

The Role of EFL learners' Heterogeneity in Terms of Age in Their Adoption of Communication Strategies

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Abstract

This study examined the role of EFL elementary learners' heterogeneity in terms of age in their adoption of Communication Strategies (CSs). A secondary purpose was to probe the probable impact of such an educational context on the students' overall vocabulary achievement. To this end, 60 elementary EFL male learners at an Iranian institute were assigned to two class conditions : the students of one class were at the age of 15 & 16 (the same-age group), and those of the other class were of different ages, ranging from 15 to 36 (the multiage group). The instructional procedures, the materials, and the teacher were consistent in both classes. The course took two and a half months for both groups and both classes received the same amount of instructional content. The results suggest that the kinds and frequency of CSs employed by the students were affected by the interlocutors' age factor. However, no significant difference was observed in the students' overall EFL vocabulary achievement.

Key Words: Multiage EFL classrooms, Communication strategies, Elementary vocabulary instruction , Age factor, EFL instruction

1. Introduction

Hundreds of years ago, students learned in a one-room schoolhouse. In such a setting, students of all ages were educated together by the same teacher for several years. Such a class provided a community atmosphere where students worked and learned together. While there are different names and forms of multiage classrooms, the essential concept involves combining different age groups within one classroom (Naylor, 2000).

There are two reasons why multiage classes exist: one reflects a philosophical view; the second relates to administrative considerations (Naylor, 2000). The former reflects a deliberate and systematic mixing of students of different ages as desirable and as beneficial to students. The second reason for the existence of what are usually defined as multi-grade classes is more mundane, and was stated by Veenman (1995) as to be an administrative device used to cope with declining student enrolment or uneven class size. In the latter context, classes are combined simply because there are not enough students to form a single-grade class.

In applied linguistics, Interest in communicative language teaching has led researchers to focus on the use of communication strategies (CSs) by second language (L2) learners (Littlemore, 2001). Communicative language teaching builds on the premise that language use is governed not only by phonological and grammatical rules, but also by sociolinguistic and discourse rules (Canale & Swain, 1980). In other words, natural language use is a complex, creative activity that takes different forms depending on a variety of factors, including the context in which the interaction occurs, the characteristics of the interlocutors (i.e., age, gender, social status, and level of education), and the purpose of the interaction (Hymes, 1972). On the other hand, the study of CSs is important, as it looks at how learners are able to use the L2 in order to convey meaning. A class where there are students of different ages can be a context that may probably be important in the students' overall language achievement as well as their use of certain communication strategies.

In second language learning/teaching context, however, multiage classrooms have not been paid much attention to date. In most cases, the language learner may be put in a class regardless of his/her age, the deciding factor being his/her level of language proficiency. Of course, the term *multilevel* is used to identify any group of learners who differ from one another in one or more significant ways. Arguably, every class is multilevel because learners begin with varying degrees of competence and then progress at different rates in each of the language skills (Bell, 1991). However, in many EFL and ESL classes, there are more variables that affect the levels within the class: the type and amount of a learner's previous education, the learning style preferences, learner expectations of appropriate classroom activities, and the culture, religion, sex, and age of each learner. Nevertheless, the language learner, whether put in a multiage class or in a same-age one, may resort to employ different strategies, when encountering problems in communication (Tarone, 1981; Faerch & Kasper, 1983).

In communicating with others, the learner may face problems. These problems are tackled

through the application of some strategies. These strategies are referred to as 'communication strategies' (Faerch & Kasper, 1983). They represent "potentially conscious plans set up by the learner in order to solve problems in communication" (Faerch & Kasper, 1983, p.39). These communication strategies, however, are not so easy to identify or to define, but two criteria are commonly applied. The first is that the strategies are problem oriented (Ellis, 1994). The second criterion is that these strategies are consciously employed or, at least, that they are potentially conscious (Faerch & Kasper 1983). That is, they are employed by the learner because he/she lacks linguistic resources to express his/her intended meaning, or, as Corder (1978) puts it, when there is a lack of balance between means and ends. However, concerning the identification of CSs, as Faerch and Kasper (1983) hold, the difficulty of the analyst's task varies with the stand one takes in defining CSs. Tarone (1981) refers to them as "compensatory means" used by an L2 learner when he/she is not able to communicate the original goal in the way previously planned, and so is forced to use alternative means to express it.

The literature on L2 learning and multi-age classes is scanty and inconclusive. For instance, Hirschler (1994) in a microethnographic study of the language interactions between Second Language (SL) learners and Native Speakers(NSs) in a mixed-age preschool setting(3- 5 year-old children) examined the importance of SL social context and language interaction for language development. Her analysis of data in terms of the time spent, the rate of NS language initiatives, the rate of responses by SL learners, the number of turns in conversations, and the quantity of talk measured by utterances revealed that NS children interacted with the SL learners in their class in different ways : the youngest child was the least frequent interacter, and the oldest child the most frequent one.

Townsend (1997) in a study combining African American children with the children of other ethnic groups argues that all languages and dialects are learned by interacting with proficient speakers. Also, she maintains that mixed-age classrooms can be rich contexts for children's development of Standard English. Her findings suggest that complex social interaction and verbal communication are more frequent for a young child paired with an older peer than for a young child paired with a same-age peer. Again, she stresses that mixed-age grouping can provide a rich context for African American children to acquire Standard English.

The studies cited above give clues to the role of environment and multiage settings in students' language learning. However, there is a need for exploring the multiage issue in an EFL learning context particularly in relation to the communication strategies the learners adopt in their classroom interactions. To this end, the following research questions were formulated:

- 1- Is there any significant relationship between the EFL learners' heterogeneity in terms of age and their adoption of communication strategies?
- 2- Does the EFL learners' heterogeneity in terms of age have any significant effect on their overall achievement?

2. Method

Subjects

The participants of the study were 60 EFL male learners studying English at level Basic Two at the Iran Language Institute (ILI), Gorgan branch, Iran. The first level to begin at the ILI is level Basic One; of course, they are false beginners. They were selected from about 150 students, based on their performance on a proficiency test (i.e. Nelson, Elementary Version 50 C) which was given to the students in order to ascertain their homogeneity in terms of General English Proficiency (GEP) prior to the study. Dispersion of the scores in the normal distribution was adopted as the consistent criterion. Then, the subjects were assigned to two classes. The students of one class were of about the same age (15&16), and those of the other of varying ages, from 15 to 36 (See Appendix B) . The distribution of the subjects across ages was fair so that there were roughly equal number of subjects from each age interval. It should be noted that the rationale behind selecting the age range for the same age group is the typical frequency of this age distribution in EFL contexts, Moreover, the researchers , having consulted the literature on developmental characteristics of L2 learners, decided not to include younger children as their unique psychological features might contaminate the findings. In order to ensure the homogeneity of these two classes in terms of language proficiency, the students' scores on the Nelson test were put in the t-test formula. As Table 1 shows, the t-observed (.65) is far less than the t-critical (2.00), at .05 level of significance, suggesting that the two classes were homogeneous in terms of GEP prior to the experiment. Therefore, the former class was homogeneous with regard to sex, age, and GEP; the latter homogeneous with respect to sex and GEP, but heterogeneous in terms of age.

Table 1: Independent t-test Ensuring the Homogeneity of the Two Classes

Class	No. Of Subjects	\bar{X}	Std. Dev.	df	t-observed	t-critical	α
Multiage	30	36.20	3.87	58	65	2.00	05
Same-age	30	35.70	3.23				

Instrumentation

In order to obtain data regarding the application of communication strategies, the videotaping method was adopted. The rationale behind this was twofold: it is more objective and it offers more opportunities for detailed analysis of the data. Thus, several sessions of each class were videotaped. The videotaped interactions were later analyzed based on the checklist of communication strategies (See Appendix A).

As for assessment of the probable difference in students' overall gains during the study, a vocabulary achievement test was developed based on the course materials during the pilot phase of this study. This achievement test comprised 30 multiple-choice items and had already been piloted with a similar group of students of the same proficiency level at the same

institute.

The validity of the achievement test was estimated through correlating the students' scores on this test with those on the vocabulary component of the Nelson English proficiency test. The reliability of the test was estimated against KR-21 formula. The test, then, proved to enjoy reasonably high validity (82) and reliability (71) indices.

Also, the reliability of the identification of communication strategies was estimated through interrater reliability. Having examined the full context of communication, two raters identified and coded the type of communication strategies based on the checklist and the illustrations provided. To insure the identification process, the final frequencies analyzed were those that had been agreed upon by the two raters alike, i.e., there was a perfect agreement.

As for the typology of communication strategies under study, Faerch and Kasper (1983) hold that the difficulty of the analyst's task varies with the stand one takes in defining CSs. Thus before examining the typology of CSs for the purposes of the present study, it is necessary to clear the air concerning the view adopted here towards CSs. The meaning of CSs as used in the study is borrowed from Tarone (1981) who refers to them as "compensatory means" used by an L2 learner when he/she is not able to communicate the original goal in the way previously planned, and so is forced to use alternative means to express it. Moreover, the approach the researchers adopted was interactional. Therefore, the typology of CSs adopted for this study is dependent on this interactional view. One obvious advantage of adopting the interactional definition is that it is easy to apply to performance data.

The following types of CSs, which frequently appear in the prominent taxonomies of CSs in the literature (Tarone, 1981; Bialystok, 1983; Faerch & Kasper, 1983; Tarone & Yule, 1989), were chosen for the purposes of this study. Also, the adopted CSs were found to be more common than the others in the pilot phase of the study conducted prior to the main research, involving similar beginner subjects. Practically speaking, one apparent merit of selecting these strategies of communication was that they were easy to be specified in the performances of the language learners. The adopted CSs for the analysis in this study were as follows:

a) Literal Translation or Transliteration

The learner translates word for word from the native language:

e.g. " He's standing near to the desk."

For " He's standing near the desk."

b) Mime or Gesture

The learner uses nonverbal strategies in place of a lexical item:

e.g. using mime for asking permission to leave the class.

c) Language Switch or Code Switching

The learner uses the native language term without bothering to translate

e.g. "My father is... Karmænd [for "an employee"]."

Procedure

This study was conducted in the summer term of the ILI, Gorgan branch, Iran, in 2001. After the administration of the Nelson English proficiency test, about 85 were identified as a homogeneous sample. Then out of the above sample, 60 students were randomly selected for the two classes: same-age class and multiage class. Therefore, the students of the same-age class were of 15- and 16-year-old students, and those of the multiage class of different ages - from 15 to 36.

It is to be noted that the teacher of both classes was the second researcher. Moreover, to control the possible effect of the contaminating factors, the same instructional materials were presented to both classes. Also, both classes received the same amount of instruction; the length of the course was the same for both, i.e., about two and a half months. Based on the ILI strict regulations, both classes were held in the afternoon, two days a week ; each session two hours. On the whole, each class received 40 hours of instruction, excluding the two sessions devoted to the mid-term and final exam. Several sessions of each class were videotaped and analyzed based on the checklist of communication strategies.

Results

In order to examine the first research question in this study, the frequencies of communication strategies adopted by the two groups were counted and put to four chi-square tests. Tables 2 & 3 present the results of the corresponding descriptive and inferential analyses.

Table 2: The Frequency of Communication Strategies used by the Two Groups

Communication Strategies	Class		Total
	Multiage	Same-age	
Literal Translation	58	38	96
Mime	13	23	36
Language Switch	36	31	67
Total	107	92	199

Table 3: Chi-Square Tests for the CSs Used by the Two Groups

Communication Strategies	χ^2 -observed	χ^2 -critical	df	α
Literal Translation	4.16*	3.84	1	05
Mime	2.77	3.84	1	05
Language Switch	.37	3.84	1	05
Total	6.22*	5.99	2	05

As Table 3 reveals, the total chi-square value for all communication strategies adopted by the two groups turned out to be 6.22 (with $df = 2$, at .05 level of significance), which exceeded the critical value of $\chi^2 = 5.99$. This implies that there is a significant difference between the two classes in deploying the communication strategies under study. Therefore, the null hypothesis of "There is no significant relationship between the EFL learners' heterogeneity in terms of age and their use of communication strategies" is rejected. In addition, for each strategy type a separate chi-square test was run, the results of which are presented in Table 6. The findings show that the groups were significantly different in terms of the frequency of adoption of 'literal translation strategy'. Also, there existed a difference between the two groups in terms of application of 'mime strategy' but it was not statistically significant.

In order to probe the second research question, based on the students' scores obtained on the achievement test, an independent t-test was run. As Table-4 depicts, the mean score of the multiage class was somewhat higher than the same-age one but not statistically significant at .05. This suggests that the difference observed is not meaningful. Thus, the null hypothesis stating "The EFL learners' heterogeneity in terms of age has no significant effect on their overall vocabulary achievement" was confirmed.

Table 4: Independent T-Test & Descriptive Statistics for the Achievement Test

Class	N	\bar{X}	SD	DF	t-observed	t-critical	α
Multiage	30	21.43	4.74	58	1.33	2.00	.05
Same-age	30	20.26	4.12				

3. Discussion

The results of the chi-square tests revealed a significant difference concerning the adoption of the specified communication strategies between the students of the multiage class and the same-age one. This is in favor of Chastain's (1988) idea that learner's use of communication strategies varies as the situation and interlocutors change. Moreover, Corder (1981) maintains that the strategies adopted by speakers depend upon their interlocutors.

What is interesting to note is that the highest frequency was the use of literal translation, followed by language switch and mime. This might be attributed to the level of the L2 learners. Since they were at lower levels of language learning, they were naturally less aware of the differences between English and Persian language structures. Therefore, they translated literally what they had in mind from Persian into English. At times, however, the utterances belonged neither to English, nor to Persian, but rather to what is called the learner's 'interlanguage'.

On the other hand, the t-test conducted to probe the first research question indicated no significant difference between the means of the two classes on the achievement test. Therefore the first null hypothesis is confirmed.

One factor which may account for this finding is that not all language learners' effective learning simply takes place in the classroom. Chastain (1988) believes that the learning context plays a crucial role in learning, but it may not be so efficient as the other influential factors, e.g., language learning strategies, which are, according to Oxford (1990), mostly used outside the learning environment. In fact, students seem to rely primarily on their learning outside the classroom; hence the effect of the learners' heterogeneity in terms of age minimizes. Thus, given the kind of instrumentation employed in this study, it may be concluded that the presence of classmates of various ages (in this study, from 15 to over-35 years old), does not have a significant effect on their final achievements.

In addition, most researchers of multiage EFL classes (Katz, 1997; Gaustad, 1997; Naylor, 2000) recommend longitudinal designs with an optimal average of one year instruction, whereas the length of the instructional term in the present study was two and a half months, i.e., 22 sessions. Therefore, this might have been an insufficient period of time to explore the impacts of the learners' heterogeneity in terms of age on their overall achievement.

A final factor which may account for the findings is the effect of the testing method. Since the learners' overall success in this study was measured through a multiple-choice test, it can be argued that this mode of testing may not have been suggestive of learners' achievement in a course run communicatively and interactionally. In this regard, Bachman (1990) holds, "test performance is also affected by the characteristics of the methods used to elicit test performance (p.111)." Accordingly, it may be said that the learners may perform differently on a different test method. This hunch, in turn, can provide an impetus for further research on the topic.

Finally, although the results of this study do not bear much on the range of different communication strategies, they do provide evidence about the importance of the role of the situation and the age of the interlocutors in employing particular communication strategies. The findings are in line with the fairly general consensus holding that the strategic competence of L2 learners is likely to be developed through genuine communication situations (Canale & Swain, 1980; Stern, 1983; Bialystok, 1990). Thus, in a situation such as a classroom, it is important to provide opportunities for the language learners to communicate their thoughts.

4. Conclusion

Briefly stated, having combined experimental and descriptive designs, this study examined two classes – a multiage class and a same-age one -- to see the effects of such contexts on the EFL learners' overall success in language learning and in their adoption and use of certain communication strategies. Concerning the first research question, the comparison of the mean scores of the groups under study showed no statistically significant effect of age distribution of the learners on their ultimate overall success as measured through a vocabulary achievement test.

Also, to explore the role of the interlocutors' ages in the learner's use of certain

communication strategies, four chi-square tests were run based on the communication strategies checklists for each group. The results showed a significant difference between the students of the two classes regarding the use of the specified communication strategies.

To sum up, as the main conclusion of this study, it may be stated that the language learners' heterogeneity in terms of age has no significant impact on their overall achievement; however, it has a significant role in the learners' use of certain communication strategies among the elementary subjects examined in this research. It is hoped that these results may stimulate further research yielding more definitive information on an apparently significant characteristic of the speech behavior of foreign language learners.

The results of this study may promise some implications for language teachers and learners. At lower levels of language learning, assigning students of different ages to a single class may not have significant impacts on the learners' language learning. Hence, language learners need not worry about their success in case they were put in a class of students of varying ages.

However, this study investigated the lower level language learners of a multiage class and a same-age one. Since, as far as it is known to the present researchers, little serious work has been published to date, specifically dealing with the objectives of the present study, the findings presented here should still be regarded as preliminary and in need of further research. Further follow up factorial research may address some other important factors which may have an effect on the students' success and also a role in the learners' use of particular communication strategies. For instance, the effect of such factors as the learners' sex on their overall achievement and employing communication strategies can be a fresh topic for further research. Moreover, the subjects in this study were language learners at lower levels of language learning in an institute. Further studies can be done with more proficient EFL learners and varied instructional settings. Finally, due to some practical limitations, the types of communication strategies examined in this research were transliteration, language switch, and mime. Further research can explore the application of

a wider range of communication strategies among the language learners.

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