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Maasum  
Collaborative  
Strategic Reading  
with University  
EFL Learners*

*The present study was an attempt to probe into the feasibility and effectiveness of a reading instructional approach called MCSR—Modified Collaborative Strategic Reading. Based on a pretest-posttest design, MCSR was implemented with 42 university-level EFL freshmen. They met once a week and received EFL reading instruction according to MCSR for 90 minutes over six weeks. A researcher-developed reading comprehension test was group-administered at pretest and posttest. Upon completion of the study, students' perceptions regarding MCSR were also evaluated by means of an Opinionnaire®. Quantitative results indicated that participating students did not demonstrate significant gains in reading comprehension skills. However, qualitative evaluation revealed that students did have positive attitudes towards MCSR. Overall, the conclusion was that EFL students' strong preference for communicative and cooperative activities runs counter to the popular thinking that disapproves group work due to students' long-standing conventional learning tradition. Keywords: Reading comprehension, reading strategy instruction, cooperative learning.*

**A**s has often been demonstrated in reading literature, tailoring an effective reading instructional practice is no easy task. Undoubtedly, the difficulty of designing a reading instructional approach is due to such complex and complicated factors as linguistic, cognitive and socio-cultural variables involved in reading comprehension in general and in English as a foreign language (EFL)

reading in particular (Hudson, 2007; Nassaji, 2003). In the late 70s and early 80s, the pioneers of reading research such as Clarke and Silberstein (1979), Coady (1979), Eskey (1986), and Smith (1978, 1982) advocated developing attack strategies or comprehension strategies in any reading program. In principle, they contended that there was very little point in teaching students to read. They, in fact, underscored that reading instructors' responsibility was to provide real opportunities for students and make it possible for them to learn to read. Perhaps, their contention can best be understood if we take into account Smith's (1982) assertion: "There is far more to reading than meets the eyes" (p. 3). This statement clearly shows the significance of other key factors that are not related to the print itself, but rather to those that are beyond the written text.

Insights gained from the first language (L1) reading process have now highlighted the fact that second and foreign language (L2) reading practitioners should concentrate their efforts on developing strategic readers who can easily manage independent learning contexts (Baker, 2002; Grabe, 2004). That students should be able to read and understand L2 texts on their own seems to be the main reason why reading comprehension instruction today pays particular attention to strategic reading development (Grabe, 2004). By definition, strategic reading refers to the application of reading strategies as heuristics and aids that can facilitate reading comprehension and overcome comprehension breakdowns at both the word and sentence levels (Aarnoutse & Schellings, 2003). Basically, reading strategies can be any comprehension-enhancing action taken by the readers. Such strategic readers are believed to draw on a variety of strategies to accomplish a purpose in reading.

Generally, strategic reading is combined with cooperative learning in which students work in small groups (Grabe, 2002; Zhang, 1993). The reason for such infusion is that the combination of strategic reading with learning in groups creates an opportunity for students to (a) interact, (b) help one another increase their understanding, and (c) overcome their comprehension problems of the text. A growing number of research studies have demonstrated that cooperation or interaction with peers can encourage the development of reading competence (Almasi, 1996; Ghaith, 2003; Tok, 2008). Likewise, research has demonstrated the effectiveness of group learning with university-level students who must pass reading courses in English (Ghaith & Abd El-Malak, 2004; Razavi, 2008; Tg Nor Rizan, 2007).

### **Statement of the Problem**

In academic settings where English is taught as a foreign language, the only skill which seems to be of paramount importance for tertiary

education is EFL reading skills (Birjandi & Noroozi, 2008; Farhady & Mirhassani, 2001). Due to the dominance of conventional language teaching methodology [i.e. Grammar-Translation Method (GTM)], a transmission style of teaching language still prevails across schools and universities in most EFL contexts. As a result, instructors commonly frown upon students' active participation in class activities and serve as the sole providers of the (language) knowledge (Mahdizadeh, 2006; Mirhassani, 2007).

In addition, English language teaching (ELT) research studies have lent support to the idea that the majority of EFL students who are admitted into tertiary education are under-prepared in terms of their EFL reading abilities (Dreyer & Nel, 2003; Haghani, 2004). Available evidence suggests that the reason for EFL learners' ill-preparedness in reading comprehension performance is, in large part, attributable to traditional language teaching methods. Given the challenges of meeting the needs of tertiary level students, there is a need for empirically-based interventions that can (a) enhance learners' engagement in today's classrooms and (b) facilitate reading comprehension by developing strategic behavior of students in EFL reading. Moreover, considering the importance of strategic reading and cooperative group work, it seems that reading strategy instruction within the framework of cooperative learning pedagogy has remained under-explored in university-level education where reading and understanding of English texts play an important part in students' further learning.

### **Main Objectives of the Study**

In order to address the above problems, the current study was designed to determine the effect of the Modified Collaborative Strategic Reading (MCSR) technique in enhancing university-level first-years' EFL reading comprehension. MCSR is a modified version of Collaborative Strategic Reading (CSR) which combines cooperative learning and reading strategy instruction (Klingner & Vaughn, 1996). Additionally, this study intended to evaluate the perceptions of the students regarding the efficacy of MCSR.

### **Research Questions**

Based on the objectives of the study, the research questions formulated for this research are as follows:

1. Will students who are taught on the basis of MCSR demonstrate gains in reading comprehension performance, as measured by the researcher-developed reading comprehension test?

2. How do the EFL students respond to MCSR—an instructional practice which is a combination of reading strategy instruction and cooperative learning? Phrased differently, what are the EFL students' perceptions regarding the efficacy of MCSR?

### **Theoretical Base**

The current study capitalized on a specific, theoretical perspective known as social constructivism. The selection of this particular perspective in this research should not imply that the authors believe that it is the most comprehensive view, but rather it should indicate that social constructivism has potential utility in guiding present-day research on reading instruction. Social constructivism is generally grounded in the work of Vygotsky (1962) who asserted that knowledge is not a singular construct, but exists in diverse forms and interactive dimensions. In fact, this theoretical stance rests on the assumption that learners are involved in an active process of making sense of things through interactions with others (Fosnot & Perry, 2005; Felix, 2005). Based on his theory, cognitive development occurs when concepts first learned through social interaction become internalized and made one's own. A salient feature of this theory is the interactiveness of the learning process. Such a pedagogical model in education comes under the heading of cooperative learning in which students work together in small groups on a clearly defined task. According to Hedegaard (1996, p. 173) and Lantolf (2000), language is a psychological tool that can be "characterized by being produced through social activity, rather than arising organically." Therefore, a learning environment where learners can interact and use language for social construction of meaning would probably enhance the language skills in general and the reading skill in particular.

In social constructivism, the reading process and the reader have undergone re-definition and reconceptualization. In light of the tenets of social constructivism, reading is viewed as a socio-cultural, collaborative experience (Alexander & Fox, 2004); similarly, the reader is seen as a member of a network of socio-cultural groups. Such a perspective on reading suggests that the process of making-meaning is socially constructed and emerges out of social interactions.

In reading strategy instruction, tasks in cooperative formats provide opportunities for learners to model and evaluate the usefulness of comprehension strategies as they read (Koda, 2005; Paris, Wasik, & Turner, 1991). When learners work cooperatively in small groups, they can read texts more efficiently and employ comprehension strategies to better comprehend the reading material (Vaughn & Edmonds, 2006). The group

dynamics generated in cooperative group work ensure strategic reading and active engagement with the text (Koda, 2005). Cooperative small groups, in turn, trigger the motivation necessary for comprehension to take place (Mathewson, 1994). In fact, the opportunity created for interaction helps improve motivation to read. As the literature suggests, cooperative learning is capable of sustaining students as motivated and engaged readers by providing opportunities for social interaction and interactive learning (Paris et al., 1991).

In light of the perspectives discussed above, the following statement represents the underlying logic for designing and conducting this study. If cooperative learning encourages active/interactive learning, and if reading strategies can lead to development of strategic behavior in learners, then their selected combination in the form of an instructional practice (i.e., MCSR, see below) will consequently promote effective reading comprehension for university-level EFL learners.

### **Modified Collaborative Strategic Reading**

Collaborative Strategic Reading (CSR) is an instructional practice in which cooperative learning and reading comprehension strategies combine with each other. Originally developed by Klingner and Vaughn in 1996, CSR creates an instructional context in which students, with the help of their peers and also the instructor, become competent at applying a number of research-based reading comprehension strategies while reading. Various lines of research on this approach indicate that CSR is an effective teaching tool that has the potential to enhance reading comprehension of (a) students with learning disabilities, (b) low- and average-achieving students, and (c) English language learners (Bryant, Vaughn, Linan-Thompson, Ugel, Hamff, & Hougen, 2000; Klingner & Vaughn, 1996; Klingner, Vaughn, & Schumm, 1998). However, for the purposes of the present investigation, the researchers employed the modified form of CSR, i.e., MCSR (Zoghi, Hazita, & Tg Nor Rizan, 2006).

Many approaches to reading strategy instruction, including CSR, tend to focus on a few reading strategies. Basically, CSR comprises four key reading comprehension strategies: (a) the preview strategy, to activate background knowledge and make predictions prior to reading, (b) the click and clunk strategy (as fix-up strategy), to monitor reading and enhance vocabulary development during reading, (c) the get-the-gist strategy, to identify main ideas while reading, and (d) the wrap-up strategy, to summarize key ideas and to generate questions following reading. Moreover, as previous research studies on CSR demonstrate, CSR is mainly employed in settings other than university-level education (e.g., Klingner & Vaughn, 1996; Klingner, Vaughn, & Schumm, 1998).

The rationale beyond the modification of CSR is that this teaching technique offers a limited number of reading strategies with regard to university-level students (Zoghi et al., 2006). Zoghi et al. (2006) contend that CSR is limited by a narrow range of reading strategies such as activating prior knowledge, summarizing main ideas, and formulating questions. Reading literature supports the idea that optimal combinations of text engagement strategies should be taught to university-level students so as to assist them to develop a repertoire of effective comprehension strategies (Fotovatian & Shokrpour, 2007). In order to give the CSR technique a certain degree of enrichment in terms of strategies, a number of effective, research-proven reading strategies appropriate for university-level students (Zoghi, 2002) have been added to the original CSR. It is believed that such a modification could validate the application of MCSR in typical EFL reading classes with all types of university-level learners (Zoghi et al., 2006).

MCSR incorporates four comprehension strategies of its original counterpart, namely, (a) *preview strategy*, (b) *fix-up strategy*, (c) *get-the-gist strategy*, and (d) *wrap-up strategy*. In MCSR, these strategies combine with a number of evidence-based strategies which facilitate identification of text structure (Nuttall, 1996; Zoghi, 2002). More specifically, reading strategies of recognizing text organization (Comparison & Causation) and discourse marker identification (Example & Adding Information) are used in the form of fix-up strategies.

MCSR implementation takes place in three stages, which are traditionally labeled as presentation, practice, and production stages:

1. **Presentation Stage.** The instructor introduces a reading strategy of recognizing text organization (comparison & causation) or discourse markers identification (example & adding information) by modeling or think-aloud techniques. Students are then asked to activate their prior knowledge about the topic that they will read.
2. **Practice Stage.** In this stage, students become involved in cooperative learning. The instructor provides practice to students in the following way. First, the instructor has students form small cooperative groups with five members in each. Students are then asked to read their selected reading material (one paragraph or two at a time) while acting their specified roles. In MCSR, the instructor assigns students in each group the following roles:
  - **Leader:** Leads the group by saying what strategy to apply next.
  - **Monitor:** Makes sure everyone participates and only one person talks at a time.

- Fix-up Pro: Uses *fix-up* cards to remind the group of the steps to follow when trying to figure out a difficult word or concept. The fix-up pro monitors the group's reading comprehension in order to identify when they have breakdowns in understanding, and uses fix-up strategies in repairing meaning that is lost. The fix-up strategies are: (a) reread the sentence and look for key ideas to help you figure out the unknown word; (b) reread the sentence before and after the difficult word looking for clues; (c) look for a prefix or suffix in the unknown word; (d) break the unknown word and look for smaller words; (e) identify the text structure; and (f) identify the connective words.
- Encourager: Watches the group and gives feedback. Looks for behaviors to praise.
- Reader: Has the responsibility of reading the passage to his or her group.

In this stage, students get involved in the processes of (a) summarizing the main idea of each individual paragraph that has been read, and (b) generating questions about the same paragraph. The practice stage is implemented more than once, namely, every one or two paragraphs.

3. **Production Stage.** The instructor performs a variety of activities to ensure that students have identified the most important ideas of the entire material. In this stage, the instructor asks students to do the following activities within their groups once the whole text is read:

- interviewing with each other on the reading material;
- retelling what s/he has read;
- and performing pro-con debates about the topic.

Finally, the instructor asks students to perform postproduction activities in order to enhance student engagement and to also consolidate important concepts learned from the material. These activities are designed in the following manner:

- Number Heads Together (Kagan, 1994): Students in each group number off from 1-4 or 1-5 (depending upon how many students are in each group). The instructor asks a review question. Students in each group then *put their heads together* to discuss the question and make sure that everyone in the group knows the answer. Then the instructor randomly selects a number from a group to answer.

- Send-A-Problem (Kagan, 1994): Each group selects the best question it has generated and passes that question to a different group to answer.

## Method

Based on a pretest-posttest design, this study attempted to provide initial findings as to the effectiveness of MCSR implemented with the tertiary-level EFL students. Furthermore, researchers collected qualitative information to complement quantitative data. According to Creswell (2005), quantitative data provides an overall picture of the study and the descriptive, qualitative information helps refine and explain the results of the obtained quantitative data. In this study, the researchers employed a significantly modified form of CSR (Klingner & Vaughn, 1996) called MCSR (Modified Collaborative Strategic Reading). MCSR, in fact, is a combination of reading strategy teaching in the context of cooperative learning.

## Context

The researchers conducted the present research in a public university located in the East- Azerbaijan province of Iran. The students had been accepted into their selected field of study based on the national university entrance exam. According to the selected university's policy, signed consent was not a common procedure. Therefore, only a verbal consent was secured to conduct the investigation. The study took place at the end of the first semester of the academic year 2007-2008 with only six sessions remaining.

## Participants

Due to the administrative constraints, the researchers were able to secure consent to one class (existing group) with 42 students for this study. The participants had been assigned to this class based on their KONKOOR (University Entrance Examination) scores. The university academic administration of the study site had already pre-grouped them in classes of 42-54 students. These entering freshmen entered different programs in the Faculty of Engineering and had to complete the compulsory General English course in this university. In fact, the researchers selected these students in this class because they were expected to improve their EFL reading skills during the course. One language instructor also agreed to participate in this study. He helped deliver the intended instruction and collect the necessary quantitative and qualitative data.

### **Instrumentation**

At pretest and posttest, the instructor collected quantitative data to assess the participants' comprehension achievement. He conducted the pretest one week prior to the beginning of the implementation of MCSR, while the posttest took place during the week immediately following the completion of the MCSR program. A six-week time interval between pretesting and posttesting was considered long enough to control for the memory factor among the participants. The same reading passages and comprehension questions were administered in the pretest and posttests. The main reason for using the same test in the pretest and posttest was to ensure that they were exactly comparable.

For this study, the researchers developed a 40-item reading comprehension test. The test was constructed by drawing on the reading comprehension taxonomy proposed by Barrett (1968); it could assess a broad range of reading comprehension skills. Different formats, namely, multiple-choice questions (MCQs), true/false (T/F), fact/opinion, and open-ended questions, comprised the test, which consisted of five categories of reading comprehension sub-skills: (a) literal comprehension, (b) reorganization of ideas, (c) inferential comprehension, (d) evaluation, and (e) appreciation. A panel of three reading experts from other local universities content-validated the test. The estimated reliability (Cronbach's alpha) of this reading test for the present L2 sample was calculated at .78. The test booklets obtained from the pretest and posttest were scored using the accompanying rubrics prepared for its scoring (see Appendix A for a sample of reading comprehension questions).

Additionally, during the week immediately following the completion of MCSR, the instructor also collected qualitative data. He gathered the intended descriptive data by means of an *Opinionnaire*<sup>®</sup> that the researchers had already developed. Such qualitative, group-administered measurement is usually believed to have the potential to elicit a great deal of response from the respondents (Jackson, 1995).

The term *Opinionnaire*<sup>®</sup> is a registered trademark of the Forum Foundation. An *Opinionnaire*<sup>®</sup> is an objective survey instrument which was developed by the Forum Foundation ([www.forumfoundation.org](http://www.forumfoundation.org)). Participants respond objectively to questions in a manner that allows for easy tabulation of participant opinions. In addition, an *Opinionnaire*<sup>®</sup> allows participants to respond anonymously with either an object or abstain. These responses are recorded and reported along with all other responses so that participants never feel obliged to come up with an answer to a question when they simply are not prepared to make a decision based on the information they currently have. The MCSR *Opinionnaire*

consisted of six questions in students' L1 that were intended to evaluate the students' perceptions regarding MCSR. Originally, seven questions had been formulated; however, in view of the three experts' recommendations in this field, they were reduced to six (Appendix B). Students' first language was used in order to ensure that they would express their opinions without experiencing any unnecessary pressure that might be caused by using L2. At the conclusion of conducting the Opinionnaires, the first author of the present article with the help of the instructor duplicated, back-translated, and then analyzed the Opinionnaires. In order to determine the consistency of the qualitative data, rater reliability of the data was calculated by Cohen's kappa. A reasonably acceptable level of inter-rater reliability was found,  $\kappa = 0.84$ .

### **Procedures**

General procedures consisted of (a) training workshop, (b) pretesting of all participants, (c) MCSR implementation, (d) conducting MCSR Opinionnaires, and (e) posttesting. As an initial step, the first author conducted an all-day workshop to train the participating instructor. The training, which took six hours in total (two three-hour sessions), consisted of (a) a brief introduction to MCSR; (b) its implementation procedures; and (c) the introduction of the research instruments, scoring rubrics, and the qualitative content analysis procedures.

Before the onset of the study, the students were pretested on reading comprehension, as measured by the researcher-developed test. The MCSR implementation took place in two phases. First, the participants received one orientation session for MCSR. In fact, students familiarized themselves with the strategies and skills needed for the implementation of MCSR. The instructor introduced the entire MCSR by explaining the comprehension strategies so that students understood the overall picture. Then, the instructor introduced the MCSR's stages to the participants. After an overall description of the practice, he provided explicit instruction on how to use each strategy through modeling and think-aloud techniques. Once he ensured that the participants were proficient enough to use the strategies of MCSR, five instructional sessions were devoted for the study. Each session took one hour and a half. The students met once a week and were taught on the basis of MCSR over the course of six weeks.

Upon completion of the six-week-long implementation of MCSR, the necessary data was collected. First, the instructor distributed the MCSR Opinionnaires among the students. No time limit was set; therefore, students were requested to take their time to respond to the questions. Then, the same reading comprehension test was re-administered to all participating students after the completion of MCSR.

## Results

### Quantitative Data Analysis

After collecting qualitative data from the pretest and posttest, the researchers analyzed the obtained data by means of performing a dependent-samples t-test. The quantitative data helped find an answer to the first research question, namely:

1. Will students who are taught on the basis of MCSR demonstrate gains in reading comprehension performance, as measured by the researcher-developed reading comprehension test?

Initially, assumption testing was performed for the proper use of a correlated t-test. To that end, the assumption of normality was tested, although it is argued that with sample sizes of 30+, violation of this assumption does not seem to be cause for concern (Pallant, 2005). The Kolmogorov-Smirnov statistics (Sig. 0.2) along with the skewness and kurtosis values ranging between  $-1.0$  and  $+1.0$  indicated that the normality assumption was upheld.

As a result, a dependent-samples t-test was run to evaluate the impact of MCSR on students' scores on the reading comprehension test. As is evident in both Table 1 and Table 2 (Appendix C), there was no statistically significant increase in students' comprehension scores from the pretest ( $M = 42.17$ ,  $SD = 5.86$ ) to the posttest [ $M = 42.80$ ,  $SD = 5.80$ ,  $t(41) = 1.75$ ,  $p > .05$ ]. While the participants' pretest mean score was 42.17 ( $SD = 5.86$ ), their posttest mean score was 42.80 ( $SD = 5.80$ ). In fact, at the .05 significance level, no statistically significant difference was found in relation to participants' reading comprehension performance between the pretest and the posttest mean scores.

Further, to assess the practical significance of MCSR, the percentage of change effected by the MCSR technique was also calculated. For this purpose, the original pretest and posttest mean scores were used. The result revealed a very low percentage of change (i.e., 1.49%). Although a statistically non-significance was reached, the lack of statistical significance should not diminish the importance of MCSR in enhancing students' reading comprehension, which was revealed in the qualitative findings. The results obtained from the qualitative data analysis have, in fact, counterbalanced the no-difference effect.

### Qualitative Data Analysis

The qualitative data obtained was analyzed to find the answer to the second research question, namely:

2. How do the EFL students respond to MCSR—an instructional practice which is a combination of reading strategy instruc-

tion and cooperative learning? Phrased differently, what are the EFL students' perceptions regarding the efficacy of MCSR?

First of all, the first author of the study back-translated the Opininnaires into English and then the instructor double-checked it to ensure the accuracy of the translation. Any discrepancies between the two were resolved in a meeting before the qualitative content analysis was conducted.

Later, the instructor and the first author duplicated and coded the data. Coding procedures for the Opinionnaire data were based on open coding (theme identification) and axial coding proposed by Strauss and Corbin (1998). According to Strauss and Corbin (1998) open coding involves "the process of breaking down, examining, comparing, conceptualizing, and categorizing data" (p. 61). During open coding, entire interviews were read and reread so that patterns and major themes in the data could be identified. After this, the data was categorized around the themes.

Axial coding, as Strauss and Corbin (1998) explicate, involves a set of procedures through which data is put back together in new ways after open coding by making connections between a category and its sub-categories. During axial coding, the identified categories were refined and narrowed down into sub-categories. Further, the data was re-categorized around the refined/narrowed themes.

Finally, upon completion of the data coding, many similarities and a couple of differences emerged in the ways respondents reported their experiences about MCSR. In effect, analysis of students' Opinionnaire data generated five major themes, as shown in Figure 1 (Appendix D): (a) general ideas about MCSR, (b) positive features of MCSR, (c) negative features of MCSR, (d) comparison of MCSR with other English classes, and (e) willingness to continue with MCSR-like approaches.

In the subsequent sub-section where we will undertake the issue of the data interpretation, evidence to support the findings will be provided by using original, key quotations from among 38 respondents out of 42 students who agreed to answer the MCSR Opinionnaires. To ensure that students stay anonymous, respondents received pseudonyms.

**General ideas about MCSR.** The qualitative content analysis demonstrated that nearly 87% of the students reported positive perceptions about the MCSR program. Their remarks also indicated that students taught on the basis of MCSR were in favor of this instructional technique. A major reason spelled out for their interest in MCSR was the group work that they were engaged in. A couple of examples of their statements are as follows:

In that class, we helped each other. If I did not know anything, I would ask my classmates and the other way round. That was really wonderful. (Beth)

I really liked the instruction [MCSR]. The reason is because in the class we were helping each other and learning from each other. (John)

However, almost 13% of the students had negative attitudes toward the MCSR program. For their negative responses, they could not really express any specific reasons except that they all attributed their disinterest to the oddness of group work. This dissatisfaction was illustrated in the following statements:

To be honest, the class was not like the regular classes that we were used to. We had to sit in circles and work in groups. That was not very interesting. (Mary)

I am not used to that kind of learning. I did not feel comfortable in the class. I love to see the teacher in front of the class all the time. (Jim)

**Positive features of MCSR.** The most frequently identified strategy as helpful was the get-the-gist strategy. Get-the-gist strategy suggests that students should read texts paragraph by paragraph and stop to find a main idea for each paragraph, rather than read the whole text and then get the main idea. For example, a couple of the students remarked:

In my opinion, 'get-the-gist' was a very useful way of reading. Even now I apply this strategy in what I read. (Mark)

"The most helpful thing was the 'get-the-gist' part. We did not have to read all the paragraphs and then find out what the text was about. (George)

One feature of the MCSR technique most popular among the MCSR students was the group or cooperative learning component. The students stressed that group learning in MCSR allowed them to easily work on reading materials with the help of their groupmates, as noted in the following comments:

I guess one positive feature of the program was the way that we learned the reading materials in groups. That is to say, we worked together in groups and we knew what we were doing with the text." (Paul)

"Actually, that was the group work. We worked together and cooperated in a way. Even though it seemed a little bit strange on the first day, I think we realized later that it was much more effective to learn things in groups rather than individually. (Beth)

**Negative features of MCSR.** Approximately 90% of the respondents identified the "Preview" strategy component of MCSR as less useful. In addition, 13% of the students who did not have positive attitudes towards MCSR stated that learning based on group models did not work out for them:

And, the preview strategy really did not make any sense. It was kind of useless, that is to say, it was an ineffective activity to do.

I was wondering why we did it. (Gabriel)

I couldn't concentrate on the lesson. I always wished I could have been able to go through the lessons alone. (Peter)

**Comparison of MCSR with other English classes.** The majority of the students, i.e. nearly 87% of them, perceived the MCSR class differently from their other English classes. One major contrast that was identified from students' responses related to the learning environment. Students noted that MCSR provided a different type of learning environment. In fact, they pointed out that MCSR could provide a learning environment which was more interactive than any other English classes that they had had before. They believed that they could actively participate in the learning process. The following comments are excerpts from their Opinonnaires:

The lessons were not boring. The instructor always tried to have us be active by involving us in activities that he had designed. In other classes this is not the case. (Bob)

In some other classes you have to sit there and just listen to what the teacher is going to say. Also, in other English classes when teachers talk, I'm going to sleep. I mean I don't care what they say. But, in the MCSR class, the learning environment was different. It could keep us motivated. (Tim)

Nevertheless, only five students, i.e., 13% of the students had opposing views to the MCSR program. They all shared one common idea about the contrast that they reported. In fact, they all referred to the learning principle that MCSR employed, that is, cooperative learning. They continuously stressed that individualistic learning in their other classes is more effective for them than learning which is based on group models. An example of their comments is as follows:

Admittedly, other English classes were more effective. I was well-organized and could take notes of what the instructors said. In MCSR class, I was kind of confused. I did not know which part of the lessons was important for the final exam. (Roger)

**Willingness to continue with MCSR-like approaches.** The majority of the students, except the very five students who did not have positive attitudes towards MCSR, said that they would continue with the MCSR-like classes. Across these five students' responses, the reason for discontinuity with MCSR-type instructional methods was found to be attributable to their preferred personal learning styles. Their reluctance with MCSR can be noted in their comments:

It does not really make sense. Everyone must take care of their own learning. Otherwise, they will lose track of their learning.

As it [MCSR] impeded my effective learning, I do not want to go on with such programs. (Henry)

No, I would not like to. The reason is because I am more comfortable when I am working by myself. (Peter)

As stated earlier, 87% of the students showed strong desire for the MCSR. They all explained that the main reason that they would continue with the MCSR class was that they found group learning effective. Some of the examples of their comments are as follows:

Not only do I wish to continue with the MCSR class, but also I do hope I can experience once again an effective instructional method like that in other classes, too. (Gary)

I think this is a new method in our university. So, it will take time for it to become popular across the university. Since it was really effective and helpful, I want to experience it again. (Melissa)

## Discussion

In this study we provided the reading program of MCSR to university-level EFL students in order to investigate students' responses to this particular technique with regard to the gains that they made on a researcher-developed reading comprehension test. We also attempted to evaluate their perceptions about the efficacy of the MCSR class.

The quantitative evaluation demonstrated that there was no statistically significant difference in the students' mean scores after the MCSR program. Moreover, the effect of MCSR, or rather the practical significance of it, was very low. As logic suggests, on the basis of this study alone, it is difficult to reach final certainty about the factors accounting for a multi-dimensional process like reading comprehension. In educational research, the conventional criterion of statistical significance testing is still well received despite the criticisms that some have leveled. However, the statistical non-significance should not detract from the potential benefits and ability of MCSR to enhance EFL reading comprehension revealed in the qualitative findings.

Positive results obtained from qualitative data, however, do not mean that we can ignore the quantitative no-difference finding. The students' minimal responsiveness to MCSR in this study may be related to both individual and instructional factors. A few possible explanations for the lack of statistically significant effects can be summarized as:

1. failing to address the language proficiency level of students before conducting the study;
2. failing to familiarize students sufficiently well with MCSR at the initial stages of the study;

3. and students failing to realize the importance of reading strategy instruction.

In addition, it is pertinent to note that students in this study may have had a stronger response to MCSR if it had been delivered with greater intensity and conducted over a longer period of time. Pedagogically, intensive and longitudinal delivery of lessons is dependent on four interconnected factors: (a) group size, (b) instructional period, (c) frequency, and (d) duration (Faggella-Luby & Deshler, 2008). Group size is related to the student-to-teacher ratio during instruction. The instructional period refers to the length of each session which can be at variance. Frequency is concerned with the number of times students receive instruction during a week. The final factor, duration, refers to both the optimal total number of sessions students should be instructed and the optimal length of time from start to finish. In short, it is absolutely necessary to ensure that educational studies are being implemented acceptably well in terms of delivery of lessons prior to conducting any research. Otherwise, research outcomes could be compromised if educational research does not carefully address instructional quantity.

The qualitative evaluation from the MCSR Opinionnaires, however, indicated that most of the participating students did have positive attitudes towards the MCSR technique. The researchers postulate that university-level EFL students have a high preference for communicative and cooperative activities, and the popular sentiment that students might resist group work because of their long-standing conventional learning tradition no longer holds.

A caveat may be of relevance here. Educational experts' reactions to innovations that emerge from different parts of the world vary. Sometimes, innovations may be blindly embraced by the enthusiastic practitioners due to their newness. Other times, they are likely to be rejected by the local practitioners simply because of their first impressions. An all-important lesson was that learning is context-dependent. The one-size-fits-all type of instruction does not seem to work; students have various sorts of pedagogical needs. Enthusiastic researchers attempting to meet these needs in educational settings should be attentive to different aspects of the dynamics of the classrooms. Thus, taking an extremist view on instructional methods could do irreparable harm to effective education. We are all conscious of the fact that "There is not any one way to teach reading" (Coady, 1979, p.11). What is hoped for, then, is that academicians come to believe that such instructional approaches as MCSR are available approaches that they can add to their existing repertoire of effective teaching techniques.

In addition, students' strong desire for cooperative learning should not blind us to the fact that this interest may be due to the novelty effects, a notion that often goes unaddressed, particularly in educational studies. Novelty effects in research refer to the likelihood that the effects of instructional techniques can be, to some extent, dependent on their newness and novelty in the settings in which they are employed. Thus, participating students' strong preference can be partly attributable to the issue that MCSR was implemented under conditions in which it was particularly infrequent and novel. Instructional techniques that are novel to students may be more effective. Future replications of such studies with frequent application of MCSR can possibly be informative and enlightening.

The other finding of the qualitative evaluation demonstrated that a few of the students showed minimal responsiveness to MCSR. Such a small degree of responsiveness may also be related to both individual and instructional factors. Possible explanations that we can offer for the lack of students' interest in such instructional programs are that (a) individual differences and personal learning styles were not taken into account before conducting studies and most importantly (b) delivery of the instruction in terms of intensity was not properly addressed. The reluctant students may have had a different response to MCSR if we had delivered the lessons with a higher degree of intensity and duration.

### **Limitations of the Study**

The present study was, in no uncertain terms, limited in view of its research design. Due to the constraints imposed by the research site on this study, we were unable to include a control group. Thus, the use of only one group could have had a weakening effect on the quantitative outcome of the study. Admittedly, another limitation is related to the instructional frequency and duration. It is not unlikely that an instructional technique with proper instructional frequency and duration would have resulted in greater gains. In addition, it is also possible that the researcher-developed reading comprehension test did not have strong psychometric properties for the subjects in this study.

Moreover, a small sample size and the limited number of the questions incorporated in the Opinionnaire may have been unable to provide a comprehensive picture of students' perceptions on MCSR. It should also be noted that since students were requested to complete the Opinionnaires before their final exam, they might have shown unreal positiveness in order to impress their instructor. These limitations should be taken into serious consideration in future MCSR studies. Thus, the results in the current study should be interpreted with caution.

### **Implication for Future Research**

One lesson that we learned from this study is that enthusiastic researchers searching for quick fixes in educational settings would, in the end, feel dismayed by the outcome of their research and, accordingly, could do a disservice to students who are in need of effective (EFL reading) instruction. Therefore, we wish to initiate a call for further research on MCSR effectiveness with appropriate instructional frequency and duration and also with a stronger research design. Inclusion of a control group is the first, vital step that needs to be taken in order to provide a more comprehensive picture of MCSR and its effectiveness.

### **Conclusion**

In closing, the authors hope that this article will be able to initiate a call for action in the pedagogical settings where English is taught as a foreign language. Obviously, future empirical research can provide a rich understanding of MCSR. Only then could MCSR be assuredly viewed as an effective, responsive, educational tool at the tertiary level for EFL learners.

The ever-growing evidence base concerning reading comprehension strategy instruction and cooperative learning seems promising. Overall findings demonstrate that EFL learners can benefit from these two effective reading instructional elements. Undoubtedly, well organized small-group learning combined with research-based reading strategy instruction is a structure that holds great promise. We therefore suggest that reading instruction for university-level EFL students include a bridging strategy that can provide reading strategy instruction combined with much-needed, scaffolded learning.

Moreover, if we intend to extend the notion of cooperation beyond the classroom confines, then teachers, instructors, and lecturers play influential roles in implementing MCSR or MCSR-like practices in classrooms. On a general note, a learning experience should be educative (Short & Burke, 1991). In other words, as it helps build up knowledge generation, it must also increase the possibility that students could seek similar but expanded experiences in the future. With regard to the fact that current instructional approaches in some EFL contexts fall short of being educative (based on Short and Burke's definition), the findings of this study are important in helping EFL academicians modify or adjust their practices in meeting their students' educational needs. Students in this study voiced their preferences; however, what remains to be seen are the new avenues such student voices might open for EFL language pedagogy in general. Hence, to meet students' unique educational needs, constant attempts should be made to insert additional studies of this nature high on the research agenda.

In sum, we envision a great payoff in terms of EFL students' reading comprehension outcomes, provided that we can effect a change in current instructional practices and prompt our colleagues to consider adopting more appropriate evidence-based methods of teaching for the settings in which they teach EFL reading.

## References

- Aarnoutse, C., & Schellings, G. (2003). Learning reading strategies by triggering reading motivation. *Educational Studies*, 29(4), 387-409.
- Alexander, P. A., & Fox, E. (2004). A historical perspective on reading research and practice. In R. B. Ruddel & N. J. Unrau (Eds.), *Theoretical models and processes of reading* (5th ed., pp. 33-68). Newark, DE: International Reading Association.
- Almasi, J. F. 1996. The nature of fourth graders' sociocognitive conflicts in peer-led and teacher-led discussion of literature, *Reading Research Quarterly*, 30, 314-351.
- Baker, L. (2002). Metacognition in comprehension instruction. In C. C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based practices* (pp. 77-95). New York, NY: Guilford Press.
- Barrett, T. C. (1968). What is reading? In T. Clymer (Ed.), *Innovation and change in reading instruction*. 67th Yearbook of the National Society for Study of Education: University Chicago Press.
- Birjandi, P., & Noroozi, I. (2008). The effect of cognitive strategies training on reading comprehension of male and female Iranian students. *Roshd FLT Journal*, 87(22), 35-41.
- Bryant, D. P., Vaughn, S., Linan-Thompson, S., Ugel, N., Hamff, A., & Hougen, M. (2000). Reading outcomes for students with and without learning disabilities in general education middle school content area classes. *Learning Disability Quarterly*, 23(23), 24-38.
- Clarke, M. A., & Silberstein, S. (1979). Toward a realization of psycholinguistic principles in the ESL reading class. In R. Mackay, B. Barkman, & R. Jordan (Eds.), *Reading in a Second Language* (pp. 48-65). Rowley, Mass.: Newbury House.
- Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). Upper Saddle River, NJ: Pearson Education.
- Coady, J. (1979). A psycholinguistic model of the ESL reader. In R. Mackay, B. Barkman, & R. Jordan (Eds.), *Reading in a second language* (pp. 5-12). Rowley, Mass.: Newbury House.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Dreyer, C., & Nel, C. (2003). Teaching reading strategies and reading comprehension within a technology-enhanced learning environment. *System*, 31, 349-365.
- Eskey, E. D. (1986). Theoretical foundations. In F. Dubin, D. E. Eskey, & W. Grabe (Eds.), *Teaching second language reading for academic purposes* (pp. 3-23). Reading, Mass.: Addison-Wesley.
- Eskey, D. E. (2002). Reading and teaching L2 reading. *TESOL Journal*, 11(1), 5-9.

- Faggella-Luby, M. N., & Deshler, D. D. (2008). Reading comprehension in adolescents with LD: What we know; what we need to learn. *Learning Disabilities Research & Practice*, 23(2), 70-78.
- Farhady, H., & Mirhassani, A. (2001). *Reading through interaction*. Tehran: Zabankadeh.
- Felix, U. (2005). E-learning pedagogy in the third millennium: The need for combining social and cognitive constructivist approaches. *ReCALL*, 17(1), 85-100.
- Fosnot, C. T., & Perry, R. S. (2005). Constructivism: A psychological theory of learning. In C. T. Fosnot (Ed.), *Constructivism: Theory, perspectives and practice* (2nd ed., pp. 8-38). New York, NY: Teacher's College Press.
- Fotovatian, S., & Shokrpour, N. (2007). Comparison of the efficiency of reading comprehension strategies on Iranian university students' comprehension. *Journal of College Reading & Learning*, 37(2), 47-63.
- Ghaith, G. M. (2003). Effects of learning together model of cooperative learning on English as a foreign language reading achievement, academic self-esteem, and feelings of school alienation. *Bilingual Research Journal*, 27(3), 451-474.
- Ghaith, G., & Abd El-Malak, M. (2004). Effect of jigsaw II on literal and higher order EFL reading comprehension. *Educational Research and Evaluation*, 10(2), 105-115.
- Grabe, W. (2004). Research on teaching reading. *Annual Review of Applied Linguistics*, 25, 44-49.
- Grabe, W. (2002). Dilemmas for the development of second language reading abilities. In J. C. Richards & W. A. Renandya (Eds.), *Methodology in language teaching: An anthology of current practice* (pp. 276-286). Cambridge: Cambridge University Press.
- Hedegaard, M. (1996). The zone of proximal development as basis for instruction. In H. Daniels (Ed.), *An introduction to Vygotsky* (pp. 171-195). London: Routledge.
- Haghani, M. (2004). Incorporating strategy training into reading instruction. *Language and Literature*, 20(7), 100-134.
- Hudson, T. (2007). *Teaching second language reading*. Oxford: Oxford University Press.
- Jackson, W. (1995). *Methods: Doing social research*. Scarborough, Ontario: Prentice-Hall Canada Inc.
- Kagan, S. (1994). *Cooperative learning*. San Juan Capistrano, CA.: Kagan Cooperative Learning.
- Klingner, J. K., & Vaughn, S. (1996). Reciprocal teaching of reading comprehension strategies for students with learning disabilities who use English as a second language. *Elementary School Journal*, 96, 275-293.
- Klingner, J. K., Vaughn, S., & Schumm, J. S. (1998). Collaborative strategic reading during social studies in heterogeneous fourth-grade classrooms. *Elementary School Journal*, 99, 3-21.
- Koda, K. (2005). *Insights into second language reading: A crosslinguistic approach*. Cambridge: Cambridge University Press.
- Mahdizadeh, A. H. (2006). Assessing the content of textbooks for the junior high school level. *Roshd FLT Journal*, 20(77), 3-10.

- Mathewson, G. C. (1994). Model of attitude influence upon reading and learning to read. In R. B. Ruddell, M. P. Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading* (4th ed.). Newark, DE: International Reading Association.
- Mirhassani, S. A. (2007). The teacher or the textbook. *Roshd FLT Journal*, 82(21), 2-3.
- Lantolf, J. P. (Ed.). (2000). *Sociocultural theory and second language learning*. Oxford: Oxford University Press.
- Nassaji, H. (2003). Higher-level and lower-level text processing skills in advanced ESL reading comprehension. *The Modern Language Journal*, 87(2), 261-276.
- Nuttall, C. (1996). *Teaching reading skills in a foreign language*. Oxford: Macmillan Heinemann.
- Razavi, R. (2008). Cooperative learning in university ESP classes. *Zaban Journal*, 3(2), 13-17.
- Richards, J. C., & Eckstut-Didier, S. (2003). *Strategic reading: Building effective reading skills*. Cambridge: Cambridge University Press.
- Pallant, J. (2005). *SPSS survival manual: A step by step guide to data analysis using SPSS version 12* (2nd ed.). Berkshire, NY: Open University Press.
- Paris, S. G., Wasik, B. A., & Turner, J. C. (1991). The development of strategic readers. In R. Barr, M. L. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. II, pp. 609-640). New York, NY: Longman.
- Short, K., & Burke, C. (1991). *Creating curriculum*. Portsmouth, NH: Heinemann.
- Smith, F. (1978). *Reading*. New York, NY: Cambridge University Press.
- Smith, F. (1982). *Understanding reading*. New York, NY: Holt, Rinehart & Winston.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Tg Nor Rizan, Tg. M. M. (2007). *The effects of cooperative learning on English as a second language (ESL) reading performance of undergraduates*. Unpublished PhD dissertation. Universiti Kebangsaan Malaysia.
- Tok, S. (2008). Effects of cooperative learning method of pairs check technique on reading comprehension. *Elementary Education Online*, 7(3), 748-757.
- Vaughn, S., & Edmonds, M. (2006). Reading comprehension for older readers. *Intervention in School and Clinic*, 41(3), 131-137.
- Vygotsky, L. S. (1962). *Thought and language*. Cambridge, MA: MIT Press.
- Zhang, Z. (1993). *Literature review on reading strategy research*. Paper presented at the Annual Conference of the Mid-South Educational Research Association: New Orleans, LA.
- Zoghi, M. (2002). Building reading skills up at the tertiary level. *Roshd FLT Journal*, 78(69), 27-37.
- Zoghi, M., Hazita A., & Tg Nor Rizan, Tg. M. M. (2006). CSR II: An instructional technique for reading strategies. *The Proceedings of SoLLs. INTEC.07*: Malaysia: Universiti Kebangsaan Malaysia.

## Appendix A

### Sample of Reading Comprehension Test

#### Reading Booklet

**Instruction:** Read ALL the passages and answer ALL the questions in the question booklet.

#### Passage 1:

Do you think about work all the time? Do you work long hours far beyond the requirements of the job? Are you anxious when you're not at work?

If you answered "yes," then you might be a workaholic, a person who is compulsively addicted to work.

How can that be, addicted to work? In truth, you can abuse anything—food, exercise. Work addiction is just one more form of compulsive behavior. It keeps us constantly busy and stops us from looking inside ourselves. "Like other addictions, you are seeking a way of not having to look at or feel things or just to self-medicate to take care of pain, anxiety, or feelings," says Janet Salyer, a professional counselor. "Workaholics put the job before family, friends, and their own health. Even if they are spending time with their families, their mind is on work."

Take note: There is a difference between hard work and compulsive work. Hard work enriches your life even if it includes some periods of long hours and extra work. Compulsive work, on the other hand, prevents you from leading a full life.

But we live in a society that rewards compulsive work, we get applauded keeping long hours and taking on more and more responsibilities. Being called a workaholic is often not taken as an insult.

"Our society in some ways reinforces and rewards workaholism. Sometimes it is subtle, but there is a lot of recognition given to people for being extremely busy. It is almost like equating someone's value with how busy they are," Salyer says.

A client of Salyer's said her co-workers often came in on Monday mornings and talked about how many hours they had worked during the weekend. The people who didn't work on Saturday or Sunday were viewed as less interested in their jobs.

"Some organizations reinforce overwork," she says. "Learn to relax and not neglect your private life."

Adapted from:

Richards, J.C. & Eckstut-Didier, S. (2003). Strategic reading: Building effective reading skills. Cambridge: Cambridge University Press, (p. 22).

**Question Booklet****Passage 1:****Instruction:** *Circle the letter of the correct answer.*

1. Society helps create workaholics by ...
  - a. reinforcing and rewarding workaholism.
  - b. valuing their pain, anxiety, or feelings.
  - c. equating hard work with workaholism.
  - d. putting the job before family and friends. (1 mark)
  
2. What do some people think of workers who don't work long hours?
  - a. They are extremely busy.
  - b. They are less interested.
  - c. Their minds are on work.
  - d. They seek a way of not having to feel things. (1 mark)
  
3. Which **one** of the sentences below summarizes paragraph 4 best?
  - a. Compulsive work prevents us from living a good life.
  - b. Hard work enriches our life.
  - c. Compulsive work includes some periods of long hours.
  - d. Hard work is not the same as compulsive work. (1.5 mark)
  
4. Some people and even organizations ...
  - a. promote workaholism.
  - b. keep us constantly busy.
  - c. consider workaholism as an insult.
  - d. prevent you from leading a full life. (1.5 mark)
  
5. Salyer's client was ...
  - a. unhappy about compulsive work.
  - b. leading a full life.
  - c. reinforcing workaholism.
  - d. interested in her workaholism. (1.5 mark)

**Instruction:** Write T for statements that are True and F for statements that are False in the box provided. Support your answers with a phrase or sentence from the passage.

6. Some workaholics work on Sundays.  (1.5 mark)
7. We should sometimes try to neglect our own life.  (1 mark)
8. Workaholism is often considered as something good.  (1.5 mark)

**Instruction:** Write the complete answers.

9. What are **two** characteristics of a workaholic?  (1 mark)
10. Based on the passage, there are **two** types of work. Write them in the blanks below.
- (a) \_\_\_\_\_ (0.5 mark)
- (b) \_\_\_\_\_ (0.5 mark)
11. Do you think it is worth paying too much attention to one's work? Why or why not? Give **TWO** reasons.
- \_\_\_\_\_
- \_\_\_\_\_ (2.5 mark)
12. In your opinion, what are some things workaholics can do to overcome their problem? Discuss **TWO** things at least.
- \_\_\_\_\_
- \_\_\_\_\_ (2.5 mark)

**Sub-total: 17.5**

## Appendix B

### English Version of the MCSR Opinionnaire

Study Program: \_\_\_\_\_ Date: \_\_\_\_\_

*The purpose of this Opinionnaire is to collect your opinions regarding the MCSR program in which you participated for six weeks. Your comments will certainly have a great effect on the design and future implementation of this program. Therefore, we would like to thank you in advance for your cooperation and would also like to request you to please take your time and answer the following questions.*

Q1. In general, what did you think of the training program (MCSR)?

\_\_\_\_\_

Q2. Was there any part of the training program (MCSR) that you found helpful? Explain.

\_\_\_\_\_

Q3. Was there any part of the training program (MCSR) that you found less helpful? Explain.

\_\_\_\_\_

Q4. Are there any similarities or differences between the MCSR class and your previous English classes? In what way?

\_\_\_\_\_

Q5. Would you like to continue with such programs in the future?

\_\_\_\_\_

## Appendix C

### Tables Summarizing Statistical Results

**Table 1**

*Descriptive Statistics for Dependent-Samples t-test*

Measure	M	N	SD
Pretest	42.17	42	5.86
Posttest	42.80	42	5.80

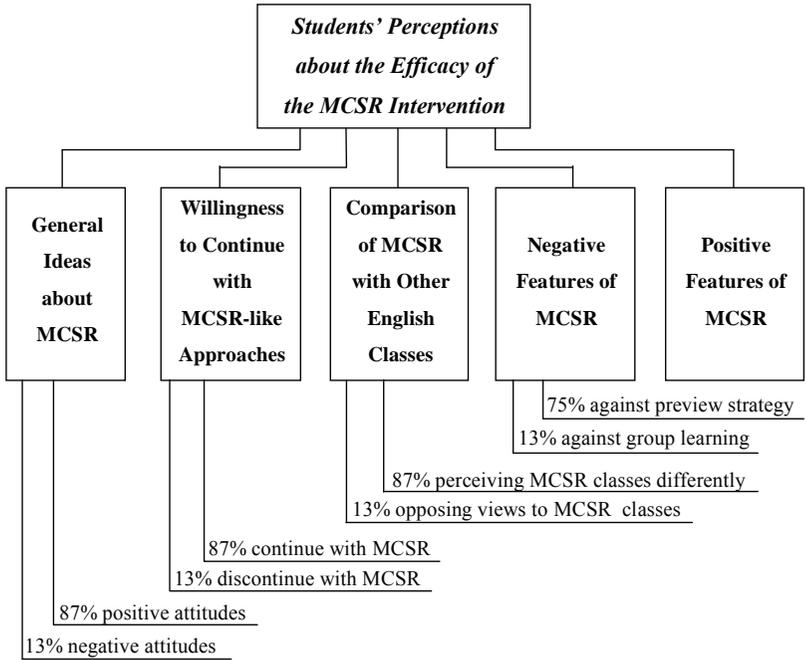
**Table 2**

*Dependent-Samples t-test*

Measure	M	SD	Paired Differences		t	df	p
			Lower	Upper			
Posttest							
Pretest	.63	2.33	-1.35	.09	1.75	4.10	.087

## Appendix D

### Representation of Emergent Themes



**Figure 1.** Graphic representation of emergent themes in the qualitative data

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