

## ABSTRACT

Out of the many task scheduling strategies, interleaving and blocking are two methods of L2 task scheduling practice which have recently gained a lot of attention. These two methods have been found to be effective in facilitating linguistic knowledge to be automated and proceduralized when used at the appropriate difficulty level. Interleaving has been described to enhance the retention and transfer of learning than blocking as the method of interleaving incorporates the mixing and spacing technique. But, the benefits of interleaved practice were not observed in all areas of L2 performance as found in some recent research done on L2 learning. The main objective of this study was to make a comparison and measure the difference in the effectiveness of interleaving and blocking in English interaction, pronunciation, fluency, and vocabulary & grammar performance of the learners over the course of a three-month-long English speaking training session. In addition to that, a comparison was done to examine the effects of interleaving and blocking on the stimulus-appraisal based scales of L2 motivation. The English interaction, pronunciation, fluency, and vocabulary & grammar performance along with L2 attitude and motivation was measured by taking 44 Indian undergraduate English as L2 learners for the study who were kept under interleaved and blocked conditions. In the first 16 sessions, for instance, the participants kept under blocked condition followed task repetition practice by speaking the sentences in a predictable order, i.e., *aaaa, bbbb, cccc, dddd*. On the other hand, the task repetition practice among the participants kept under interleaved condition was organized using the technique of spacing and mixing in the first 16 sessions in the order of *abcd, abbd, aacc, and bdcd*. To gather data required for the study, one recruitment test was used to distribute the participants into interleaving and blocked practice groups, and three major tests- a pre-test, an intermediate test, and a post-test were administered to compare and measure the difference in the effectiveness of the two methods on the English speaking performance of the participants at different phases of the training sessions. The data was analyzed using repeated measures ANOVA test.

There was no statistically significant difference observed between the interaction performance of the two groups as found in the mean values of the interaction scores of the participants. The repeated measures ANOVA test demonstrated a  $p$ -value of the comparison which was .81. The  $F$ -value was low and so was the effect size which were .061 and .003 respectively. Despite the study could not show a significant advantage of interleaving and blocking in enhancing the interaction performance of the participants, blocking showed a little better English interaction performance than interleaving. It was because the effect of desirable difficulty framework incorporated a decrease in the performance stress experienced by learners with limited language skills and whose language proficiency level was low.

The results of the English pronunciation performance also demonstrated no statistically significant difference in the mean values between the participants of both groups. The repeated measures ANOVA test showed a  $p$ -value of .211. The  $F$ -score was also low, 1.66 so was the effect size of .07. Therefore, the results of this study did not demonstrate the advantages of interleaving method of practice, but rather suggested that the method of blocking might be more beneficial in learning of English L2 pronunciation as it offers the chances for retrievals of earlier auditory items needed for auditory-to-visual mapping of knowledge.

Similarly, in case of fluency performance, the mean values of the English fluency scores of the participants in the interleaved and blocked practice group did not demonstrate any statistically significant difference in the enhancement of English L2 fluency. The results of the repeated measures ANOVA test demonstrated a  $p$ -value of the comparison of the two groups which was .29. It also represented a low  $F$ -value of 1.16 and a low effect size of .05. However, in the later stages of the fluency training program, there was a slight rise in fluency development observed among the participants in the blocked group. There was a shift from slow and hesitant speech performance to random self-correction or repetition in a long speech. Thus, interleaving may not be effective than blocking in improving L2

fluency as the systematic arrangement and manipulation of tasks in blocked practice integrating high similarity or stimuli retrieval may be more effective in the development of L2 fluency.

The methods of blocking and interleaving have been suggested for task repetition practices intended in learning L2 vocabulary and grammar within a desirable difficulty framework. The test results of the participants showed no statistically significant differences between the effects of the two methods on the retention of English vocabulary and grammar as the *p*-value, *F*-score, and effect size were .17, 2.05, and .09 respectively. All through the three tests, the participants in both groups showed little flexibility and the choice of words were not appropriate. Also, the participants could not produce English sentences which were complex in forms and structures. However, the participants in the blocked practice group spoke English sentences that were flexible in nature and the word choice was also appropriate. In order to express new ideas in oral English, they frequently used complex forms and structures in the intermediate and post-test.

Moreover, there were some significant correlations found between the scheduling of language tasks and the attitude and motivation of the language learners. In language classrooms, a variety of task repetition methods are employed to generate interest and maintain the eagerness for these types of activities in order to boost language practice. Using the attitude and motivation test battery, their attitude and motivation towards English was noted at various intervals during the study. In the first month of the study, there was no statistically significant difference observed between interleaving and blocking with regards to L2 attitude and motivation. However, in the third month, a statistically significant difference was observed between the two methods in their effect on coping potential and self/social image scales. In order to create a language classroom with high levels of motivation, a thorough comprehension of how task scheduling affects L2 attitude and motivation might be beneficial in determining the particular kind of language practice in the classroom.