

# Inverted Teaching for Improving the Teaching Performance of EFL Student Teachers at Jubail College of Education

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## Abstract

The objective of the present study was investigating the effect of inverted teaching on EFL student teachers' teaching performance. Fifty-four EFL student teachers studying the Lesson Planning course at Jubail College of Education, Imam Abdulrahman Bin Faisal University participated in the study. They were pretested in teaching performance, then inverted teaching was implemented, finally all participants were posttested in teaching performance. Statistical analysis showed a significant improvement in the teaching performance of the participants ( $t=7.6611$ ,  $p<0.05$ ) between the pre and post measurements in favor of the post measurement. Accordingly, the researchers concluded that inverted teaching is significantly effective in improving the teaching performance of EFL student teachers.

**Keywords:** EFL student teacher, inverted teaching, teaching performance

## 1. Introduction

### *1.1 Problem of the Study*

The type of teaching occurring in the classrooms is very important for achieving the quality of education. This is the reason educators should always work on enhancing their teaching performance. At the College of Education in Jubail, Imam Abdulrahman Bin Faisal University, student teachers go for their Practicum only at their final semester. As a result, they are deprived of opportunities to improve their teaching performance throughout their study. Therefore, they need to practice teaching before going out to schools. An approach is needed where student teachers become active learners who have the ability to shape their professional growth (Clarke & Hollingsworth, 2002). As faculty members at the English Department, the researchers noticed some weaknesses in the teaching performance student teachers used to show during their Practicum. Therefore, the researchers attempted to find an answer to the question: How can EFL student teachers' teaching performance be improved? In recent years, inverted teaching has been extensively used as a new model which has reshaped the long-established lecture mode (Giannakos & Chrisochoides, 2014). Therefore, the researchers decided to investigate the use of inverted teaching as a means to develop EFL student teachers' teaching performance.

### *1.2 Review of Related Literature*

Inverted teaching, sometimes called flipped teaching, is an instructional model where traditional classroom activities (lecturing) take place before class while class time is devoted to discussion, problem solving, and interaction among students (Lage, Platt, & Treglia, 2000). The inverted classroom is an educational technique that includes two components: interactive learning activities inside the class and direct technology-based individual instruction out of the class (Bishop & Verleger, 2013). Through this model, internet resources are provided to assist student preparation for classroom time that is then saved for applying knowledge and hands-on activities (The Queensland Government, 2012). In the inverted teaching model, learners access course material at home (Abeysekera & Dawson, 2015) through videos that explain the information and skills (Boyer, 2013) while the classroom is turned into a workshop for interactive learning (William & Wuensch, 2016).

Inverted teaching shifts the teacher's role away from transmitting knowledge to passive students (Montoya & Hernández, 2016) towards guiding them to the content (Bergmann & Sams, 2012) through active learning activities (Morrison, 2014), providing practical support (Boyer, 2013; Johnson, 2012) in the application of what

learners have learned outside of class (Horn, 2013), and challenging them to think in a creative way (Bergmann & Sams, 2012). In the inverted classroom, the role of teachers is no longer simply to explain knowledge, but to cultivate students' learning initiative (Zhang, 2018).

Inverted teaching also changes students' role from sitting passively and listening to the teacher's lecture (Connor, 2012) to being active learners who gather the information outside of class and apply it to new contexts during class time (Berrett, 2012). Concerning teachers' and students' attitudes towards the use of inverted teaching, Lape, et al. (2014) found that teachers enjoyed the inverted classroom environment, considered it to be lively and interactive, and liked the way it enabled them to interact with students while they built understanding of course material via problem solving. Moreover, Gross and Musselman (2018) found that students favor the learning environment of the inverted classroom.

According to Evseeva and Solozhenko (2015), the integration of inverted teaching into the educational process increases students' motivation and interest for studying foreign languages. In the inverted classroom, students become responsible for learning before class. Therefore, the instructor can spend class time working on applied active learning activities (Davis, 2013). Using the inverted model, in-class activities (e.g., lectures) are viewed by students through instructional videos before attending class, and out-of-class activities (e.g., homework problems) are done inside the classroom (McDaniel & Caverly, 2010). According to Choi (2013), passive learning occurs outside the classroom by watching videos while classroom time is filled with activities of an in-depth conversation and mentoring.

Inverted teaching is attracting attention at various levels of education (Hoffman, 2014) as it can create a good learning environment, making up for the shortcomings of traditional teaching methods and playing an important role to stimulate students' interest in learning (Zhang, 2018). First, it enables the teacher to use classroom time more productively and innovatively (Fulton, 2012) as it frees up class time for active learning activities, rather than passive listening (Milman, 2012). Moreover, it provides more opportunities for the instructor and the learners to interact (Bergmann, Overmayer, & Willie, 2013; Zhang, 2018) through increasing direct contact time (Pape, Sheehan, & Worrell, 2012). Additionally, it creates a learning atmosphere that responds to students' interests (Lemmer, 2013) as learning through video makes lectures under the control of the learners as it gives them the opportunity to view and replay as they wish (Educause Learning Initiative, 2012) and as students can choose which spaces to learn in (e.g., at home, in the cafeteria, etc.) (Montoya & Hernández, 2016). This increases their freedom (Fulton, 2012), autonomy (Driscoll & Petty, 2014), responsibility for learning (Pape et al., 2012), collaboration (Acedo, 2013), motivation, confidence (Lemmer, 2013), and engagement (Millard, 2012). The possibility to invert space and time provides students with experiences different from those they were accustomed to in traditional academic settings (Montoya & Hernández, 2016).

The inverted teaching model includes two components: an online component (online materials received before class) and a face-to-face component (in-class active learning activities) (Sharples et al., 2014). For the online component, the instructor either video record a lecture and upload it to students on the Internet or select relevant videos from websites such as the Khan Academy (Halili & Zainuddin, 2015). Whether recorded or selected from the Internet, these videos should not be lengthy (Bergman & Sams, 2012) and longer videos should be divided into parts with interactive elements (Raths, 2014). Moreover, these video lectures should be collaborative (Bergman & Sams, 2012). This can be done through engaging students in the videos in ways such as holding a discussion about them, asking questions about them, or requiring students to take notes on them. Concerning the face-to-face component, classroom time can be used to discuss questions learners have regarding the content they received online (Rapoport, 2013). Moreover, students can use classroom time to work on activities (Wood, Galloway, Sinclair, & Hardy, 2018) through peer collaboration (Maher, Lipford, & Singh, 2013). Due to the benefits of inverted teaching, the researchers decided to attempt to use it to improve the teaching performance of EFL student teachers at Jubail College of Education. It was hypothesized that there would be a statistically significant difference in the teaching performance of EFL student teachers between the pre and the post measurements in favor of the post measurement.

## **2. Method**

### *2.1 Research Design*

The present study adopted a one-group pre-posttest quasi-experimental design. Participants were pretested in teaching performance before the experiment and posttested after it. Scores of participants on both administrations were statistically compared.

## 2.2 Participants

Fifty-four EFL student teachers studying the Lesson Planning course at Jubail College of Education, Imam Abdulrahman Bin Faisal University during the 2017/2018 academic year (2<sup>nd</sup> term) participated in the study. All participants were female. Students were accustomed to using Blackboard, a learning management system used to manage instructional content and track students' work.

## 2.3 Measure

To measure participants' teaching performance, the researchers designed a 39-item observation sheet. This sheet consisted of three components: planning (7 items), presentation (27 items), and evaluation (5 items). A five-point Likert scale was used in order to weigh each item in the observation sheet (1=never; 2=rarely; 3= sometimes; 4= most of the time; 5= all the time). Validity of the observation sheet was confirmed when it was reviewed by three TEFL experts who made some changes in the wording of four items. Inter-rater reliability of the observation sheet was calculated using Pearson correlation coefficient and it was (0.92).

## 2.4 Procedures

Procedures were executed at Jubail College of Education, Imam Abdulrahman Bin Faisal University, during the 2017/2018 academic year. First, all participants were pretested in teaching performance, then inverted teaching was implemented. Finally, all participants were posttested in teaching performance. The implementation of inverted teaching went through the following steps:

- Based on the learning outcomes and content of the Lesson Planning course, the researchers selected a number of short videos that covered all the knowledge and skills in each lecture.
- Students were oriented to inverted teaching during a 100-minute class session, where they learnt about the concept of inverted teaching, how it is used, teacher's roles, and students' roles.
- Every week, before class, students found the learning resources for the lecture on Blackboard. They had to watch the videos uploaded for the next class in order to be able to participate effectively in class.
- The researchers began each class by asking questions about the information presented in the learning resources offered to students online before class. They also answered questions posed by participants regarding the information in the videos.
- The researchers used active learning activities to engage participants in practicing what they watched in the videos. These activities included KWL charts, one-minute reflections, fishbowls, cumulative brainstorming, discussion mitten, pro-con grids, think alouds, debates, think-pair-share, and case studies.
- After class, participants reflected on the experience in a discussion forum within Blackboard. They discussed questions like "What do you think of inverted teaching?", "What can you suggest to improve this experience?" They were also allowed to search the internet for more information on the discussed topics and also to share some videos related to what they watched.

## 3. Result

In order to evaluate the difference between participants' means of scores on the pre and the post measurements of teaching performance, paired-samples t-test was employed. The t-test revealed that the difference was statistically significant as t-value was 7.6611 at the 0.05 level of significance. See the Table 1 below.

Table 1. Paired-samples t-test of participants' means of scores on the pre and the post measurements of teaching performance

	Paired Differences		t	df	Probability
	Mean	Std. Error Mean			
Posttest-Pretest	31.65	4.131	7.661	53	Significant

## 4. Discussion

The purpose of the present study was to investigate the effect of inverted teaching on EFL student teachers' teaching performance. Employing a paired-samples t-test, statistical analysis showed a significant difference in favor of the post measurement ( $t=7.6611$ ,  $p<0.05$ ). Therefore, it can be said that inverted teaching improves EFL student teachers' teaching performance. This result goes along with the result found by Hussain, Ahmad, Saeed,

and Khan (2015) who studied the effect of the inverted learning approach on prospective teachers' pedagogical skills. They found that the inverted model improved prospective teachers' instructional planning, presentation, classroom management, and assessment skills.

A possible justification for the result of the present study may be that participants watched and shared videos related to preparing, presenting, and evaluating English lessons. This might have allowed them, as student teachers, to imitate or follow the good teaching practices they watched in the videos. Moreover, they could control the pace as well as the number of views of the videos through replaying and pausing which provided them with more opportunities to benefit pedagogically from these videos. This explanation agrees with the results of some studies which found that watching videos of model teachers can improve teaching skills (e.g., Matthews, 2007).

Inverted teaching replaces in-class lectures with active student engagement in experiential learning activities, while the main content is provided through videos offered before class (Foster & Stagl, 2018). Therefore, another possible reason for this result is the effect of active learning activities where student teachers practiced what they watched in the videos during class time. These activities helped to consolidate the knowledge and skills that student teachers received in a theoretical way through the videos. This explanation is congruent with the result of the study of Virtanen, Niemi, and Nevgi (2017) who found that active learning activities enhanced student teachers' professional competencies.

A final explanation for this study's result is the effect of the discussions and reflections student teachers practiced on Blackboard. Through these discussions they could express their views towards different teaching issues. This might have helped them identify and explore different effective teaching practices, which were then reflected in their teaching performance. This explanation is supported by the results of some studies which found that discussion and reflection improve teaching performance (e.g., Kumari, & Naik, 2015; Ufuk, 2017).

## 5. Conclusion

The result reached in the present study led the researchers to conclude that the inverted teaching could significantly improve the teaching performance of EFL student teachers. This teaching model can be adopted in other courses or used by other teachers at Imam Abdulrahman Bin Faisal University.

## 6. Recommendations and Suggestions for Further Research

In light of the result of the present study, the researchers recommend: 1) devoting class time to practical activities, rather than theoretical lectures, 2) using inverted teaching for enhancing the listening comprehension of EFL learners, 3) providing EFL student teachers adequate opportunities to practice teaching before going to practicum, and 4) encouraging them to use videos available on the internet of good teaching practices. Moreover, the researchers suggest conducting research studies investigating: 1) the effect of inverted teaching on EFL student teachers' teaching self-efficacy and 2) EFL student teachers' attitude towards using of inverted teaching.

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