. He asserts that teachers can guide, support, and encourage student participation effectively. Vygotsky argues that students learn best not in isolation but through interaction with others, particularly with those who possess greater knowledge and can offer the necessary guidance and encouragement to help them acquire new skills. Additionally, Vygotsky (1978), as noted by Chin (2007), posits that the sociocultural theory of learning involves teachers facilitating student performance within the "zone of proximal development." This concept highlights the importance of teachers directing discourse on the inter-psychological level to enhance student learning.

Given the phenomena stated, the researcher attempted to investigate the nature of interactions between lecturers and students. The Flanders Interaction Analysis Categories System (FIACS), an observational instrument created by Flanders (1970), was used in this study to categorize and examine the interactions that take place in a classroom. This system assisted the researcher in assessing various student attitudes towards classroom interactions.

RESEARCH METHOD

1.   Research Design
The purpose of this study was to examine the classroom interactions of international students in Universitas Negeri Padang's Physics Department. For this analysis, the researcher used a descriptive qualitative method.

2.   Population and Sample
The study's population included the international class students in the Physics Department at Universitas Negeri Padang for the academic year 2021, totaling 15

students. Given that the population was fewer than 100, the researcher chose to include all members of the population as the sample, following the guidelines provided by Arikunto (2013). As a result, the sample for this research consisted of all 15 students.

3. Instrumentation

a. Observation

Observations were carried out to examine the interactions between the lecturer and students by utilizing the categories from the Flanders Interaction Analysis Category System. The researcher documented the teaching and learning process in the 21A class of the Physics Department across four sessions.

4. Technique of Data Collection

a. Video Recording

The researcher attended the class to capture the complete teaching and learning process. The recorded interactions were transcribed and organized into the different categories outlined by the Flanders Interaction Analysis Categories System (FIACS)., such as Accepts feeling, Praises or Encouragement, Accepts or uses ideas, Questioning, Explaining, Giving Direction, Criticizing or justifying authority, Response, and Initiation.

5. Technique of Data Analysis

a.   Observation
The researcher recorded the entire teaching and learning process and then wrote up a transcription of the recordings. After that, the transcription was examined by classifying the interactions that took place during the activities in the classroom in order to determine which group dominated the interactions. Both the data and the video recordings have to be carefully examined for this research. In the end, these observations provided insights for the researcher.

RESULT AND DISCUSSION

1. Result.

a. Classroom interaction patterns

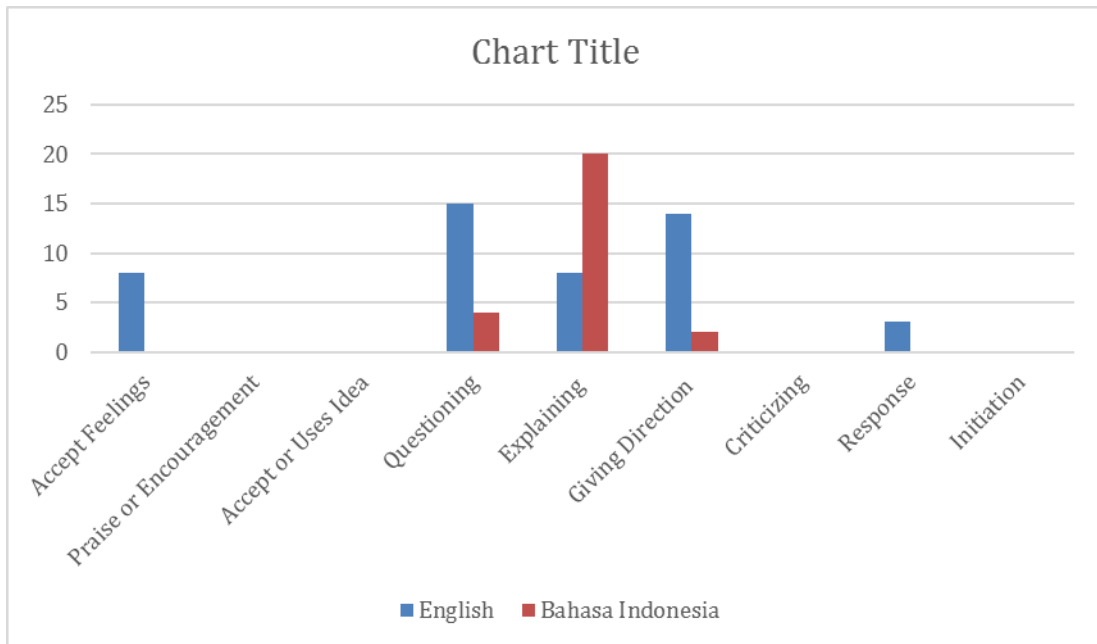After transcribing and analyzing the data, the researcher discovered that:

Figure 2. Lecturer- Students Interaction

The data above illustrates the outcomes of interactions observed during classroom activities, categorized according to the Flanders Interaction Analysis Category System. It presents the interaction outcomes between the lecturer and the students. The data show that the explaining is the highest category in the lecture – students interaction 28 utterances (44%) and the second is questioning with 19 utterances (28%) the third is giving direction with 16 utterances (12%) the fourth is 8 utterances (11%) and the response is the lowest categories with 3 utterances (5%). The following is the result of the interaction between the lecturer and the students:

1) Explaining

Explaining is the way the lecturer in presenting information, opinion, or orientation. Based on the observation, explaining showed 28 utterances (44%), which consists of 8 utterances (28%) English and 20 utterances(71%) In Bahasa Indonesia. This is proven, as follows:

Table 1. Explaining

NO	ROLE	TRANSCRIPT	LANGUAGE		CATEGORY	PATTERNS		
			IND	ENG		LS	SL	SS
21	T	if we want the students to have critical thinking ability		√	E	√		

22	T	Berarti pembelajarannya kita akan untuk thinking lebih banyak thinking atau assessment-nya religious to critical thinking tidak hanya soal-soal...	√	√	E	√ √		
22	S1	Oke, thank you maam. For the next question from Sonia, will be answered by Magita.			GD			

2) Questioning

Questioning is the way the lecturer asks for the students' opinions or information. Based on the observation, questioning showed 19 utterances (28%), which consists of 15 utterances (83%) in English and 4 utterances (22%) in Bahasa Indonesia. This is proven, as follows:

Table 2. Questioning

N o	Role	Transkrip	Language		Catego ry	Patterns		
			eng	Ind		LS	SL	SS
1.	T	okay can we start?	√		Q	√		
2.	T	Semuanya sudah masuk?		√	Q	√		
3.	T	Assalamualaikum warahmatullahi wabarakatu			AF	√		
4.	SS	Waalaikumsalam warahmatullahiwabarakatu			AF		√	

3) Giving Direction

Giving direction is the way the lecturer provides command in order to expect students' participation. Based on the observation, giving direction showed 16 utterances (12%), which consists of 14 (87,5%)utterances in English and once 2 (12,5%) in Bahasa Indonesia. This is proven, as follows:

Table 3. Giving Direction

No	Role	Transkrip	languange		Category	Patterns		
			Eng	ind		LS	SL	SS
94	SS	Okay	√		R		√	
95	T	For the next meeting, ya,	√		GD			
96	T	we will discuss about	√		GD	√		

		modul ajar, ya.						

4) Accept Feelings

Accept feelings is a method through which educators acknowledge and express emotions in a non-confrontational manner. According to our observations, this behavior was evident in 8 instances (11%), with 8 (100%) utterance in English. Educators predominantly exhibit this behavior, particularly when commencing the learning session with greetings, leading prayers, recording attendance, and occasionally discussing student behaviour. This is proven, as follows:

Table 4. Accept Feelings

No	Role	Transkrip	languange		category	Patterns		
			eng	ind		LS	SL	SS
2.	T	Assalamualaikum warahmatullahi wabarakatu			AF	√		
3.	SS	waalaikumsalam warahmatullahi wabarakatuhh			AF		√	
4.	T	before we start our lesson, i will check youre present first	√		AF	√		
5.	T	today we would like to discuss about next topic	√		AF	√		

5) Response

The response is the reaction to the students' questions. Based on the observation, response showed 3 utterances (5%), which consists of 3(100%) utterances in English. The response category is shown by the lecturer responding to the students' question in the middle of the learning. This is proven, as follows:

Table 5. Response

No	Role	Transkrip	languange		category	Patterns		
			Eng	Ind		LS	SL	SS
104	S9	So, that's why assessment is not only about cognitive assessment, ya. The teacher also doing non-cognitive assessment, right?	√		I		√	
105	T	During that assessment, the teacher will diagnose	√		R	√		

		atau analyze students, bagaimana dia belajarnya di sudut rumah, atau karakteristik siswanya. Nah, jadi guru	√				

Based on the interaction shown by each category above, it shows that the lecturer uses more English in the teaching-learning process with the dominant category between the lecturer with the students is Explaining and the rest of categories do not occure in this learning process such as praise or encouragement, accept or uses ideas, criticizing, and initiation. The researcher found during the observation that the material is explained in the form of presentations by the students

Discussion

This research analyzes Lecturer-Student interaction during classroom activities. The findings indicate that the Lecture-Student interaction pattern occurred 64 times, accounting for 33% of total interactions. The most prevalent categories were explaining, questioning, giving direction, accepting feelings, and responding. Notably, the other categories did not occur. In conclusion, the interactions primarily consisted of explanations and questions posed by the lecturer. Adiantika and Charisma (2021) also identified that the most common categories used by lecturers were asking questions and explaining, while students predominantly engaged through responses. Additionally, this research explores the nature of interactions among students themselves.

CONCLUSION

This study employed a descriptive qualitative approach to investigate classroom interactions and students' attitudes within the International Class of the Physics Department at Universitas Negeri Padang. The analysis identified predominant interaction patterns, highlighting that lecturer-to-student interactions primarily consisted of explanations. Instruction was conducted in both English and Bahasa Indonesia, with English being the main language of instruction.

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