Creating a Low-Anxiety Classroom by Mediational Artefacts: A Comparison Through Materialization and Verbalization

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One of the challenges in foreign language teaching, specifically teaching listening skill, is to create a low-anxiety classroom environment, since many learners believe listening induces anxiety. This study compares learners' anxiety in two different classrooms in which learners were instructed by two forms of artifacts: materializing and verbalizing. The Foreign Language Listening Anxiety Scale (FLLAS) scores before and after a 13-week experimental treatment course were used to compare learners' anxiety before and after receiving intervention by two means. In this study, the lower score of anxiety was for the group which did verbalization practice in the class; however, both groups showed the same performance on listening test.

Keywords: anxiety, verbalization, materialization

Introduction

Most learners complain about difficulties of listening and consider this skill as the most difficult skill (Graham, 2003; Hasan, 2000). Learners' failure to comprehend the speech at the pressure of time induces anxiety (Arnold, 2000). In addition, most listening activities in the classroom put learners in a situation that merely measures how much learners have understood (Graham, 2006). In other words, most listening activities focus on the outcome and play the role of a test (Vandergrift & Goh, 2012). Learners' negative perception about listening and the product-based nature of listening activities contribute to a high level of anxiety in the class (Mendelsohn, 1994). In listening activities, learners are expected to complete all the tasks without any help or mediation (Vandergrift & Goh, 2012). Clearly, it is important for teachers to support learners with necessary mediational artefacts in order to reduce their anxiety. Mediation in Socio-cultural Theory (SCT) is considered as a pedagogical instrument for helping learners overcome problems during learning (Poehner & Lantolf, 2010). Lantolf and Throne (2006) point out that "psychological tools, or what are often referred to as artifacts, include various kinds of human constructions: numbers, charts, figures, art, music, and the most powerful and pervasive artifact of all, language" (p. 26). This study tried to use mediation to reduce learners' anxiety in the process of learning listening. There are numerous pieces of research in the area of learners' anxiety, yet scanty research has been carried out on the role of teachers in alleviating anxiety by equipping their teaching with appropriate mediational artefacts. Vogely (1999) believes that for reducing learners' anxiety, two important factors should be taken into account, which are making input comprehensible and improving

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instructional factors. In addition, Young (1991) summarized six possible sources of second language anxiety two of which can be mentioned as instructor and learner interaction and classroom procedure that emphasize the role of teacher for controlling anxiety. Truitt (1995) believes that teachers can change learners' anxiety through the way of instruction. In order to create a low-anxiety environment, different forms of mediational artefacts such as materialized objects and verbalization activity were presented to two different groups. This paper suggests that learners' level of anxiety can be lowered when teachers use different mediational artefacts in the process of teaching.

Materializing Listening Concepts

Materializing tools include the pattern or model, means, objects, rules of action, and the orienting chart. Materializing tool refers to the model which tries to show the intended output of the action (Lee, 2012). It is intentionally and systematically constructed by the teacher (Fogal, 2015) and sometimes by the learners (Ferreira & Lantolf, 2008).

It reflects Gal'perin's (1992) educational philosophy that learners should be provided with complete guidance. He believes that teachers' guidance is more effective when accompanied by symbolic and graphic representations. Materialized tools can be in different forms such as image (Yáñez-Prieto, 2008; Lee, 2012) or charts (Negueruela, 2003). The logic behind this way of presenting is that in the initial stage, learners carry out a task with the external support that illuminates the concept to be learned. In this study, materializing tools refer to charts and tables that represent rules for each listening concept. It is a tool that learners can refer to when they face problems in accomplishing listening tasks.

Verbalizing Listening Concepts

Verbalization or Languageing refers to "producing language, and, in particular, to producing language in an attempt to understand—to problem solve—to make meaning" (Swain, 2006, p. 96). Verbalization is in the form of oral or written explanation of the concepts in order for learners to monitor and evaluate one's action (Negueruela, 2003) while working on a particular task, and help them externalize their understanding of the concepts. Speech is accepted to mediate thought and this mediation may occur through different ways such as collaborative speech among learners (Swain & Lapkin, 2002), speech between learner and expert (Aljaafreh & Lantolf, 1994), or the private speech of individual learners (DiCamilla & Anton, 2004). Speech in any form—social or individual—serves to mediate learning and leads learners to gain self-regulation.

The primary goal of this study was to investigate the effects of two mediational artefacts on learners' listening anxiety and listening performance. To this end, this study addresses the following questions:

- (1) Is there any significant difference in EFL (English as a Foreign Language) learners' level of anxiety between two groups of mediation (STI-EM & STI-EV)?
- (2) Which form of classroom (materialized versus verbalization) leads to learners' better listening performance?

Method

This study followed experimental design through which the data of 60 EFL students was drawn from an initial pool of 72 (23 males and 49 females) in two intact classes. The differences among groups were related to the kind of mediational artefacts they were exposed to during their instruction. One group was exposed to materialized tools developed by the researcher as well as teacher's oral explanation of listening concepts.

Another group was just exposed to teacher's oral explanation of target concepts and for accomplishing listening tasks, learners did collaborative verbalization for better concept understanding. Learners were divided into one level of language proficiency, that is, intermediate, based on their scores on the Oxford Placement Test (OPT). The *mean* obtained was 67.4 and the *SD* was 10. Those who scored one SD above and one SD below the mean were included in the study. Those who scored above and below 77 and 57 were excluded from the study.

Instruments

Six instruments were used in this study as (1) Foreign Language Anxiety Scale (FLAS) (before & after intervention); (2) instructional units; (3) materialized objects for the related group; (4) verbalization tasks for related group; (5) the listening section of Preliminary English Test (PET) (pre & posttest); and (6) OPT listening section for selecting the required participants. All the instructional tasks were collected and adapted by the researcher from different intermediate instructional listening textbooks. Verbalization activity was carried out through both spoken language and written. The oral verbalization was accomplished dyadically to support the understanding of listening concepts. Spoken form incorporated learners' overt speech to another (their partner in the class for two tasks in each unit). Then, the learners were provided with researcher-designed listening homework assignment; only the group mediated by verbalization did the written form of languaging. This activity for the materializing mediated group was carried out without writing their explanation. The investigation on learners' anxiety relied on learners' responses to the FLAS scale developed by Kim (2000) two times before and after instruction by two forms of mediation. The scale consisted of 33 Likert-scale items. The response continuum is from one "Strongly Disagree" to five "Strongly Agree". In addition, some steps were followed for materializing listening concepts. The procedures can be summarized as follows: (1) finding listening concepts and knowledge based on literature; (2) categorizing all the necessary rules for listening comprehension in each concept; (3) imaging all the rules for each concept in a diagram and providing some examples; and (4) adding the corresponding strategy in each diagram in order to use the rules of each concept.

Results

Anxiety change in groups. A one-way between-groups analysis of covariance (ANCOVA) was run to measure the effect of different ways of mediation on learners' listening anxiety reduction. The result of Levene's test indicated that the homogeneity of variances, the prerequisite condition for running ANOVA with covariate, was not violated because the value obtained was greater than the alpha level of 0.05 ($p = .32 > .05$). It is clear that the covariate (students' level of anxiety before receiving any instruction) significantly predicted the dependent variable (students' level of anxiety, after receiving instruction by different forms of mediation), because the significant value is smaller than 0.05 ($p = .001$). Therefore, there is a significant difference in learners' anxiety among two groups mediated by two different ways. In other words, the mean (90.10) of group which mediated by doing verbalization was lower than the group which was exposed to materialized objects (mean: 100.09).

Learning change in groups. Again, a one-way between-groups analysis of covariance was conducted to compare the effectiveness of two different mediational artifacts on listening. Before running ANCOVA analysis, preliminary checks were conducted to ensure there was no violation of the assumptions. The assumption of homogeneity of regression slopes was checked. In the output obtained from the procedure, $p = .72$ which is greater than significant value and indicated that the assumption of homogeneity of regression slopes was not violated. The result of Levene's test indicated that the homogeneity of variances, the

prerequisite condition for running ANOVA with covariate, was not violated because the value obtained was greater than the alpha level of 0.05 ($p = .96 > .05$). It is clear that the covariate (students' listening scores on PET before receiving any instruction) not significantly predict the dependent variable (students' listening scores after receiving instruction), because the significant value is greater than 0.05 ($p = .82$). Therefore, there is not a significant difference in learners' listening performance of the two groups studied. In other words, the mean of group mediated by verbalization was approximately the same as the materializing group (16.64 and 16.48 respectively).

Conclusion

The results regarding learners' level of anxiety before and after intervention provide justification for the role of verbalization. It is considered as an efficient mediational artefact to provide a low-anxiety classroom. It should be noted that verbalization or languaging changes the listening activities from product to process-oriented approach when learners detect, identify, and explain the rules in aural texts. To Vandergrift (2007), in product oriented approach towards listening, there is no information regarding the reasons or processes underlying learners' performance, and only learners' success is important. In product approach, educators do not find enough information about the reasons behind learners' comprehension breakdown. Verbalization or languaging could be considered as an efficient tool for checking learners' understanding of the related concepts in this study. Verbalization practice draws learners' attention to the process of listening which helps learners control their listening and reduce anxiety. This finding is also line with Vandergrift and Goh's (2012) ideas that "the way of teaching listening can contribute to or reduce anxiety" (p. 271). However, there is no significant difference among learners' listening performance in two mediated groups. The reason behind their equal performance could be attributed to the same efficacy of two mediational artefacts in listening concepts. In the study conducted by Serrano-Lopez and Poehner (2008), the findings confirm the effective role of materialization in language development because the experimental group in which learners constructed mediational tool themselves outperformed the control group which was only exposed to teacher's oral explanation in teaching Spanish locative prepositions. The only difference between this study and Serrano-Lopez's one is that the learners in the current study were exposed to prefabricated tools developed by the researcher. On the other hand, the findings of earlier studies (Donato, 1994; Ganem-Gutierrez, 2008) support the mediatory role of collaborative dialogue in language use and language learning that was practiced in this study for one group. To summarize, verbalizing as well as materializing mediated classroom could equally help learners in listening performance, while verbalizing classrooms provide an environment that reduces learners' anxiety. The study suggests that language educators who intend to reduce learners' anxiety need to allocate some time of the class to learners' verbalization in different forms such as self, collaborative, oral, written, and group.

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