

# **Incorporating Collaborative Teaching in Student-Teacher Education**

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## **ABSTRACT**

The aim of this study is to investigate the effect of collaborative teaching on student teachers' education. The design of the study is an experimental design. The participants of the study were 30 senior students in the Applied Linguistics department. They were divided into a control group (15 students) and an experimental group (15 students). Their performance was observed before and after the experimental treatment. An attitude questionnaire was given to the experimental group to measure their attitude towards using collaborative teaching. The results of the study showed that co-teaching was more effective in developing students' teachers professionally. The participants also showed a positive attitude towards collaborative teaching.

*Keywords:* collaborative teaching, student-teacher education

## **1. INTRODUCTION**

Teacher Education Programs face many challenges. The most important one is how to maintain high quality instruction to large classes having heterogeneous students. Teacher Education Programs are still sticking to the usual individualistic pattern that stresses teacher isolation and self-containment.

It became necessary to change this pattern and replace it with the one that focuses on collaboration instead of isolation. Collaboration can have powerful effects on student learning, particularly for low-achieving students. Collaborative teaching is a teaching method by a group of teachers. Collaborative teaching is emerging as an innovative and very effective approach in various disciplines including teaching EFL. It can help both teachers and students in the foreign language classroom. It maximizes students' learning when exposed to the various teaching styles and techniques of the cooperating teachers. It also stimulates students. It helps teachers who work in a team to benefit from each other, cooperate, coordinate and share the responsibilities of planning, implementation and evaluation.

Collaborative teaching helps student-teachers to have a real experience not artificial like that provided by the micro teaching experience. It helps student-teachers in their teaching practice as it "allows students to collaborate in planning in early stages, it lessens initial stress factor for trainees, it allows

trainees to focus on one's pedagogic aspect at a time and aids in promoting understanding of lesson structures". (Boeshaar, 1986:49). Team Teaching is a common term that describes a technique to teach a course with more than one instructor. The method shifts the role of instruction from an individual to a team with the aim of improving the quality of teaching and learning.

Dividing the lesson into stages and more manageable parts allows student-teachers to focus on each part and give it more attention. This also gives them the chance to have less work load and it enriches their teaching practice. Co-teaching allows student-teachers to work together, cooperate in planning lessons and coordinating teaching responsibilities. By exchanging skills and ideas, they develop in areas where they may not be efficient. This develops their academic, professional and social growth. Effective collaborative teaching requires training. Student teachers as prospective teachers of EFL should be familiarized with co-teaching and its benefits to be able to use it in their teaching practice and in their future teaching.

## 2. LITERATURE REVIEW

### *Definition of terms*

#### *Collaborative Team Teaching*

Co-teaching research has identified successful methods of implementing co-teaching within their classrooms (Friend, Cook, Hurley-Chamberlain, &Shamberger, 2010; Kim, Woodruff, Klein, & Vaughn, 2006; Thousand, Villa, & Nevin, 2006). Consequently, co-teaching has been met with considerable support from schools as a successful instructional method incorporating partnerships among general and special educators to meet the needs of special education students (Murawski& Lochner, 2010).

Aydelott and Makhlof, (1999:29) defined co-teaching as "more than one teacher sharing responsibilities of teaching a group of students". All instructors are jointly responsible for course content, presentation and grading (Shafer, 2001:1). Collaborative learning is defined as "a situation in which two or more people learn or attempt to learn something together;" and more specifically as joint problem solving (Dillenbourg, 1999, p. 1). Roschelle and Teasley define collaboration more specifically as "mutual engagement of participants in a coordinated effort to solve a problem together;" (as cited in Dillenbourg et al., 1996, p. 2).

Co-teaching is a developmental process that involves open communication and interaction, mutual admiration, and compromise (Gately & Gately, 2001). In short, co-teaching requires a commitment to the evolution of the collaborative process (Dieker& Barnett, 1996). Co-teaching is defined as two or more teachers working together with groups of students, sharing the planning, organization, delivery,

and assessment of instruction as well as the physical classroom space (Teacher Quality Enhancement Center, 2010; Villa, Thousand, & Nevin, 2008).

Collaborative Team Teaching (CTT) increases educational opportunities for all students. It can reduce the stigma often associated with being identified as having a disability. It creates a stronger system of support for effective instruction among the adults responsible for educating students, (Friend, 2008).

The term co-teaching is used in the present study to refer to the collaboration of three student-teachers in planning and sharing the responsibilities of teaching a given period; each one part or stage of the lesson to intermediate school students.

***Types and models of co-teaching:***

Co-teaching is typically implemented using one of the following six models (Cook & Friend, 2010):

**1. One Teach, One Observe**

In this model, one teacher instructs while the other observes students to identify issues and assess their performance. This method allows the observing teacher to provide feedback on which content and activities are most effective for students, allowing the co-teaching pair to continually improve their practice and best meet the needs of all students in their classroom.

**2. One Teach, One Drift**

This approach is similar to the 'One Teaches, One Observes' model, but while one teacher is instructing the classroom, the second teacher provides additional assistance and support to students as needed.

**3. Station Teaching**

With station teaching, the lesson is divided into segments as the teachers each instruct part of the lesson at independent stations or rotate between groups of students. This allows teachers to provide specialized support when delivering content in areas they may have more expertise in, or if their style better fits a certain part of a lesson.

**4. Parallel Teaching**

In the parallel teaching model, the teachers divide the class into two groups and they instruct each group with the same content simultaneously. In this arrangement, the smaller groups allow closer supervision and more opportunities for interaction between the students and teacher.

#### 5. Alternate Teaching

In this method, one teacher handles a larger group, while the other teaches a small group who need specialized attention and additional supports.

#### 6. Team Teaching

Team teaching requires the strongest partnership, but can be one of the most fulfilling methods of co-teaching. With team teaching, the co-teachers share responsibility and deliver instruction at the same time as a “tag team”.

### *Advantages of Co-teaching*

Many educators who have participated in co-teaching arrangements include the following "positives" as a rationale for incorporating co-teaching into their schools:

- Increased adult attention to students, since co-taught lessons can reduce the teacher-to-student ratio
- Shared expertise among two or more teachers
- Shared responsibility for instruction and management
- Increased opportunity to differentiate for student needs
- Greater social integration among student sub-groups
- Demonstrated improvement in student achievement

Additional advantages are also attained when a CT co-teaches with an ST:

- Enhanced instructional support for children in the classroom.
- Maximized the time the ST spends "teaching" within the clinical setting.
- Energizes classroom teachers through supportive mentoring relationships with their co-teaching STs.
- Heightens CT's awareness of the newest instructional strategies and their impact through ongoing conversations with STs about planning and lesson implementation.

- Offers continuous mentoring opportunities rather than only those during isolated lessons (Cohen and Hoffman, 2014).

Goetz (2000) cites the following advantages: it gives the participating team teacher a supportive environment, allows for development of new teaching approaches, aids in overcoming academic isolation, increases the likelihood of sounder solutions regarding the discipline of problematic students and augments the opportunity for intellectual growth.

Teacher collaboration occurs in situations where teachers work together in a coordinated way to achieve common goals. Hargreaves and Fullan provide a useful continuum of collaboration from, “Scanning and storytelling (exchange of ideas, anecdotes and gossip), to help and assistance, to sharing (of materials and teaching strategies), to joint work where teachers teach, plan or inquire into teaching together” (2012, p. 112). This ‘joint work’ has significant benefit for teachers and students with teaching focusing on work that has the potential to improve student outcomes, well-being and self-regulation.

Co-teaching occurs when two or more teachers share responsibility for a group of students, usually within one workspace, through a shared approach that includes the pooling of resources and joint accountability (Friend & Cook, 2010). One of the two teachers’ is typically a general education teacher with the second teacher a registered special education teacher. Co-teaching can be traced to the early 1960’s when special education students were first ‘included’ in mainstream classes (Friend & Cook, 2010; Walther-Thomas, 1997; Warger&Aldinger, 1986). By the 1990’s emerging research evidenced benefits for special needs students in inclusive classrooms together with teachers reporting professional growth and an improved sense of collegiality (Friend & Cook, 2010; Walther-Thomas, 1997; Villa, Thousand & Nevin, 2013).

In 1999, Lee described a successful collaborative program that paired college faculty with high school teachers. The program had three major goals: (1) to facilitate pedagogical cooperation between college foreign language and literature faculty and local middle school and high school teachers, (2) to improve articulation between secondary and postsecondary foreign language curricula, and (3) to develop the communicative skills of students, particularly speaking and listening, despite increased class sizes. The partners in the program pointed out the value of cooperation in stimulating students and promoting professional growth. In addition, teachers reported benefiting from discussing pedagogical issues with colleagues from other secondary schools as well as with college faculty.

It is believed that collaborative teaching can provide teachers more opportunities to get involved, overcoming teaching difficulties, stimulating the growth of professional knowledge and abilities and

learning from each other. In addition, integrated teaching activities could bring up students' interest, so they could start further discussions on certain topics, to achieve learning goals and to help them create a more pluralistic space. The key factors of collaborative teaching's success are teachers' experiences, personalities, working styles and attitudes toward learning (Garcia-Morales, Lopez-Martin & Llamas-Sanchez, 2006; Perry & Stewart, 2005; Moran, 2007; Trent, Driver, Wood, Parrott & Martin, 2003; Huffman & Kalnin, 2003; Rathgen, 2006)

Lin and Xie (2009) incorporated a collaborative teaching model into a selected "introduction to design" course in order to explore its influences on students' learning effectiveness. The research subjects were selected from a polytechnic university in central Taiwan, and included 59 freshmen from the commercial design department and 57 from the spatial design department. After detailed analysis, the following conclusions have been drawn: (1) none of the pre-test results for any of the units in the professional theory have reached a significant level for students from either department. This means their pre-requisite knowledge for the introduction to design course is homogeneous. (2) The incorporation of a collaborative teaching model can improve students' learning effectiveness. (3) The students from the commercial design department have greater improvement in learning effectiveness than those from the spatial design department. (4) Both the teachers and the students showed a positive attitude towards the incorporation of the collaborative teaching model.

Aliakbari and Nejad (2013) examined how co-teaching may affect the learning process. To do so, a group of 58 first-grade students was assigned to two classes. In one group, learners received grammar instruction from co-teachers, while in the other group grammar instruction was delivered by a single teacher. The findings revealed that the difference in method of grammar instruction did not lead to a significant difference in the participants' performance. This finding implies that the appropriateness of co-teaching in educational systems, at least for teaching grammar in an EFL context, is doubtful, and that co-teaching classes should be used cautiously.

### **3. METHODOLOGY**

#### **3.1 Purpose of the Study**

The present study attempts to investigate the effect of collaborative teaching on enhancing students-teachers' performance in the classroom.

#### **3.2 Significance of the Study**

The study aims at familiarizing EFL student-teachers with collaborative teaching as a new method and helping them use it in their teaching practice as well as future teaching. It helps to maximize EFL

student-teachers' achievement and learning as they are exposed to different perspectives and styles of teaching.

### **3.3 Hypotheses of the Study**

The study attempted to test the following hypotheses:

1. There are no significant differences between mean scores obtained by the subjects of the control group and the experimental group on classroom performance before incorporating collaborative teaching.
2. There are significant differences between mean scores obtained by the subjects of the control group and the experimental group on classroom performance after incorporating collaborative teaching.
3. There are significant differences between mean scores obtained by the subjects of the experimental group on classroom performance before and after incorporating collaborative teaching.

### **3.4 Participants of the Study**

The participants of the study were 30 senior students in the Applied Linguistics department. They were divided into a control group (15 students) and an experimental group (15 students). They were all having their practicum course in the academic year 2013.

### **3.5 Tool of the Study**

An observation sheet was prepared by the researcher to observe student-teachers teaching performance. It contains three sections to measure student-teachers' performance in: Presentation, practice, and production.

### **3.6 Research Design**

The present study used an experimental research design. Participants were divided into two groups, an experimental and a control group. The experimental group used collaborative teaching and the control group used the usual teaching practice.

### **3.7 Procedures for collecting the data**

- a. Observing the teaching performance of both the experimental and the control group before the treatment. Each student-teacher was observed while teaching an entire class. An observation checklist designed by the researcher was used.

- b. Sessions for raising student-teacher's awareness about the use of collaborative teaching as a new method of teaching were given to the experimental group. Models of collaborative teaching and how to incorporate them in teaching were explained.
- c. The experimental group students were divided into five groups of three student-teachers. Each student was assigned a role in a stage of the lesson. Each group was given instructions to exchange the role to make sure that each one has taught three times, each time a different stage of the lesson.
- d. Student-teachers' implementation of the idea of collaborative teaching was checked. As one student-teacher was giving a warm up stage of the new lesson, the other student-teachers were checking students' assignments. In another stage while one student-teacher was presenting the new lesson, another student-teacher was guiding students in their practice, and a third one was giving the concluding summary of the lesson and evaluating their progress.
- e. Post co-teaching sessions were given to reflect on the co-teaching experience.
- f. For the control group, student-teachers used the traditional teaching practice in which each student-teacher was teaching the whole class period individually.
- g. Both the experimental and the control group student-teachers were observed.

## **4. Results and Discussion**

This part deals with data that were discussed and interpreted in relation to the hypotheses of the study.

### **4.1 Results of the Study**

#### **4.1.1 Testing the first hypothesis**

To test the first hypothesis of the research "There is no statistically significant difference between mean scores obtained by the subjects of the control group and the experimental group on classroom performance after incorporating collaborative teaching", the mean scores of the control group and experimental group on their class performance skills before the experiment were calculated and tabulated. A t-test formula for the correlated scores was used to calculate the differences statistically. Results showed no significant differences between the two groups, which proved the first hypothesis as shown in Table (1).



Group	Number of Students	Mean Score	Standard Deviation	T	P
Control	15	17.56	1.31	0.22	Not Sig.
Experimental	15	17.50	1.33		

**Table (1) Means and Standard Deviation of scores of subjects of the control group, experimental group on the observation checklist before treatment**

As shown in table (1), the mean score of the control was 17.56 with a standard deviation of 1.31. Comparing it to the mean score of the experimental group that was 17.50 and standard deviation of 1.33 proves that both groups have similar performance before the treatment.

#### **4.1.2 Testing the second hypothesis**

To test the second hypothesis of the research “There are statistically significant differences between mean scores obtained by the subjects of the control group and the experimental group on classroom performance after incorporating collaborative teaching”, the mean scores of the control group and experimental group on their class performance skills before the experiment were calculated and tabulated. Results showed significant differences between the two groups, which proved the second hypothesis as shown in Table (2).

Group	Number of Students	Mean Score	Standard Deviation	T	P
Control	15	21.50	2.61	6.83	0.01*
Experimental	15	26.30	2.18		

**Table (2) Means and Standard Deviation of scores of subjects of the control group and experimental group on the observation checklist after treatment**

The results shown in table (2) indicate that there are significant differences between the control and the experimental group after incorporating collaborative teaching in favor of the experimental group with mean scores of 26.30 and standard deviation of 2.18. It became clear that there are differences between the control and the experimental groups in favor of the experimental group. The experimental group who incorporated collaborative teaching outperformed the control group who used the traditional teaching practice with one students-

teacher per class. Their performance improved and they mastered the teaching skills due to using collaborative teaching models. This remarkable progress shown by the study subjects after the treatment was due to incorporating collaborative teaching.

#### **4.1.3 Testing the third hypothesis**

To test the third hypothesis” There are statistically significant differences between mean scores obtained by the subjects of the experimental group on classroom performance before and after incorporating collaborative teaching”, the mean scores of the experimental group on their class performance skills before and after the experiment were calculated and tabulated. Results showed significant differences between the pre and post treatment performance, which proved the third hypothesis as shown in Table (3).

Number of Students	Mean Scores		Standard Deviation	t-value	P
15	Pre-Treatment	17.50	1.33	17.35	*
	Post-treatment	26.30	2.18		

\*  $P < 0.01$

**Table (3) Means and Standard Deviation of scores of subjects of the experimental group on the observation checklist before and after treatment**

The results shown in table (3) indicate a statistically significant difference between mean scores of the pre-post treatment of the experimental group favoring the post treatment scores.

#### **4. CONCLUSION**

The results of the present study made it clear that co-teaching method was effective in improving student-teachers' classroom performance skills. Co-teaching experience was beneficial in helping them develop collaborative skills while working with their peers. This would indicate the co-teaching models were helpful in improving their abilities to collaborate in ways that helped improve their teaching practice. With the use of co-teaching, student-teachers became more proficient in their teaching performance than their counterparts who used the conventional teaching methods. The results are consistent with other studies findings especially those of Rosaen (1992) and Lee (1999).

The results of the present study contradict those of Alikbari and Nejad (2013) that showed that co-taught students did not outperform the students who received traditional methods of teaching in the

ELT context. In other words, the co-teaching model did not contribute to better results in the grammatical proficiency than did the single instruction approach. Therefore, it might be argued that the model of co-teaching used is not suitable to be implemented in every educational system in teaching grammar points.

## 5. RECOMMENDATIONS

The following recommendations are presented based on the study findings and conclusions.

- a. Pre-service or in-service training helps teachers to understand how to collaborate or communicate effectively with colleagues or how to develop inter-personal skills.
- b. Teachers should learn how to create learning focused communication and develop the skills to communicate effectively with colleagues to best meet students' needs.
- c. Educational administrators should provide co-teachers with professional development activities that offer instruction related to effective co-planning; co-teaching variation and models; student scheduling; and interpersonal communication.
- d. Co-teachers should be given the chance to select their co-teaching partners. Teachers who co-teach need to have opportunity to develop personal compatibility with their partner teacher.

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