

SYNOPSIS

This study investigated the patterns of interaction and reading performance of ESL students during online collaboration. More specifically, the study examined the effects of online collaboration on the reading performance of ESL students, the patterns of interaction demonstrated during online collaboration, the differences in the patterns of interaction when completing different reading tasks, and the nature of the relationship between the patterns of interaction and the reading performance.

The subjects of the study involved an intact class of ESL students who were studying in a university in Malaysia. The ESL students were divided into groups of four whereby each group comprised students of mixed ability. Transcripts from the online discussions were used to identify the patterns of interaction, and to examine if there were differences in the patterns of interaction when ESL students completed different reading tasks. The patterns of interaction were examined for the co-construction of knowledge. The scores obtained from the different reading tasks were also used to investigate the nature of the relationship between the patterns of interaction and reading performance. Finally, the students' pretest and posttest reading scores, and the scores from the different reading tasks were used to investigate the effects of online collaboration on reading performance.

Both quantitative and qualitative procedures were used in this study. Qualitative analyses were used to identify and code the online discussions for patterns of interaction. The results of the qualitative analyses were then quantitatively analyzed to look for

patterns of interaction, and to determine the nature of the relationship between the patterns of interaction and reading performance. Quantitative analyses were also used to examine the effects of online collaboration on reading performance.

Firstly, online collaboration was found to have significantly improved the reading performance of ESL students both at the individual and group levels. The greatest gainers were the low and average proficiency students. Secondly, the results showed that ESL students were engaged in all four phases of interaction during online collaboration. Nevertheless, most of the interaction occurred at phase I which was the sharing phase. Thirdly, no significant correlation was found between the patterns of interaction and the different reading tasks except for two similarities. Lastly, the results revealed that the reading performance of ESL students improved when certain operations were generated.

The findings of the study imply that online collaboration has a positive effect on students' reading performance. More importantly, it also provides empirical evidence in support of the sociocultural approach to learning. It validates the fact that online collaboration presents an opportunity for students to scaffold each other's learning. Furthermore, the study suggests that during online collaboration, ESL students tended to interact at the lower levels of interactive phases as evidenced by the predomination of information exchange. The results also show that different reading tasks not only influence the quantity of the discussion but they also determine the patterns of interaction. Finally, the generation of different operations which relate positively to the reading scores, indicates that ESL students were flexible in their use of operations.