

## Peers' Instructional Interactions in Inclusive Classrooms: Slow Learner Students and Typical Students

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Received 01 June 2017, Accepted 05 Aug 2017, Available online 15 Aug 2017, Vol.5 (July/Aug 2017 issue)

### Abstract

*The purpose of this research was to determine the type and function of peers' instructional interaction between slow learner students and typical students and the initial intervention function performed by the English teacher and special assistant teacher to both types of students in an English lesson in an inclusive classroom. Findings from this study indicate that the type of academic interaction is more common than the non-academic interaction, namely the interaction that helps slow learner students in overcoming difficulties especially in understanding the purpose of the task besides asking for explanation of the contents of the subject matter to the typical student. The conclusion of the peers' instructional interaction function is to improve academic skills, social interaction, and strengthen friendship. The initial intervention function that teachers provide to students is to increase the quantity of peers' instructional interactions, in order to complete academic and social tasks and make relationships more meaningful.*

**Keywords:** Peers instructional interaction, Slow learner student, Typical student, Inclusive classroom

### 1. Introduction

Instructional interaction plays an important role in achieving success in an instructional process. To achieve a critical instructional process, interaction is important [1]. The involvement of all class members in the instructional interaction between teacher-student, teacher-teacher, and student-student has a positive impact on the classroom environment.

In the practice of inclusive classes, instructional interactions can enhance students' cognitive engagement and lessons [2], so that meaningful learning can be achieved [3] [4] [5]. So far, the success of the instructional process in the inclusive classroom cannot be separated from the teacher's role through instructional interaction. Interaction between teachers and students for example will create mutual understanding in an activity [6]. Thus, the teachers should be fair in giving attention to all students including to the special needs students reinforcing the fact that skills in communicating and interacting cannot be ignored in order to achieve the instructional goals. It is not easy for teachers to achieve instructional goals in an inclusive classroom that consists of a variety of student characteristics if they rely solely on teacher-student interaction. Limitations of time and attention of teachers can cause instructional goals to not

be achieved, so teachers should be able to use instructional strategies, including building interactions between students and or interactions between peers.

Peer's interactions in inclusive classrooms (special needs students with typical students) provide good benefits. Usually the typical students help the special needs students so that their knowledge and ability increases because of their involvement with each other [7] and has a positive impact on social, emotional, communication, and academic development of children [8][9]. It also improves social skills, norms, knowledge, self-concept, emotional [10] friendship [11] and relationship development [12]. For both types of students, interaction with typical students can have a positive effect, especially for special needs students and eliminate negative thinking for typical students about the slow learner [13].

However, interaction does not take place particularly in inclusive classes [14]. Some problems such as the beliefs and skills of all parties including peers greatly influence the success of the interaction [15] in that the role of teacher assistants as the primary sources of help for the special needs students in the inclusive classroom [16]. Typical students do not understand the behavior and manner of communication of special needs students [17]. The previously mentioned are some of the obstacles that make it difficult to build interactions between peers

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in inclusive classes. Interaction between peers must be built in conducive conditions where students understand each other's advantages and barriers especially for special needs students including slow learner students. Until now, no research data has been produced on effective interaction forms for slow learner students in learning that can minimize the barriers and learning difficulties for slow learner students. The topic of borderline or slow learner is rarely studied or raised in research, although it has a high percentage [18].

In Indonesia, although there is no exact data on the number of slow learner students, when viewed from the characteristics of these students after entering high school, it turns out that many teachers find students with slow learner student characteristics. The results of preliminary studies by the author of slow learner student problems in learning, some of which are about the difficulty of teachers, distinguish slow learner students from typical students. Despite having the same physical characteristics, the two kinds of students differ in behavior and speed of understanding the lesson. This problem is related to the difficulty of teachers building interaction with slow learner students which results in typical students also finding it difficult to build an effective interaction with slow learner students in learning, help to complete the task, encourage and motivate, and explain the subject matter. This difficulty is closely related to slow learner student characteristics, such as being more withdrawn and solitude in learning, having few friends, and not doing any activities unless the teacher or assistant teacher is near the student.

Further research results show that the slow learner has a poor tendency to socialize and communicate, and also has a tendency to withdraw while playing [19]. Slow learners also have short attention spans and poor social processes and skills [20]. This condition is of course requires attention of teachers in building interaction among peers, so that the instructional goals can be accomplished. General teachers and special assistant teachers should try to encourage more interaction between slow learner students and typical students so that effective learning can happen. Some research results suggest that until now, teacher intervention is one way interaction can occur among students in an inclusive classroom. Before the intervention, interaction almost did not occur between the typical students with special needs students [21].

The purpose of this study is to determine the type of instructional interaction between slow learner students and typical students. In addition to that, this study focuses on the instructional interaction function and examines the initial intervention conducted by the general teacher and the special assistant teacher in encouraging instructional interaction in the learning process.

Research questions can be formulated as below:

- 1) What kind of interaction occurs between slow learner student (SLS) with typical students (TS).
- 2) What is the instructional interaction functions that occurs between SLS and TS?
- 3) a. Is there an initial intervention of teacher --English teacher (ET) & special assistant teacher (SAT)-- to the students so that interaction between SLS and TS occurs? b. If there is an initial intervention by the teacher, what is the function of the initial intervention?

## 2. Literature Review

### 2.1. Peer's instructional interaction

Interaction is another person's response that shapes and guides everyone's response to the transactional process [22], or acts mutually in cooperation, involves himself to expressing a particular action [23]. Interaction in learning is essential for communicating knowledge, thoughts, skills and values between teachers and learners in learning activities [24], active involvement of learners with resources in working on data [25]. Several ways of interaction conducted in inclusive classes, among others, can be done directly to students for positive interaction in learning [26].

Peer interactions have a positive impact, such as improving student achievement [27] on social, emotional, communication and academic development of children [8] [9]. The advantage of creating peer interaction, can improve social skills, norms, knowledge, self-concept and emotional [10]. Another example of the importance of interaction is research that peer interaction improved skill of academic, social and friendship [11], and provides a more meaningful relationship between typical students and special students [28]. In an inclusive class, typical students can assist special needs students so that their knowledge skills increase because of the involvement of the two by learning from each other [7]. For slow learner student can give positive influence, and eliminate negative thinking for typical student about slow learner [13].

### 2.2. Slow learner students and typical students

Some terms of slow learner students such as borderline mental retardation, mild cognitive impairment, general learning disability [18]. Another definition is slow child learning is a child who is not successful in learning due to psychological shortcomings and cognitive abilities [29]. Usually slow learner students have an officially recorded IQ of 70-85, difficulties in understanding abstract, behavioral deficit, in understanding more matter is done repetition, slow in academic [30]. According to [19], that slow learner children have a range IQ of 70-90, having problems in communication, having less stable emotions, difficult to socialize.

Conversely, typical students are students who do not get special education services, associated as children without defects who have the behavior, intellectual ability, and functional ability in accordance with the development of children of his age. Usually often referred to as normal children, regular education students, and or general education students.

In Indonesia, the term slow learner according to [31] suggests that slow learner is a child with little intellectual potency below normal but not including mental handicapped and usually has obstacles or delays in thinking, stimulation and social adaptation but still much better compared with the mentally handicapped, but slower than the normal, the need for long and repetitive time in the completion of academic and non academic tasks. This definition is also affirmed by the [32], that slow learner is a child who has limitations of intelligence, which effected in the learning process becomes slow.

### 2.3. Inclusive classroom

The inclusive classroom is a suitable place for making rules and practices based on the provision that everyone needs mutual support and respect [33], providing diversity in learning and behavior in children with special needs in academic and social achievement [6] and aims to provide education to all students who are flexibly arranged regardless of disability, academic level, behavior, learning style and strengths and weaknesses [34]. As an inclusive class, the Indonesian government through the [35] is committed to making inclusive classes warm, friendly and receiving diversity and respecting differences and being able to accommodate heterogeneity of the special needs of learners grouped into several types of inclusive classes: regular full classes (students with special learning needs together with regular students), regular classes with special mentors (special needs students accompanied by special counseling teachers with regular students) and special classes in regular schools (students with special needs separated from regular students, at a particular time are included).

## 3. Methodology

The approach used in this research was qualitative with single case study research method. This method was used because the number of participants involved consisted of only one slow learner and 22 typical students. The purpose of this study using this case study is to explain the interaction between the slow learner student and typical students during the four-month English lesson.

This research is done through observation, interview, and photo taking. Observations were made to obtain interaction data between the SLS and TSs. Interviews were conducted with both kinds of students, as well as the ET and SAT using a semi-structured form developed from previous interview content to support data

collection. A rise in the credibility of the research occurred. Additionally, member checks were conducted by participant teachers to confirm the data that was collected. This analysis will be presented in a descriptive form, and the results will be expressed in abstracted qualitative terms.

### 3.1. Participants

Participants involved in this study, a secondary school in West Java Indonesia, which is an inclusive school. Participants consisted of one person's special needs clearly displays the characteristics of a slow learner, built on the results of a recent test I.Q. Test. This student's I.Q. is approximately 75-85, and he displays low academic motivation, as well as 22 typical students or non special needs students. In addition, the other participants involved were one English language teacher who taught English, the main teacher, and a special tutor who assisted the English teacher in handling the slow learner student.

### 3.2. Setting and Materials

The study took place in an Islamic Junior High School, an inclusive school in West Java, Indonesia. The school is a private school, established in 2007, and has a working infrastructure as well as facilities that are on par with those of other inclusive schools. Since 2016, the school has established three inclusive classrooms with a minimum of one student need in each. This research was implemented in the English language classroom which was equipped with a projector, a computer, and a blackboard. Desks and chairs were sufficiently flexible to accommodate all students. Lessons observed were English lessons. The classroom consisted of one English teacher, one special assistant teacher, 22 typical students and one slow learner student. Learning time usually lasted 1.5 to two hours.

Activities consisted of individual lessons which took place in both small groups and large groups, depending on the English teacher's lesson plans. Material was culled from English language textbooks, worksheets created by the English teacher, material from the internet, and material from the class exercise book. The content of the lesson consisted of information about context, narrative text, descriptive text, and daily reports.

### 3.3. Data Collection

The research data was collected by observation, interview and field notes. Observations were done to observe the interaction between SLS and TS in the observation of SLS and TS actions during the learning process. Interviews conducted face-to-face with SLS, TS, ET and SAT by researcher related to the interactions that take place in the classroom during the instructional process. The primary data for this study consisted of video and audio

recording, especially recording the instructional interaction between SLS and TS as well as intervention data-if it occurs-between ET, and SAT to the students.

### 3.4. Analysis

At the stage of data analysis, the researcher used Spradley's model of analysis using domain analysis stage, taxonomic analysis, compositional analysis, and cultural theme analysis. Prior to data analysis, categorization coding was used to understand both the semantic content of utterances and their function from the original data grouped so as to facilitate the researcher in

determining the type of interaction that occurred. All SLS-TS interactions have been divided into several categories and then determined the types of academic and non academic interactions. Types of data that include academic and non academic data will be analyzed interaction function, as well as to see initial initiators that encourage interaction between SLS and TS.

### 4. Results

After the coding and analysis process, the data obtained is below:

**Table 1** Category, Type of Interaction, Function, Actors of interaction, and Initiation of early intervention

Category	Description	Type of Interactions	Function of interactions	Actors of interactions	Initiator of initial interventions
Complete the task	Ask about the content of the subject matter (abbreviations, food packaging differences)	Academic	Request an explanation of the subject matter	SL to TS	SAT
	Ask about the purpose of the task (make the sentence)	Academic	Ask for help to find out the purpose of the task	SL to TS	SAT
	Ask about the purpose of the task (film project)	Academic	Ask for help to find out the purpose of the task	SL to TS	SAT
	Invite to work together in doing group work	Academic	Invite to cooperate	SL to TS	SAT
	Help explain task (make sentence)	Non Academic	Provide help	SL to TS	SAT
	- Assist in working on the exercise	Academic	Provide help	TS to SL	SAT
	Help explain the purpose of the task (tell the contents of the novel)	Academic	Provide help	TS to SL	ET

Table 1 illustrates the type of interaction between the SLS and TSs in the learning process, the type of academic interaction is more than non-academic. The academic category with interaction function performed by the SLS to the TS asked more about the purpose of the task to the TS and only once in a non-academic interaction that invited TS to cooperate in completing the task. TS interaction with the SLS was done more in the academic category of the provision of assistance regarding task work. In the meantime, there was not any non-academic interaction performed by TS to SLS.

Below are some examples of interactions between the SLS and TSs relating to asking for help from the TS in completing the task:

SLS: "Yahya, what did miss Yuni say about the task just now?"

TS: "what should we do?"

SLS: "yes, what does it mean?"

TS: "we must read the novel books that have been provided the same miss yuni, later we choose which novel we like"

The results of interviews to the SLS regarding the instructional interaction with the TS resulted in: 1) if there is a question that the SLS does not understand related to the task or content, then the SLS will ask the SAT compared to the TS, unless ET and / or SAT ask SLS for ask first to TS; 2) the most frequently asked questions to the TS are about the purpose of the assignment given by the ET, for the content of the subject matter usually the SLS will first ask SAT; 3) the SLS only asks friends who have the closest or most intimate relationships, because SLS has few friends who are usually invited to speak; 4) SLS rarely provide motivation to the TS, but sometimes if in doing the tasks in one group motivation in the form of spirit has been done by SLS to TS.

The similar answer given by TS about the interaction in the learning done to the SLS is: 1) if there is a question that is not understood TS related to the task or content of the material, then the TS will ask the ET or other students compared to the SLS; 2) The TS will only ask the SLS related to the completion of the task that has been done by the SLS; 3) TS will provide assistance in the form of

explanation of task or subject matter to SLS, if requested by ET, and or SAT; 4) TS rarely gives motivation to SLS.

Meanwhile, the results of interviews conducted to ET on initial interventions given to TS and SLS in the learning process that support the interaction between the two are: 1) provide an opportunity for the TS to assist the SLS if it encounters difficulties, especially in completing the task, in the form of encouragement and Or sentence request to TS; 2) initial intervention by ET to TS, if TS has completed its task; 3). usually TS rarely helps SLS unless requested by the teacher, or if assisting SLS is only done by a familiar TS and a group with SLS; 4) ET usually puts one of the intimate friends or friends who are thought to often help the TS in learning in one group in order to cooperate with each other in completing the task; 5) focus intervention not only on the TS, but on the SLS as well, in order for the SLS to be encouraged to ask and interact with the TS, but the task is most dominantly performed by the SAT.

Below is an example of early intervention through the interaction between ET and TS in order to help SLS explain the content of the subject matter:

ET: "Andin, did you finish the job?"

TS: "Already Miss"

ET: "Now help Dafa to explain some of the contents of the task"

TS: "yes Miss"

For the results of interviews with SAT on initial interventions made to the SLS that: 1) SAT often provided early intervention of encouragement to the SLS to ask the TS about things that were not understood either in the form of task or content of the subject matter; 2) SLS often remained silent or did not engage in any activity if there was no early intervention including initiatives to initiate inquiries, either to TSs or to the ET in learning; 3). SLS often asked only to SAT either for the purpose of the task or explanation of the contents of the subject matter. Examples of early interventions made by the SAT to the SLS through its second interaction are:

SLS: "What is (sesampainya) in English, sir?"

SAT: "Try to ask andin"

SLS: "Come on dafa, do it, ask andin"

SAT: "Andin, what is (sesampainya) in English?"

TS: "It's to when in English. For example when I arrive at the hotel, blah ... blah"

SAT: "Let's start writing dafa"

## 5. Discussion

The purpose of this study is to determine of the type and function of instructional interaction, in this case the interaction of instruction between slow learner students and typical students that occurred in English lessons, also initial intervention that increases interaction between peers in inclusive classroom which is dynamic process in learning.

### 5.1. Type of interaction

In the first question regarding the type of interaction that occurs between SLS and TS. The results obtained show there are two types of interaction namely academic interaction and non-academic interaction. In this study, academic interactions relate to the context of the material being taught by the teacher to the students, while non-academic interaction is associated with personal interaction outside the academic context. In the present invention, the academic interaction between the two is more common than non-academic interactions. Academic interaction conducted by the SLS to the TSs, is predominantly dominated by the question of task intent given by the ET.

When viewed from the interaction of the instructional process, the SLS tended to be less understanding of the task intent than the ET explained in class to all students. This condition almost always occurred at every meeting either on the activities of continuing the previous material or on the new material. The SL took a long time and required repeated explanations in order to understand the purpose of the task and the subject matter described by the ET.

This condition was related to the characteristics of the slow learner who took longer to understand the concept. This opinion is in line with the opinion that slow learner students take longer to learn and understand concepts when compared to other students of the same age, and fail to meet the target expected by the teacher. In addition, it is very difficult to connect new information with previously acquired knowledge [36][37]. Especially in English material, slow learner student usually have a low understanding, weak memory, and poor attention span [20] which are the very characteristics of slow learner students.

Therefore, academic interaction especially with peers-TS-SLS is expected to provide meaningful understanding to the SLS, in addition to the interaction with the teacher and SAT. Although some studies suggest that the tendency of interaction between special needs students and peers often does not provide meaningful interactions [38][39], but at least this academic interaction can overcome the problem that often occurs, especially with students with special needs [40] in inclusive classrooms.

The academic interaction that occurred between TSs and the SLS, was more about the content of the subject matter given by the TS to the SL. Some TSs that interacted and explained to the SLS were students who had high academic skills compared to other students. Although in practice this interaction gets initial intervention from the ET to TS, at least with the occurrence of interaction among peers with the simpler language and the same age, it is hoped that the SL's understanding of the tasks and content of the subject matter could be more easily understood.

Meanwhile, the non-academic interaction that occurred between the SLS and the TSs consisted of the

solicitation of SL to collaborate with a view to accomplish the group task is a form of interaction that provides positive motivation between peers that not only improve academic skills but also friendship. This opinion is in line with [11] that peer interaction can improve academic, social, and friendship skills. It is not easy for SLS to have a good relationship with peers or typical student because SLS usually have problems communicating with others and tend to be alone. This is in line with the opinion that in general, students with special needs usually have fewer friends, less interaction with peers and more interaction with their teachers [41].

Interview results reinforce this statement that SLS find it more convenient to interact with one or two peers only when completing the task and ask about the contents of the subject matter. Although interaction between SLS does not occur with most TSs, this condition has at least encouraged the SLS to develop social skills and good relationships with peers.

### 5.2. *The interaction function of learning between SLS and TS*

The second question about the function of interaction that occurs between the SLS and the TS, gives an idea that the whole interaction function leads to asking for help or explanation from the TS in order to understand the purpose of the task as well as the content of the subject matter being explained by the ET. The existence of TSs as peers and the interaction that occurs between the two, for SL has a very positive meaning to overcome difficulties, especially in understanding the task and not just understanding of the subject matter in order to improve academic and social skills. This is in accordance with the opinion of [42], that the interaction function for a slow learner student who has difficulties to understand new material and incorporate it in the previous material, is in direct need of peers to improve their academic skills and motivation.

The interaction function performed by the TS to the SLS in the learning activities provides an illustration that the TS contributes to helping the SLS understand the purpose of the task and the material under study, in order to help improve the academic and social skills of the SLS. Interaction serves to positively influence the slow learner and eliminate negative thinking for typical students about slow learners [13]. The academic interaction given by typical students to slow learners can improve knowledge between the two as they learn from each other [7] and provide a more meaningful connection between typical students and special needs students [28]. The interaction between TS and SLS gives a positive impact to the TS that learning together with SLS reduces negative thinking about SL's problems and barriers, strengthens friendship, and helps improve academic and social skills of the SL. The interaction function of learning between fellow SL and TS in inclusive classes is to provide opportunities between them in order to improve academic and social skills, and strengthen friendships.

### 5.3. *Initial Intervention ET and SAT to students*

In general, the interaction function for students with special needs with their peers in inclusive classroom practice has a positive impact [43], in order to train communication skills, social competence and relationship development [12], although interactions between peers—slow learners and typical students—are not common in inclusive classes [14]. Some reasons such as students with special needs interact more with special assistant teacher due to the fact that the special assistant teacher is the main source for slow learner students [16] when learning takes place. Therefore, in order for there to be interaction between students with special needs and peers, there is usually a need to be intervened by teachers or special assistant teachers because if not the special need students becomes a very isolated student in the inclusive class [44]. Interaction will occur if the intervention is done [12].

In this study, interventions were provided by the SAT to the SLS at baseline before interaction began between SLS and TS. Interventions should be done because of the tendency that interaction will not occur, unless SAT intervention is undertaken. This is shown also in the results of SLS interviews, that if SLS gets difficulties in understanding the content of subject, then SAT is the main source of SLS in finding initial information. So usually interaction is more often done by SLS to SAT compared with TS. If no initial intervention is given, then interaction between SLS and TS will not occur. SLS usually withdraw from learning activities, not doing any activities and not talking to peers.

It is therefore necessary for the SAT to provide interventions to the SLS in order to increase the number of interactions, complete academic tasks and social interactions, make more meaningful connections with peers, and will reduce the SLS dependence on SAT. Through the initial intervention given to the SLS, the quantity of interaction with the TS is more often performed so as to provide benefits in the learning process particularly in the inclusive class [45], and in order to meet effective learning practices for slow learner students [46].

Like SLS, TS also requires intervention in initiating interaction with the SLS. Some issues related to SLS issues such as behavioral issues tend to be closed, as well as passive communication make it difficult for TS to interact with the SLS, so teacher intervention is needed in creating interactions. Interaction between TS and SLS will not occur if there is no initial intention by ET to TS in learning activities. Through initial intervention given by ET to TS, expected interaction between TS and SLS. Before the intervention, the interaction almost did not occur between typical students and special needs students [21], typical students tended to interact with peers compared with slow learners [47].

The intervention is initiated by the teachers to typical students in order for interaction with the slow learners is

a form of support and benefits for all students [48]. The initial intervention function is provided by ETs and SATs to students-SL and TS-is to increase the quantity of peer-to-peer interaction, in order to complete academic and social tasks, and makes the relationship more meaningful.

## 6. Limitation of This Study and Future Research

This study has a number of limitations, especially regarding the number of participants which is twenty students, with one SLS and twenty-two TSs. A major obstacle in the selection of schools makes it difficult to find inclusive schools that have slow learner students and have special assistant teachers. Although there are limits in the merging of the findings of this study, the results are very clear that the interaction function of learning and among peers has a positive impact on the student learning process.

The results of this study provide an overview of the interaction function between peers and are very positive for both typical students and slow learner students. The results of this study add to the information that has not been obtained by many other researchers, especially in Indonesia on slow learner students, especially the topic of instructional interactions that occurs between slow learner students with typical students. The involvement and activeness of both types of students greatly affects the interaction in learning and this learning without any barriers from students with special needs and can improve interaction [49], especially among middle students, students with special needs and typical students can interact with peers [50]. Therefore, teachers' initial interventions should be reduced by using various instructional strategies that involve between of peers cooperation. In the future, it will be hoped that the researcher can design a research aimed at reducing the dependence of slow learner students on special mentors, and can increase the students' independence and motivation by cooperating with typical students as the main source of learning.

## Conclusion

The types of learning interaction between SLS and TS occurring in this research were academic and non academic interaction. Academic interactions were more common than non-academic interactions. The function of academic instructional interaction between peers for SLS was to overcome difficulties, especially in understanding the purpose of the task given by ET, in addition to asking for an explanation of the contents of the subject matter to the TS. The instructional interaction function of peers for the TS was to help the SLS understand the purpose of the task and explain the content of the lesson being studied in order to help improve the academic and social skills of the SLS. In general, the interaction function of learning for both was to provide opportunities between them in order to improve academic and social skills, and

strengthen friendships. The initial intervention function provided by the ET to the TS, was to encourage the TS to initiate interaction so that they could work together and the TS assisted the SLS in explaining the purpose of the task and the subject matter not understood by the SLS. The initial intervention function provided by the SAT to the SLS was to encourage the SLS to begin interaction to ask the TS especially about the purpose of the task in addition to the explanation of some of the content of the subject matter. In general, the intervention function provided by the two teachers was to increase the quantity of peer interactions, in order to complete academic and social tasks, and make the relationship more meaningful while achieving instructional goals.

## Acknowledgement

The author would like to acknowledge to Prof. Dr. Zulela, M.Pd and Prof. Dr. Endry Boeriswati, M.Pd have assisted me to completing this article and also to the Ministry of Research, Technology and Higher Education of Indonesia who provided the dissertation grant.

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