

Research Article

# The Relationship Between Learners' Moves and Learning Outcome

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## Abstract

This study was carried at a private school in Iraq. It intended to find the relationship between some learners' classroom moves and their learning outcome. The main aim of the study was to access whether the findings of the very few similar studies are applicable in other contexts. To do this, the author had to collect the data and analyse it quantitatively and qualitatively. The data was collected in the following manner: first, she had to observe an English class for one term (about 5 months) and record all the events that took place there with focus on the participants recording their moves in the interaction process. These moves were recorded on observation sheets adapted from an observation scheme. Later, the recorded moves for each student participant were moved to tallies, one for each participant. All the categories were then added to correlate the numbers with the students' scores. Second, learners' scores on the pre-test at the beginning of the term and the post-test at the end of the term were collected for comparison and contrast. It was found that there is positive correlation between learners' utterances and their scores regardless of the quality or quantity of learners' utterances. However, the direction of the relationship between these two variables could not be determined.

## Keywords

Language Acquisition, Learners' Participation, Learners' Moves, Classroom Interaction

## 1. Introduction

### 1.1. Definition of SLA

Second language acquisition (SLA) is a complex process influenced by factors like input, output, motivation, and learner differences, focusing on both subconscious and conscious learning, and involving the development of phonology, grammar, and pragmatics.

### 1.2. Views on Classroom SLA

Early language acquisition theories, particularly the behaviorist approach, emphasized structured teaching and ex-

ternal input, but overlooked internal learner processes and individual differences, leading to inconclusive studies. In the 1970s, researchers shifted focus to classroom interaction, recognizing its importance in SLA, while later theories, including mentalist and humanist approaches, expanded on the role of cognitive and affective factors in language learning.

### 1.3. Classroom Theories and Research on Input/Interaction

The Colorado project and alternative systems like Flanders' FIAC and Moskowitz's FLINT shifted focus to analyzing

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classroom verbal behavior to study its impact on second language acquisition (SLA) [1, 2]. While some researchers emphasized the importance of overt communication for learning, others, like Allwright, argued that covert interaction, such as silent attention, is also crucial for language acquisition [3].

### 1.3.1. Input/interaction as Practice Opportunities

Seliger argued that self-initiated interaction accelerates second language acquisition, but his small sample size was criticized for limiting the generalizability of his conclusions. Studies by Strong (1983) and Day (1986) challenged this view, with Day's larger study finding no direct link between classroom participation and language proficiency, emphasizing the need to consider other factors like nationality and context [4, 5].

### 1.3.2. Interaction as Modification of Input

Krashen's Input Hypothesis asserts that comprehensible input, where learners understand language slightly above their current level, is the primary driver of second language acquisition [6]. He emphasizes the importance of simplified input for comprehension, but argues that speaking is a result of acquisition, not a prerequisite, and that active learner participation is not essential for comprehensible input.

### 1.3.3. Interaction as Negotiation of Meaning

Researchers explored how negotiation can transform classroom dynamics and discovered that involving students in decision-making processes can enhance their learning outcomes [7]. To foster meaningful discussions, teachers often use indirect teaching methods while maintaining authority in the classroom. Researchers like Long argue that two-way communication tasks, involving negotiation of meaning through conversational adjustments, are more beneficial for second language acquisition (SLA) than simplified input [8]. However, evidence linking these modifications directly to SLA is inconclusive, and more research is needed to determine their effectiveness in language learning.

### 1.3.4. Learners' Output and SLA

The Input and Interaction hypotheses are reception-based theories that focus on how learners receive language input. Unlike Seliger and Day's work, these hypotheses do not assign a direct role to production in second language acquisition (SLA), though they acknowledge that production may have an indirect role [9]. The section then introduces two additional hypotheses—the Output Hypothesis [10] and the Topicalisation Hypothesis [11]—which argue that language production directly contributes to SLA.

The Output and Topicalisation Hypotheses emphasize the importance of learner-driven interaction and active production in language acquisition, highlighting that controlling conversation topics and producing output enhance learning

outcomes. Affective factors, such as motivation, also play a significant role in facilitating interaction and language learning.

## 1.4. Learner Processes

Recent research has focused on identifying and teaching effective learning techniques and strategies, examining the behaviors of successful learners and how their classroom participation and use of techniques correlate with language proficiency and school performance.

## 1.5. Successful Learner Studies

Studies have identified various behaviors and techniques of good language learners (GLLs), such as active engagement, emotional coping, and using memorization strategies, though not all strategies were observed in the current study.

## 1.6. The Role of Formal Instruction

Research has shown that formal instruction significantly enhances second language acquisition (SLA), particularly when combined with informal exposure, and that classroom interactions, including input, output, and teacher feedback, play a crucial role in language proficiency. This study aims to explore the impact of both formal instruction and affective factors like motivation and passiveness on SLA, focusing on the relationship between classroom interaction, learner behaviors, and language learning success.

## 2. Literature Review

Research on second language acquisition (SLA) highlights the importance of classroom interaction in language learning, but the exact relationship between interaction and learning outcomes remains underexplored. Studies by scholars like Hatch [12] and Allwright [13] emphasize the role of discourse, feedback, and practice opportunities in the classroom as crucial elements for language development. However, traditional studies on teaching methodology and outcomes failed to account for the impact of actual classroom interaction, suggesting that effective learning emerges from the dynamic and collaborative nature of the classroom environment rather than solely from planned instruction.

### 2.1. Alternatives to Traditional Studies

After the failure of studies comparing teaching methods, researchers shifted focus to observing classroom interaction, specifically examining teacher behavior and its impact on learning outcomes. While earlier studies concentrated on the teacher's role, they overlooked the learners' contributions and the overall interaction process, a gap that Allwright [3, 14] highlighted by emphasizing the need to study what learners

actually do. Recent research has explored various aspects of teacher talk, such as feedback, questioning techniques, and error correction, revealing that teacher behavior, including the type of questions asked and the feedback provided, can significantly influence learners' motivation, engagement, and language acquisition.

#### A. Teacher's elicit

Teacher's elicitation occurs when the teacher selects a specific learner to answer a question, either after the learner bids for a turn or spontaneously, often using open questions or directly addressing a student.

B. Teach This includes the seven types of correction suggested by [15]. They are occurrence, blame, location, second try, model, type and remedy.

#### C. Teacher's praise and reinforcement.

This happens when a teacher praises a learner or when he reinforces his correct utterance positively by repeating it.

#### D. Teacher's miscellaneous correction.

This study focuses solely on teacher talk directed at individual learners, excluding moves directed at the whole class.

## 2.2. Ellis' Interactional Framework

Ellis proposes an interactional framework categorizing interactions into "medium-centered," "message-oriented," and "activity-oriented" types, each influencing language learning differently [16]. He argues that while "activity-oriented" interactions are most similar to first language acquisition, more research is needed to establish the link between interaction features and second language acquisition success.

## 2.3. Review of Studies

Recent studies on classroom second language acquisition have examined the relationship between interaction and learning outcomes, but their inconclusive results highlight the need for further research into both this relationship and the individual factors influencing classroom interaction.

### 2.3.1. Interaction and Route of Acquisition

Lightbown's study focused on the relationship between the frequency of linguistic items in the teacher's input and their appearance in learners' output, but did not consider specific interaction types or outcomes like proficiency tests, limiting its insights on overall language acquisition [17]. Ellis' study, which examined the effect of teacher input and feedback on learners' use of WH questions, found that low interactors showed more progress than high interactors, challenging the idea that learner involvement in classroom interaction is crucial for SLA [9]. However, both studies had limitations, including small sample sizes, teacher-centered designs, and a focus on isolated linguistic features, suggesting the need for more comprehensive research that includes interactional dynamics and long-term learning outcomes.

### 2.3.2. Interaction and Success

Slimani's study investigated the relationship between interaction and learning outcomes by examining learners' "uptake," or their self-reported claims of what they had learned, but found no positive correlation between classroom participation and uptake [18]. Although her methodology provided valuable insights, it was limited by the reliance on learners' self-reports, which may not accurately reflect actual learning, and would have benefited from a delayed test to verify the reported uptake.

## 2.4. Conclusion

This study aims to explore the relationship between classroom participation and success in second language acquisition, focusing on both the quantity and quality of learners' interactions. By examining the connection between participation and learning outcomes, it seeks to clarify the role of interaction in SLA, addressing the conflicting claims of previous research and offering insights into how different types of classroom interaction contribute to language learning.

## 3. Research Methodology

The study aims to examine the relationship between learners' classroom participation and their success by correlating their behaviors and learning outcomes, focusing on a third-world context where the L2 culture is not favored.

### 3.1. The Setting

The research was conducted at a private school in Basra, Iraq, where English was taught using a traditional approach with minimal group work, and a total of 16 students were observed across various reading and grammar lessons. The study focused on the reading class, where learners had more opportunities for genuine interaction and oral production, such as presenting their own stories and participating in comprehension exercises.

### 3.2. The Subjects

Sixteen female students were selected for the case study based on their previous year's achievement results and their participation levels, representing a range of active, passive, and intermediate learners to ensure a diverse and generalizable sample.

### 3.3. The Method of Data Collection

To reach the aims of the study, the author:

1. Used the school scores for pre and post tests for comparison and correlations.
2. Designed and used her own adapted coding scheme for real-time use in the classroom to suit the aims of the

study.

### 3.3.1. The School Test

The author examined monthly school tests focused on grammar, reading, and writing to assess learners' declarative knowledge, which was considered fair and relevant by both the teacher and students. The scores of the pretest were taken at the beginning of the term and the posttest at the end of the term for comparison and correlation.

### 3.3.2. The Coding Scheme

The author developed a customized coding scheme, blending adapted and new categories, focused on learners, to ensure reliability, validity, and generalizability throughout the four-month observation period. It only recorded students' moves in their observation units to see what kind of relation existed between these moves and learners' scores.

Column 1 represents the observation units. As recommended by researchers and practitioners, the observation scheme followed traditional methods, coding events occurring in thirty-second intervals, followed by ninety seconds of uncoded time.

Who: The second column in this part tells us which learner is speaking.

To Whom: This category tells us about the addressee when the addresser is a learner. That is, whether s/he was talking to the teacher (T) or other learners (ot). Only oral moves by the learners were recorded according to quality and quantity for correlation with learners' scores.

- 1) Number and Length of utterance quantity):
  - i) Ultra-minimal (UM)
  - ii) Minimal (min)
  - iii) Sustained
- 2) Type and purpose of utterance (Quality)
  - i) Initiation (I), whether the learner initiated the utterance voluntarily.
  - ii) Volunteer (V), whether the learner volunteered a response when the teacher initiates a move.
  - iii) Response (R), whether the learner responded to a teacher's move after he was assigned the turn.
- 3) Addressee, whether the learner is talking to the teacher (T) or others (ot).

and the number of utterances. This is followed by the comparison and discussion of the school results. As mentioned earlier, the school test total score is made up of four scores: grammar, writing, reading and translation. They are the learners' scores of the final term test taken in April which was supposed to cover the whole term's work. Table 1 below presents these scores.

Table 1 presents the learners' identifying numbers together with their total school test scores, and the number of utterances. The result of a correlation of columns 3 (No. of utts) and 2 (school scores) is  $r = 0.68$ . This means that there is a positive relationship between the 2 variables, which implies that high achievers spoke more in the classroom; or it could mean that active learners achieved more than less active and passive ones; or it could mean both.

**Table 1.** Students' scores and utterances.

S	Score	Utterances
11	26	166
1	26	92
3	33	85
10	26	70
15	30	59
2	21	46
13	20	39
8	28	35
4	11	26
14	14	18
7	18	13
12	17	14
5	14	11
6	3	11
16	19	6
9	13	3

Column 1: students' nos

Column 2: students' scores

Column 3: students' no of utterances

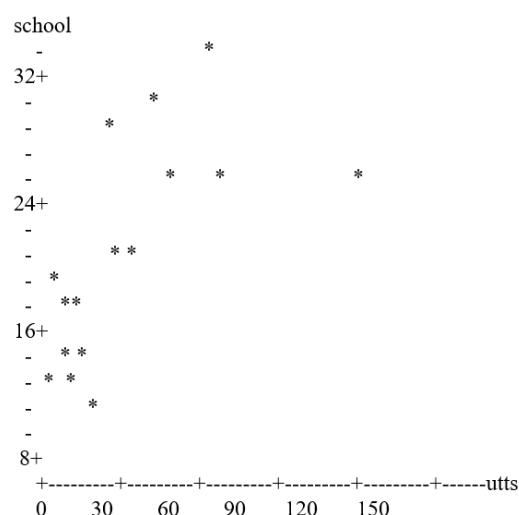
## 4. Results and Discussion

The school test total score consists of four components: grammar, writing, reading, and translation, based on the learners' final term test taken in April, covering the entire term's material.

### 4.1. Number of Utterances and School Individual Scores

This part will first discuss the correlations of school results

Cluster figure 1 presents this relationship. Again it has to be emphasised that a causal relationship between those two variables can not be concluded.



**Figure 1.** The relationship between the number of utterances and school scores.

## 4.2. Quality of Utterances and School Scores

The following table presents the summary of the correlations found between the quantity and quality of utterances on one hand and school scores on the other. The correlations between the quantity of utterances and school scores have been discussed above. The quality of utterances is discussed in the following sections.

**Table 2.** Correlation between utterances and scores.

UM	0.45
min	0.62**
sust	0.72**
I	0.49
V	0.76**
R	0.53*
T	0.68**
Ot	0.48

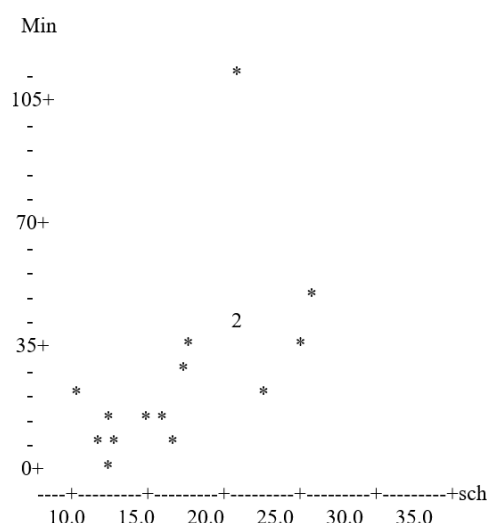
\* is significant at  $p < 0.05$

\*\* is significant at  $p < 0.01$

## 4.3. Length of Utterances and School Scores

Table 2 above shows that the correlations of minimal and sustained utterances with school scores are  $r = 0.62$  and  $r = 0.72$  respectively. This means that there is strong correlation between learners' minimal utterances and their school scores, and there is a stronger positive relationship between school

scores and learners' sustained utterances. This implies that high achievers used sustained more than minimal utterances. Or, of course, it could also mean that those learners who used longer utterances achieved better than those who did not. The result that both minimal and sustained utterances correlated positively with school scores is important. Figure 2 plots the relationship between minimal utterances and school scores. The relationship between "sustained" and school scores is presented in Figure 3. These figures show that a lot more minimal utterances were used than sustained utterances. It is important that learners produce, since one of the most important and direct way to test hypotheses is production (see introduction), and learners should be encouraged to produce in this case to help them test their hypotheses about the language and to practice its items before automatization can take place. The positive correlation between "UM" and "MIN" utterances on one hand and school results on the other is due to the three grammar lessons included in the data. In these lessons not many sustained utterances existed because of the type of activities, which were traditional grammar drills where the IRF pattern was prevalent (see literature review).



**Figure 2.** The relationship between learners' minimal utterances and school scores.

The total of learners' utterances in these lessons was 4 ultraminimal (UM), 39 minimal (min) and 10 sustained (sust) utterances (an average of 1.3 UM, 13 min and 3.3 sust). The average number of utterances produced by all learners in a reading class is 0 "UM", 13 "min" and 11 "sust" utterances.

## 4.4. Type of Utterances and School Scores

Table 2 above shows that there are positive correlations between the three types of utterances (I, V and R) and school scores, but it also shows that some correlations are stronger than others. Among the three types of utterances, it is volunteering which is strongly correlated with learners' scores. Moreover, initiations



correlate with these scores slightly less than responses, which supports the belief that learners' initiations are strongly related to their success. Nevertheless, the difference between these two correlations is much smaller than expected. This is because some responses were answers to learners' questions during communication; they were not responses to teacher's questions most of which occurred in the observed grammar lessons. Also the very high positive correlation between "V" and "R" ( $r = 0.84$ ) implies that these responses were mainly used by proficient learners who also provided most of the volunteered utterances (V). This can be supported by the fact that "R" correlates positively with both "T" (0.89) and "Ot" (0.82). This means that responses were directed, more or less, equally to the teacher's and the learners' questions.

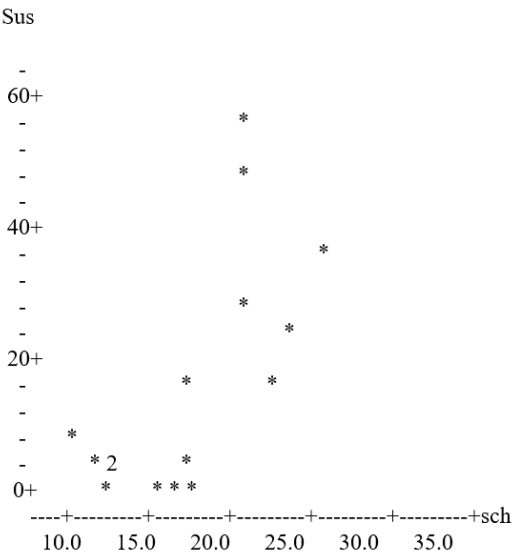


Figure 3. The relationship between "sustained" and school scores.

5. Conclusion

This article has examined the relationship between learners' scores on school tests and their quantitative and qualitative participation in the classroom. With the help of the private conversations with the teacher and learners, it was found that the teacher's style was mainly to blame since he did not tend to provide any explanations of grammar rules. His style did not integrate with the learners' style who wanted explanations of grammatical rules and more focus on grammar. This supports Ellis' argument that learning styles play a significant role in second language acquisition [16]. He suggests that "controlled or structural practice, which involves a fairly mechanical manipulation of specific linguistic forms, helps the learner to internalise language items [14]. In previous years those learners had been exposed to controlled practice which is associated with audiolingualism [19] in their past language learning experience, but in the reading session in that particular year they faced a dramatic change in teacher's style which focused on communicative practice. The learners

had been used to studying items "declaratively" before acquiring them "procedurally" for a number of years. The teacher's focus on conveying procedural Knowledge to his learners ignoring their need for declarative knowledge first could be blamed for the learners' "unimprovement" in structural knowledge. In fact, the learners wanted equal attention to be given to both controlled and communicative practice (of Rivers and Temperley's type) [19]. If this equal attention were achieved, then there might be a balance in the results.

Abbreviations

- I Initiated Utterance
- V Volunteered Utterance
- R Response
- UM Ultra Minimal Utterance
- Min Minimal Utterance
- Sust Sustained Utterance

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Author Contributions

Batool Dahham Al Ali is the sole author. The author read and approved the final manuscript.

Conflicts of Interest

The author declares no conflicts of Interests.

Appendix

Table 3. The Observation Scheme.

Ob unit	To who Whom	Type of utterance			Length of utterance		
		T ot	I	V	R	UM	MIN Sust
1							
2							
3							
1							
2							
3							
etc							

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