

Chapter 33: The Use of Technology in Teaching ESL in a Blended Classroom Setting Using Differentiated Instruction

Abdulla Mohammed H. Alkawai

Abstract: This paper addressed the main issue that students in Saudi public schools are having; being unmotivated and not engaged which led to unsatisfactory scores in standardized ESL tests in general. This paper addresses the issues related to the curriculum and how it is delivered. It proposes a new implementation of technology in an ESL classroom that lessens teacher intervention, focuses more on the students, and provides a tailored learning experience for each student.

By implementing this new program, the curriculum is going to be modified and better supported with multi-media, online material and newer ways of student-teacher interactions, which will also make room for future updates. The teachers are going to be playing a more facilitator part than that of a lecturer. The students are going to be more motivated and engaged in and out of the classroom, because this is a program that is going to be implemented in a blended classroom setting while using rotations, the flipped classroom, or the flex models. Throughout the program, differentiated instruction is going to be implemented to provide sheltered instruction for the students in the native language and to provide sufficient scaffolding for each individual student.

There is sufficient research validating the effectiveness of implementing technology in an ESL classroom. Moreover, various studies have proven that the students' scores, motivation, engagement and retention levels have improved significantly after the implementation of technology. In addition to that, there is sufficient literature backing the claims of differentiated instruction and how that affects the learning outcomes in general and provides a sheltered environment for low-skill students and proper scaffolding for all students. By implementing digital differentiation, the teacher's role is to provide guidance and support which promotes

Student autonomy in that the students make choices and their choices are valid.

Statement of need

Students in Saudi Arabia go to school for twelve years, just like in the United States. They spend six years in the elementary school, three in the intermediate school, and three in the high school. They start by taking two English classes in the fourth elementary grade level, four classes in the intermediate grade level and five in the high school grade level. The elementary grade level curriculum starts with the basic phonemes along with simple vocabulary and then develops to short reading passages and basic grammar. In the high school level, students should comprehend more complex reading structures. They also should listen to regular everyday conversations, monologues and short lectures. By the third grade in high school, students should have mastery of English grammar that is used for academic writing – which prepares them for college and should be able to speak full sentences or give short presentations.

As a high school English teacher, I always see my students struggling to learn basic linguistic concepts, grammatical rules, or vocabulary. In Saudi Arabia, generally speaking, the English language teaching outcomes are not up to international standards. According to the EPI (English Proficiency Index) report issued by EF (English First) in 2017, Saudi Arabia came in 72 out of 80 countries included in the study. Moreover, in the third edition of The Official Guide to the TOEFL (2009), statistics reveal that the average TOEFL result in Saudi Arabia is 57 out of 120, which is the second lowest in the entire Middle East and among the lowest

average TOEFL scores in the world. In general, students are getting low scores in ESL proficiency and overall learning outcomes are unsatisfactory (Al-Khairi, 2013; Alrabai, 2014; Alrahaili, 2013; Alrashidi

& Phan, 2015; Elyas & Picard, 2010; Rahman & Alhaisoni, 2013; etc.)

Most ESL teachers depend on the grammar translation method to deliver the curriculum.

Elvas and Picard (2010) explain that students can directly translate sentences from L2 to L1 after learning certain grammatical rules and that is the typical Saudi ESL context based on the grammar translation method. Ahmad (2014) and Al-Seghayer (2014) also emphasize that the traditional methods followed by the Saudi teachers are the audio-lingual and grammar-translation methods.

The Saudi government has recently made a lot of changes to the educational system. One of the huge leaps that they have made is developing a facilitating system to implement technology in teaching English as well as other subjects. On the 13th of May in 2018, the minister of education launched a *Digital Transformation Unit* within the Ministry of Education. The role of this unit is to facilitate digital learning and make use of the up-to-date technologies to support the educational process. In the same year, the Ministry of Education also launched a program called FG (Future Gate) which has the role of developing an educational environment that relies heavily on the use of technology (Almukhtar, 2018). In August 2018, the Ministry started by choosing 1500 schools around the Kingdom of Saudi Arabia to implement digital learning in their everyday classes.

With the incorporation of technology in the classroom, students have more opportunities to explore learning which would increase their motivation and engagement levels. What I am proposing goes well with the Ministry's plan for digital transformation. My plan is to suggest working on a comprehensive system that delivers instruction, monitors progress and provides feedback that is necessary for each student's individual progress. The students could be working individually, in small groups, or with the whole class. Feedback is going to be provided by the program so that the teacher knows exactly where each individual student is lacking and in need of teacher intervention. Moreover, this program is going to be implemented in a *blended learning* (BL) setting and delivered through *differentiated instruction* (DI). For a similar intervention, which proved to be effective, see the literature review portion of this paper.

Review of the Literature

There are some teachers who are still skeptical about the use of technology in the classroom (Kist & Pytash, 2015; Laughter, 2015) because they believe that students who are posting on Facebook or Twitter are not really writing. Others are reluctant to incorporate technology in their classrooms, due to time commitments and the fact that they feel embarrassed over their own lack of technological knowledge (Fabry & Higgs, 1997), or simply due to the notion that all students born around the Millennium are adept with digital technology (Pesky,

2001). Hence, the teacher's attitude may affect how he or she uses it as an educational tool (Almekhlafi, 1999). In Syria, for example, teachers are worried that the use of technology might have a negative influence over their culture (Albirini, 2006).

However, it is an undeniable fact that incorporating the use of technology in our instruction has many educational benefits for both learners and teachers (Saglam & Sert, 2012). For instance, information is easily accessible for students, it increases student interest, and

improves student learning. Moreover, it is a crucial part of successful teaching because it is a tool that engages all the students in the classroom (Almekhlafi & Almeqdadi, 2010). Research found that various instructional ideas expressed in the new English Language Arts (ELA) curriculum encourages senior students to engage with all means of technology by sending and receiving texts. Traditional pen and paper examinations could be an alternative to demonstrate learning and understanding. As a potential strategy, students could be assigned a task as individual readers, writers, or learners according to the student's position as a member of an editing team, sound crew, planning cohort, or film workshop. The walls of the classroom are expanded by access to virtual spaces through Internet exploration.

Decision makers around the world are aware of the many benefits of using technology in education. Computers and related internet technologies represent important educational innovation according to the educational leaders and policy makers (Howley & Wood, 2011). As a result, they saw the tremendous positive influence of implementing technology in model schools because they wanted to make these technologies available for less advantaged schools to lessen the achievement gap. Moreover, strong standing digital agendas in formal educational settings are boasted of by many governments around the world (Selwyn & Facer, 2013).

It has almost become the norm that technology goes hand in hand with teaching and learning languages (Singhal, 1997) because of the many ways technology is used to facilitate the learning process in each area of the language (Sharma, 2009). Some researchers might say that it has become a trend around the world (Liu, 2009). Through the integration of technology in our teaching, we, as educators, can implement and modify this valuable tool to focus on teaching the main language skills; listening, speaking, reading, and writing. Therefore, we need to choose the best methods or strategies in which we can enhance the learning experience for each student based on the skill or the subject they are learning.

Differentiated Instruction

We need Differentiated Instruction (DI) to achieve that level of individualized learning.

We need to change the pace, level, or kind of instruction according to the student's needs, learning styles, or interests (Heacox, 2002). We can differentiate in content which means we can provide different content based on each student's skill level or readiness (Gregory, 2007;

Heacox, 2002). In terms of process, we can provide various learning activities and strategies based on the student's interests, cognitive levels or learning styles (Gregory, 2007; Heacox, 2002; Tomlinson, 1999, 2001). Differentiating the product involves having students produce various items based on their preferred learning style, skill level, cognitive ability or interests

(Blaz, 2006; Thousand et al., 2007; Tomlinson, 1999, 2001; Tomlinson & McTighe, 2006).

Vygotsky's research finds that learning as a continuous process – which is more important than the product – should be a collaborative social interaction between the students themselves and their teachers (Riddle and Dabbagh, 1999). Therefore, the researchers state that we should put more emphasis on the process itself and our relationship with the students. Learning

should not only be collaborative but reciprocal as well. We as teachers tend to teach based on what we know and how we function as human beings but we tend to forget or neglect this wealth of knowledge that the students of different cultural backgrounds are bringing to the classroom. In this sea of diversity, teachers should acknowledge and accommodate these differences. (Gable, Hendrickson, Tonelson, and Van Acker, 2000; Guild, 2001). Addressing student differences will enhance their learning experience and will keep them motivated.

(Stronge, 2004; Tomlinson, 2004). Moreover, students will feel that their environment is safe and that their differences or even mistakes are being accommodated and valued which will make them open to learning new concepts and bringing new ideas to the classroom. We have to keep the students' brains engaged constantly in order to call our instruction efficient (Greenleaf, 2003). Research shows that if we achieve that, students will be able to make sense of the newly introduced ideas and concepts. (King-Friedrichs, 2001; Tomlinson and Kalbfleisch, 1998). In order for us as educators to keep the students brain engaged, we need to introduce the new knowledge in a way that triggers it, by relating to the student's intelligence type and by implementing the suitable learning style accordingly.

Digital Differentiation in an ESL Classroom

In an English language classroom, DI would involve what researchers call sheltered instruction. The goal of which is to make content accessible to English language learners (ELLs). The instruction could be delivered in a variety of ways. For Example, some of it might be in the students' native language. Some of it might be delivered through the use of visual / auidial aids. Alternatively, a teacher could simply use simpler language to explain new or complex linguistic concepts.

Tomlinson's (2001) work suggests that there are a variety of ways through which we can tailor the content, the process and the product according to the learner's needs, learning style, readiness and skill level. Other research substantiated Tomlinson's work and added different ways of differentiation for ELLs (Baecher, 2011). The author suggests that content adaptations for ELLs might include shortening texts, using visuals along with texts or providing a simple similar text. She also says the process could be modified by providing support through group work, using mobile dictionary apps, or simply using the student's own notes. Finally, she suggested the adaptation of the product through writing a 5-statement paragraph instead of 10 or using illustrations to demonstrate comprehension instead of writing narratives.

Research states that there are a lot of aids and methods for differentiated instruction by using technology (De Lay, 2010). For example, blogs, YouTube videos, video and image editing applications can all be used as differentiating tools in the content, the process or the product. Other research found that all students could benefit greatly from digital differentiation even in a large classroom (Haelermans et al 2015).

Blended Learning

In any classroom setting, blended learning is the involvement of different activities and technologies designed for a particular group of learners. In other words, it is a way of providing ample support to traditional instruction with electronic media and materials (Bersin, 2004). In an EFL setting, it is a pedagogical approach that combines the effectiveness and

socialization opportunities of the classroom with the technologically enhanced active learning possibilities of online environment (Dziuban et al., 2004).

There are many benefits to the implementation of blended learning in any class.

Research found that an online atmosphere helps to make students more relaxed (ALJarf, 2006). Moreover, the online exposure can be beneficial in enabling strategic use in the process of practicing all language skills. Also, incorporating online activities facilitates the self-directed learning in accordance to the course material (Barenfanger, 2005). It can increase the interest and

the satisfaction of the students as well (Burgon and Williams, 2003). In other studies, satisfaction has been measured through students' feedback with the E-learning model in order to make the suitable changes (Iyer, 2003). They found that the asynchronous approach to blended learning, especially the forums and the e-mails, is preferred by students. Another comparative study found no difference in the students' attitudes towards face-to-face and online lectures during the second half of the course. However, in the post-course survey, they found that the students' attitude changed to positive (Vamosi et al., 2004). This proves that students' satisfaction increased as the course progressed due to becoming familiar with the elearning system. Other researchers found that students are more interested in studying in a blended learning classroom setting (Chen and Jones, 2007). However, in a different study, they also found that the students in the blended classroom setting reported that they preferred direct contact with the teacher, and they were concerned that one or two students of the group had to shoulder the load when their work was done in groups. Finally, Wu and Hiltz (2004) investigated the students' perceptions of using the asynchronous online discussion and found that the students' learning increased due to the online activities.

When it comes to English language learners, research has found that interaction between ELLs and native English speakers is usually very limited (Harklau, 1999). That is why one of the goals of blended learning in an English classroom is to raise the exposure level to English and to provide students with a more immersive experience. To that end, implementing BL in an ESL classroom is crucial to enhancing the students' speaking and listening skills, and will be a solution to some of the issues in teaching English in general, such as teacher-centered learning and difficulties brought up by the students' heterogeneity. However, the main goals are still providing authentic English oral communication – since the very nature and goal of a language is communicative (Hadley, 1993; Richards & Rogers 2003), learner-centered pedagogy and ample scaffolding for ESL learners.

Student-centered pedagogy is essential to the acquisition of English oral skills (Yu & Wang, 2009). In comparison to lecture-based lesson, BL has been proposed as an optimal means for providing learners with an environment where they simultaneously express their ideas, engage in conversation, acquire new knowledge and stimulate thinking (Khan, 1997). E-learning has transformed the nature of English listening and speaking instruction allowing information and student input to be updated, stored, retrieved for later evaluation and shared (Rosenberg, 2001). Higher order thinking needs student-centered learning strategies in order to be developed, because the emphasis is on the skills that simply cannot be acquired via passive learning. For example, several authors have analyzed language classes and found that the use of debates is a successful for fostering skills such as critical thinking (Benesch, 1999; Kovalik & Kovalik, 2007; Shaaban, 2005). Moreover, research found that sharing personal experiences

and opinions as well as perspective-taking discussions are also effective in developing critical thinking through oral communication in an ESL classroom. (Crismore, 2000; Pally, 1997)

In writing, research found that uploading the written assignments online has a positive effect on the achievement level of the students. (O'Toole & Absalom, 2003). They found that students benefitted from reading online feedback and material, and they had better scores in quizzes.

For writing skills to be improved, continuous language exposure is required and that can be provided easily through blended learning. Researchers found that 80% of the learnt material is lost within 24 hours, so by implementing blended learning, students are provided with additional content to support their newly-learnt knowledge. By sharing their writing assignments online, students can learn from one another and make use of their classmates' modes of writing (Graham, C., 2006).

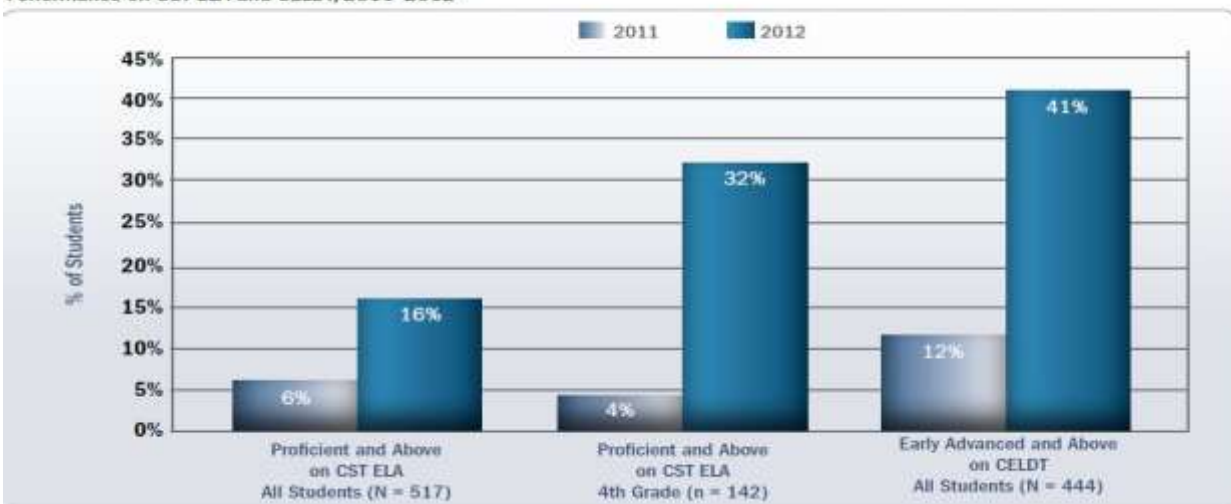
Evidence of the Effectiveness of System 44

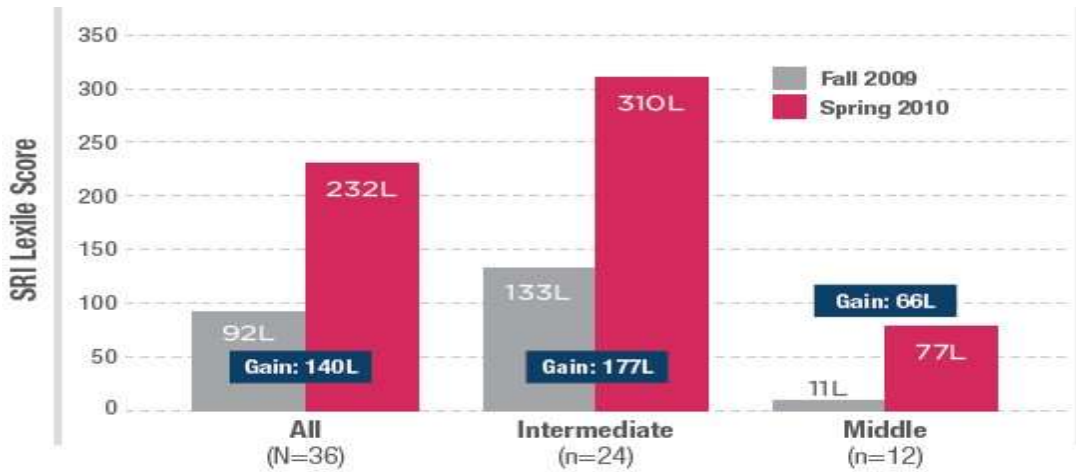
A similar program called *System 44* has been implemented in a number of schools in the United States. This is a highly advanced system that is funded by several school districts across the United States and is created by a private establishment, which is called *Scholastic*. This system, which is used for the sole purpose of improving the students' proficiency in English as a second language, works best in a blended learning setting and differentiates instruction based on the student's skill level and pace. Student scores have shown tremendous improvement.

Moreover, there have been huge gains in their vocabulary. As Graph 1 displays, there has been a

6% increase in the students' scores on the California Standards Test of English Language Arts (CST ELA) in 2011-2012 school year and that includes a leap from 4% to 32% for the districts four graders. In addition to that, the percentage rose from 12% to 41% for *System 44* students in Early Advanced and Above on CELDT in the prior year. Graph 2 displays the gain in the students' Lexile in Scholastic Reading Inventory (SRI) which is 140 for all students, 177 for intermediate students and 66 for middle students.

Graph 1.
Napa Valley Unified School District System 44 Students, Grades 3-11 (N = 517)
Performance on CST ELA and CELDT, 2011-2012





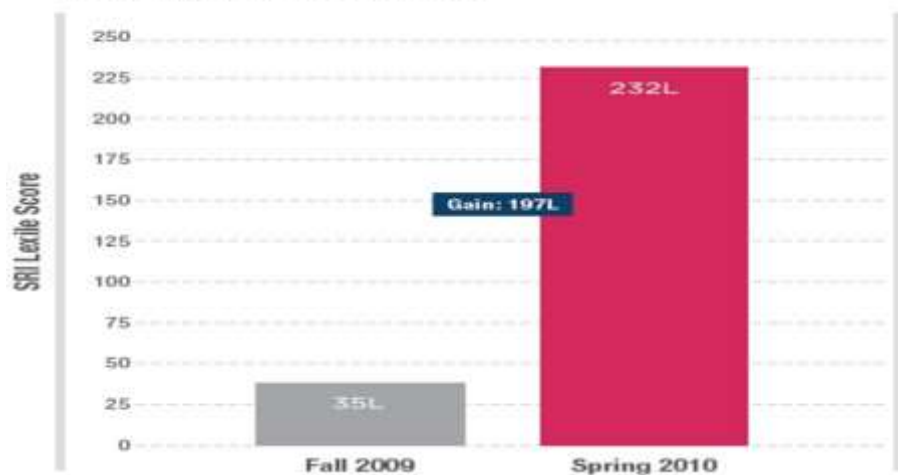
Note. The gain in Lexile was statistically significant for all students ($t=4.94, p=.00$).

Graph 2: Scholastic Reading Inventory (SRI).

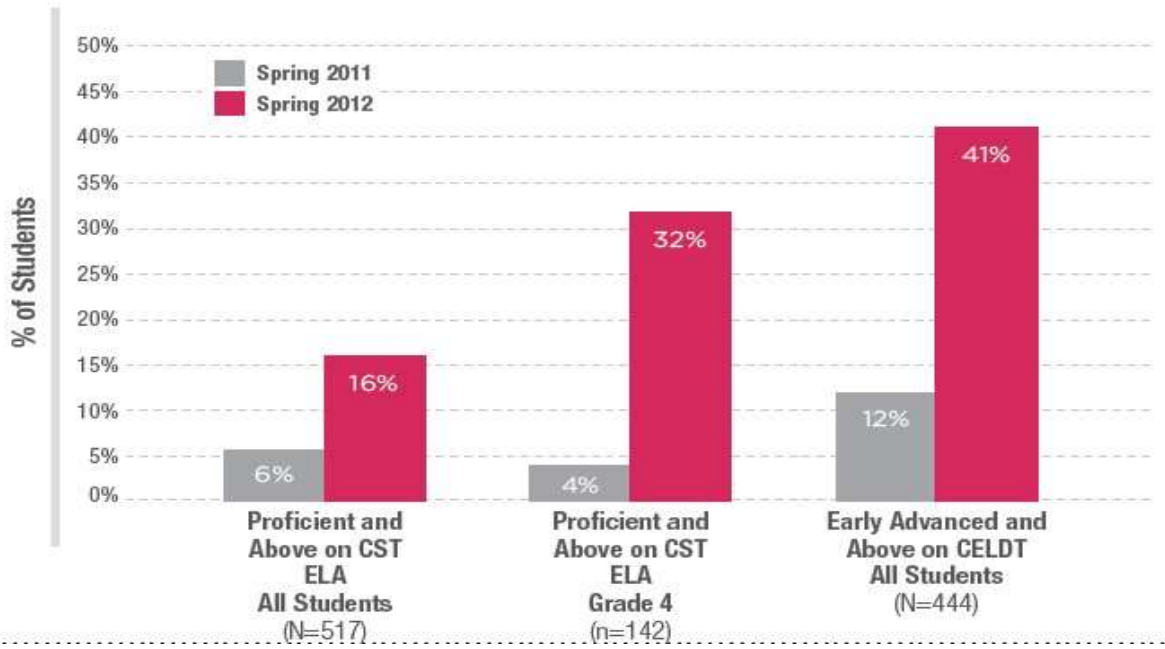
Assessment in System 44

Ever since System 44 has been implemented in the United States, many school districts using the program has seen significant improvements in the students’ English proficiency. There were placement tests, weekly quizzes, and finals. Some standardized tests were used to test the students’ fluency and Lexile gains. Different grade levels in a number of school districts were tested. Graph 3 shows the significant 197 Lexile gain in the students’ scores in 2010. In the California Standards Test of English Language Arts (CST ELA), we can see that the percentage of students scoring proficient and above went from 6% in 2011 to 16% in 2012 and that includes a huge leap from 4% to 32% for the fourth graders. Moreover, in 2012, 41% of System 44 students scored Early Advanced and Above on CELDT, up from 12% in 2011.

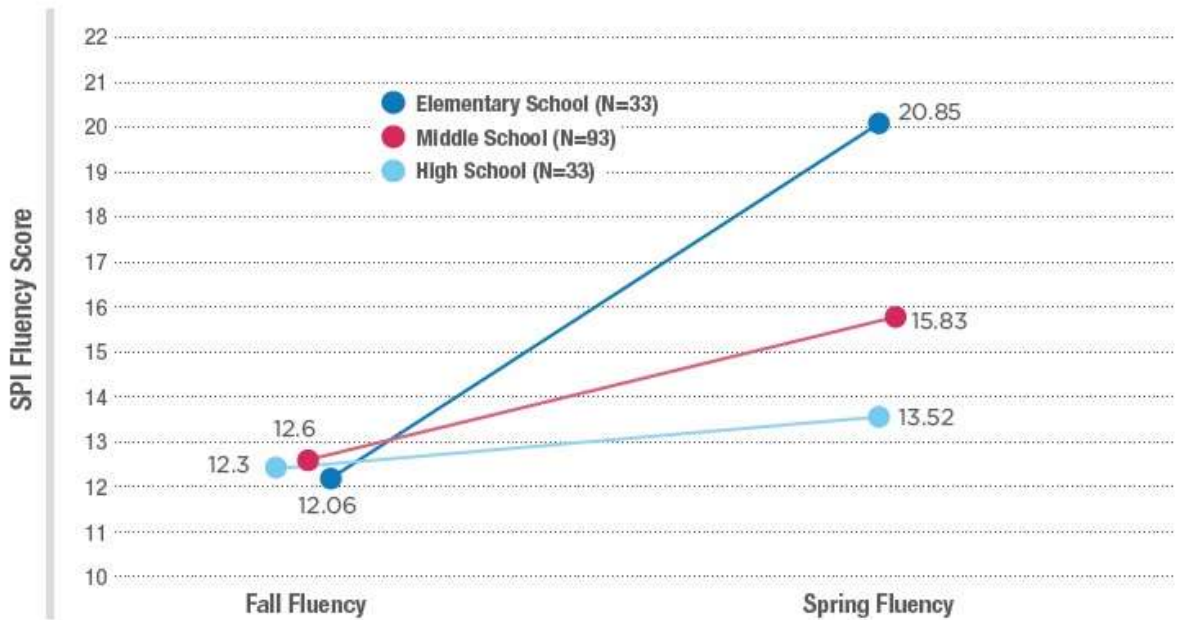
Recovery School District System 44 Students, Grade 4 (N=29) Performance on SRI, 2009–2010



Napa Valley Unified School District System 44 Students, Grades 3–11 (N=517)
Performance on CST ELA and CELDT, 2011–2012



Central Indiana School District System 44 Students, Grades 3–12 (N=159)
SPI Total Fluency Growth by School Level, 2009–2010



Implementation Plan

The goal of this intervention is to improve the students’ English proficiency overall and to expose them to an immersive and engaging language experience. The objectives are to collect and analyze their previous scores in the final exams to determine where and how they are lacking and what skills need more focus from English teachers. To that end, I am going to

collaborate With the district to build a team for analysis and another for implementation and a third for training. The timeline for this plan is three years, and that is counting the first year as grounds for the pilot stage. The pilot stage is going to be implemented in my school district. I will collaborate with colleagues to implement it in the elementary and the intermediate grade levels, and I will be the one carrying out the plan for the high school grade level. During the first six months we will work together to train other teachers in the district.

Program Design

Depending on the resources available at any school, the implementation of the program is going to be slightly different, even though the key idea is the same. This program is going to be available as an Android / IOS app or via a website, which is designed specifically for this program, so that Students could access it via smart phones, tablets or laptops available at school or in their households. The resources available for this program are students' books, teacher's manual, implementation guide and a selection of audio books. The teacher's manual has the answer key as well as the planning sheet for each lesson. The implementation guide contains information about how and when to differentiate, as well as the optimal blended learning classroom setting for each lesson. The different settings and classroom rotations are going to be explained throughout the guide. It is essential that teachers as well as students are given a number of choices for student autonomy is key to the success of this program. The teacher and his or her students are going to decide on the course of action for each class or week as well as what blended learning rotation to implement whether it be flipped classroom, online working station, instructional station or flex model.

This is a twelve-level program. Students are going to start working on the program when they reach the fourth grade and that is in accordance to the Saudi English curriculum. The implementation of this program in a blended learning setting can accommodate large classrooms.

The teacher's role is to facilitate the learning process by guiding students through the different levels of the program and giving them appropriate instruction as they progress.

This program is going to start with the Basic English phonemes; that are the vowels, including diphthongs, as well as consonants. Students are going to listen to the phoneme while they are looking at the character. Then, they will have to record their pronunciation of it. When a student pronounces it correctly, he or she will move on to the next stage. In this stage, they are going to see the phoneme within a word. The program will demonstrate how it is pronounced in each stage while highlighting the new phoneme. Students record their pronunciation into the program and feedback through every stage is going to be provided to the student and the teacher. The teacher should know where each student is lacking and guide him or her accordingly. The next stage is going to be a quiz in which each student should identify the phoneme and / or fill in the blanks with the correct one. At the end of these stages, there is going to be an assessment to see whether a student should move on to the next level or not. The program is going to get more complex as students advance through it and it is going to include more material according to the student's level.

Writing

It is crucial that students have books along with the app so that they learn how to write as well. Although textbooks should be used along with the online program, students should do most of their work digitally. There should be ample room in intermediate and advanced levels for

students to answer comprehension questions or write paragraphs or essays eventually. Therefore, even though one of the program's objectives is to reduce paper work, students should use their textbooks to write in each class. There

Should be ample room in their books to take notes as well, and that is also going to be available digitally. Homework is going to be mostly uploaded through the program except for the writing part, but if a student chooses to do so digitally, they are free to do so. Teachers' instruction or feedback about homework is going to be posted online when a student turns it in.

Reading

Reading material should be available in the students' textbooks and digitally as well. Therefore, the process is differentiated in reading comprehension. New vocabulary is highlighted and explained through an external icon or tab. The process of explaining new vocabulary is also differentiated. A number of choices will be provided. A student might choose to learn a new word through the use of pictures or videos. Another student might choose to read the meaning and the examples. A third choice explaining new vocabulary in Arabic is also given to provide sheltered instruction to low-skill students. Grammatical forms are going to be explained as they are found in the reading text and practice will be provided in the next step.

Oral skills

Oral material should be available as well so that the students can practice their listening and speaking skills. There will be short audio books, conversations or short lectures in advanced levels. Students will have a quiz after each listening part is over. They should practice their speaking skills as well. They will be asked to have a short conversation, answer a question or express their thoughts and ideas about a certain topic, which is crucial to promote critical thinking and problem solving as well. The student's record their voices through the app and the teacher should listen and provide feedback as needed.

Assessment

Assessments are going to be administered through the program, whether they are formative or summative. The program will deliver the scores immediately without the teacher's intervention. Therefore, the teacher's job is to print a hard copy of the scores for future reference. Moreover, since teachers are not going to be scoring the tests, they might be free to make other productive uses of their time.

Depending on the automatic feedback provided by the program, students might have whole class, small groups, or individual plans for the next stage. Hence, differentiated instruction is going to be implemented constantly throughout various stages in the program. The content might be modified to suit the student's personality and preferred learning style. The process and the pace might slightly differ from one student to another according to their skill level and readiness. Students should be given a choice in the products they make to demonstrate their understanding. A student might choose to make a video and another might write a paragraph.

Implementation phases

If this proposal is accepted by the Ministry of Education, I am going to propose a pilot stage in the 4th elementary grade, the 1st intermediate school grade, and the 1st high school grade. That

way, students in all grade levels will learn through the program. If the students' scores see much improvement compared to the traditional way, then the pilot is going to be applied to the next subsequent grade level and so on until all grade levels are covered. This process is going to take three years to be fully implemented throughout all of the grade levels.

My role

Of course, I as a teacher would have to supervise how this is applied in my classroom. I will also be in direct contact with the Ministry of Education through their regional office to provide consultations or support throughout the various stages of the program. I will also elaborate on the benefits of using technology in ESL teaching and use the data from *System 44* as an example of its effectiveness. Moreover, due to the fact that this is my project, I can provide a training outline for teachers implementing this program. The training portion can be conducted through the summer break since this goes along with the Ministry's plan to do summer professional training for teachers. The training for this program, however, is going to be taking four weeks; one week for differentiated instruction, the second week should cover blended learning and how the rotations can work in any classroom, and the other remaining weeks are to understand the layout of the program and how to use it.

System 44 & my proposal

The system which I keep referring to is slightly similar but it is also very different from my project. It is similar in the fact that it relies heavily on differentiated instruction and the fact that there are different kinds of assessments throughout some parts. There is also the fact that students record their voices. System 44's main focus is the phonics. In addition to that, it does expand on the students' vocabulary. In this system, there is a student's book, a teacher's guide and an implementation manual for the differentiated instruction. There are also various short books and they are available digitally as well.

In my project, I am using system 44 as a conceptual base but I am expanding on it in the fact that all of the English language skills are going to be emphasized equally. It might start out similarly, but the layout and the implementation in a Saudi Arabian school is completely different. Another difference is going to be in the emphasis on the students' oral skills. Listening to everyday conversations, short lectures, or other media excerpts is crucial. There is also a speaking portion where students will be able to take part in conversations, class discussions or simply reading aloud, and it is all going to be recorded for assessment and feedback. A third difference will be in the emphasis on the writing skill, both free and guided. Students will start writing simple words at first, but in the advanced levels they will be writing essays. Students are going to be given a choice to hand write or type it and in both cases it should be submitted digitally. The reason for this is that all of the students' work and the teacher's feedback is in one place which could be easily accessible for both.

Pre-implementation Survey

Prior to implementing this new program, a survey will be distributed. This survey is going to be measuring the students', the teachers', the supervisors' attitudes towards my intervention plan, how it is going to be perceived, and how it is going to be implemented.

1. Here are some sample questions for the students:
2. Do you prefer to learn English digitally or from a text book?

3. Do you prefer to do that in the classroom or in a separate language lab?
4. Do prefer to use your mobile phone or the schools' computers?
5. How would you like new vocabulary to be explained? Through videos, pictures, definitions, examples, parts of speech, or synonyms and antonyms?
6. Do you prefer to move around the classroom or stay in a designated seat?
7. Would you prefer the instruction to be delivered in your native language?

Here are sample questions for the teachers:

8. Do you prefer teaching English through an app?
9. Do prefer students to be in different stations?
10. Do you prefer automated tests and quizzes?

Here are some sample questions for supervisors:

11. Do you prefer monitoring students' performance through an app?
12. Do you prefer to oversee some sample lessons online?

Evaluation Plan

Assessment

The aforementioned implementation and analysis teams which were assembled by the Qatif school district will carry out the assessments whether summative or formative each in his school and the data for these various assessments will be gathered later for comparison with the standardized tests. At the beginning of the program, there will be an evaluation to place the students in their appropriate levels. After the program will have been implemented, there will be a formative assessment delivered through the program to see whether the students understood the material or not. If a student does not get the desired score, he / she can retake the quiz. The point of this assessment is to provide sufficient data to see that the scaffolding is implemented properly. These quizzes will be delivered on a weekly basis or at the end of each unit to provide immediate feedback so that both the student and the teacher know what is lacking or which language skill needs more focus. Then, the student can revisit some of the parts that have not been fully understood.

There are different types of assessments that are going to be delivered throughout different stages of the program. Some of them are formative like the ones mentioned previously. Others are summative assessments, which will be conducted in the form of midterms every eight weeks or as finals at the end of each semester. One of the tools of measuring the effectiveness of this intervention is to compare the students' scores enrolled in the program to the ones who are not. The students will be tested in the six areas that the Ministry of Education requires. These are the listening comprehension and the oral communications skill, which are evaluated separately. Then there is the vocabulary, the grammar, the reading comprehension and the writing; both free and guided. After the first major summative assessment is scored, the results are then analyzed to see where the students

are lacking, if they are. Bear in mind that this is an online application, so there will always be room for it to be modified and updated according to today's needs.

Standardized tests

When students who are enrolled in the program are in their last year they are going to be tested in the IELTS, TOEFL, STEP, or other standardized test to see if by implementing this intervention the students' scores in these tests have improved significantly. These tests will provide a clear view regarding the skills each student needs to improve. The scores are going to be analyzed and will be compared to the previous scores in Saudi Arabia in general. Moreover, this comparison will provide solid data to validate the effectiveness of learning through this program. For assessment in *System 44*, refer to the literature review portion of this paper.

Post-Implementation Survey

Naturally, two surveys were going to be carried out; pre- and post-implementation surveys. The goal of the latter is to get feedback on the overall satisfaction of the whole learning experience both for the teachers and the students. Therefore, any issues that come up in the survey can be ironed out for the next phase of the program. The questions are going to be opened, so that the participants have more room to express their views.

Here are some sample questions for the students:

1. How satisfied are you about the experience?
2. What did you enjoy the most?
3. What skill you think has improved after using the program?
4. If you can enhance your experience, what would you add to the program?

Here are some sample questions for the teachers:

1. How satisfied are you about the experience?
2. What was the most enjoyable aspect / part?
3. What skills have improved in general?
4. If you can enhance your experience, what would you add to the program?

Dissemination Plan

Due to the fact that this paper is proposing a large-scale change throughout the Saudi educational system in teaching English a second language, it is going to be shared with the Ministry of Education through its regional office in my hometown. I am going to pitch this idea to the head of the English department and other English supervisors as well. Based on their feedback, I will start working on the project. Certain aspects of this paper – such as digital differentiation and its crucial role in education, and different blended learning settings – are going to be shared with colleagues; mainly English teachers. That is going to be conducted through the regional training centers affiliated with the Ministry. If this proposal is picked by the

Ministry, I will provide the staging grounds for the pilot program. I will also provide consultation during the development phase for I have seen similar programs throughout my immersion in the US school system.

The presentation of this proposal is going to contain information mentioned in the abstract, but it is going to be more detailed in the poster and the handouts. These are, the statement of need, the literature review - including portions about the benefits of technology in ESL teaching, digital differentiation, and blended learning- the implementation as well as the evaluation plans summarized. The aforementioned assembled team will carry out these presentations each in his school or all in the regional training centers as assigned by the school district. The audience for these presentations is going to be both teachers and administrators.

The Author's Biography

The author is Abdulla Mohammed H. Alkawai. He is a Saudi teacher who has majored in English literature and linguistics in college. He graduated with a bachelor's degree in English from King Saud University in Riyadh. He has been teaching in the Saudi public schools since 2002. He has been teaching English as a high school teacher. He was a teacher at Ibn Alqayim High School in the District of Qatif. He has taught different curriculums throughout his teaching career; curriculums ranging from the old ones to the new modern ones – Flying High, Mega Goals and Traveller, - which have been digitized. He has noticed that the more digitized the content, the more enjoyable and engaging it has become for the students. In February 2018, he was selected among a handful of teachers to be a part of the Khebrat program in the United

States in Kansas State University. The objectives of this program are to develop the teachers' English proficiency, to enhance their pedagogical background, to provide new research in the field of education and to immerse them in the US educational system. The objective of these teachers is to take what is applicable, innovative, interesting and relevant to the Saudi school system, and share it with their colleagues in different forums. At the end of this program, the author has done extensive research on the uses of technology in ESL, blended learning and differentiated instruction and how they intertwine to produce the best learning experience for students who are studying English as a second language.

References

- Al-Khairi, M. (2013). English as a foreign language learning demotivational factors as perceived by Saudi undergraduates. *European Scientific Journal*, 9, 365-382.
- Alrabai, F. (2014). A Model of Foreign Language Anxiety in the Saudi EFL Context. *English Language Teaching*, 7(7), 82-101. Retrieved from <https://doi.org/10.5539/elt.v7n7p82>
- Alrahaili, M. (2013). Predictors of L2 attitudes and motivational intensity: A cross-sectional study in the Saudi EFL context (PhD Thesis). The University of Newcastle, Callaghan, Australia.
- Alrashidi, O., & Phan, H. (2015). Education context and English Teaching and learning in the Kingdom of Saudi Arabia: An overview. *English Language Teaching*, 8(25), 33-44. Retrieved from <https://doi.org/10.5539/elt.v8n5p33>
- Elyas, T., & Picard, M. (2010). Saudi Arabian educational history: Impacts on English language teaching. *Education, Business and Society: Contemporary Middle Eastern Issues*, 3(2), 136-145. Retrieved from <https://doi.org/10.1108/17537981011047961>
- Rahman, M., & Alhaisoni, E. (2013). Teaching English in Saudi Arabia: Prospects and challenges. *International*, 4, 112-118.
- Elyas, T., & Picard, M. (2010). Saudi Arabian educational history: Impacts on English language teaching. *Education, Business and Society: Contemporary Middle Eastern Issues*, 3(2),

- 136-145.
- TOEFL®. (2009). *The Official Guide to the TOEFL Test* (3rd ed., pp. 428-436).
- Ahmad, A. M. (2014). Kumaravadivelu's framework as a basis for improving English language teaching in Saudi Arabia: Opportunities and challenges. *English Language Teaching*, 7, 96-110.
- Al-Seghayer, K. (2014). The four most common constraints affecting English teaching in Saudi Arabia. *International Journal of English Linguistics*, 4(3), 17-26. Retrieved from <http://dx.doi.org/10.5539/ijel.v4n5p17>
- Almukhtar, A. (2018). *Future Gate*. Qatif Almarifa, 5, 66.
- Graph1-4: Scholastic Research & Validation. (2014)44-45. Napa Valley Unified School District Research Update. New York: Scholastic Inc.
- Graph 2: Scholastic Research & Validation. (2011)14. Lawrence Public Schools Research Update. New York: Scholastic Inc.
- Graph 3: Scholastic Research & Validation. (2011)31. Three Public School Districts: Students With Learning Disabilities Research Update. New York: Scholastic Inc
- Graph 5: Scholastic Research & Validation. (2011)11. Central Indiana School District Research Update. New York: Scholastic Inc.
- All Graphs retrieved from: <https://www.hmhco.com/programs/system-44/research-results>
- Singhal, M. (1997). The internet and foreign language education: Benefits and challenges. *The Internet TESL Journal*, 3(6). Retrieved from <http://iteslj.org/Articles/SinghalInternet.html>
- Sharma, P. (2009, April 8). Controversies in using technology in language teaching. Retrieved from <http://www.teachingenglish.org.uk/articles/controversies-usingtechnology-language-teaching>
- Selwyn, N., & Facer, K. (2013). The need for a politics of education and technology. In N. Selwyn & K. Facer, (Eds.), *The politics of education and technology. Conflicts, controversies and connections*. Basingstoke, UK: Palgrave Macmillan.
- Kist, W., & Pytash, K. E. (2015). "I love to flip the pages": Preservice teachers and new literacies within a field experience. *English Journal*, 104(3), 131-167.
- Laughter, J. (2015). ELA teacher preparation 2.0: Critical media literacy, action research, and mashups. *Contemporary Issues In Technology and Teacher Education*, 15(3), 265-282. Retrieved from <http://www.citejournal.org/volume-15/issue-3-15/english-languagearts/ela-teacher-preparation-2-0-critical-media-literacy-action-research-and-mashups>
- Fabry, Dee. L., & John R. Higgs. (1997). Barriers to the effective use of technology in education: Current status. *Journal of Educational Computing Research*, 17, 385-395.
- Prensky, M. (2001). Digital natives, digital immigrants part 1. *On the Horizon*, 9(5), 1-6. Retrieved from <http://www.emeraldinsight.com.proxy.kennesaw.edu/journals.htm?issn=1074-8121>
- Hill, J.R., & Hannafin, M.J. (2001). Teaching and learning in digital environments: The resurgence of resource-based learning. *Educational Technology Research and Development*, 49(3), 37-52.
- Saglam, A.L.G., & Sert, S. (2012). Perceptions of in-service teachers regarding technology integrated English language teaching. *Turkish Journal of Qualitative Inquiry*, 3(3), 1-14.
- Almekhlafi, A. G. (1999). The effect of instructional media on learning second language teaching strategies by preservice teachers. Unpublished doctoral dissertation, Arizona State University, Tempe.
- Almekhlafi, A. G., & Almeqdadi, F. A. (2010). Teachers' Perceptions of Technology Integration in the United Arab Emirates School Classrooms. *Educational Technology & Society*, 13(1), 165-175.
- Barrell, B. (1999). Technology and change in Atlantic Canada's new secondary English language arts curriculum. *English Education*, 31(3), 231-247.
- Albirini, A. (2006). Teachers' attitudes toward information and communication technologies: the case of Syrian EFL teachers. *Computers & Education*, 47(4), 373-398.
- Howley, A., Wood, L., & Hough, B. (2011). Rural elementary school teachers' technology integration. *Journal of Research in Rural Education (Online)*, 26(9), 1-13.
- Liu, J. (2009). A Survey of EFL Learners' Attitudes toward Information and Communication Technologies. *English Language Teaching*, 2(4), 101-106.
- Wilkins, D. A. (1972). *Linguistics in language teaching*. London, UK: Edward Arnold.

- Riddle, E. M., and Dabbagh, N. (1999). Lev Vygotsky's Social Development Theory. [Online] <http://chd.gse.gmu.edu/immersion/knowledgebase/theorists/constructivism/vygotsky.htm> [18 August, 2005].
- Gable, R. A., Hendrickson, J. M., Tonelson, S. W., and Van Acker, R. (2000). Changing disciplinary and instructional practices in the middle school to address IDEA. *The Clearing House*, 73(4), 205-208.
- Stronge, J. (2004). Teacher effectiveness and student achievement: What do good teachers do? Paper presented at the American Association of School Administrators Annual Conference and Exposition, San Francisco, California.
- Greenleaf, R. K. (2003). Motion and emotion. *Principal Leadership*, 3(9), 14-19
- King-Friedrichs, J. (2001). Brain friendly techniques for improving memory. *Educational Leadership*, 59(3), 76-79.
- Heacox, D. (2002). *Differentiating instruction in the regular classroom: How to reach and teach all learners, grades 3–12*. Minneapolis, MN: Free Spirit.
- Gregory, G. H. (2007). *Differentiated instructional strategies: One size doesn't fit it all*. Thousand Oaks, CA: Corwin.
- Tomlinson, C. A. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Blaz, D. (2006). *Differentiated instruction: A guide for foreign language teachers*. Larchmont, NY: Eye on Education.
- Tomlinson, C. A., & McTighe, J. (2006). *Integrating differentiated instruction and understanding by design: Connecting content and kids*. Alexandria, VA: Association for Supervision and Curriculum Development.
- De Lay, A. (2010). Technology as a Differentiated Instruction Tool. *The Agricultural Education Magazine* 83(3)-15
- Haelermans, C., Ghysels, J., & Prince, F. (2015). Increasing performance by differentiated teaching? experimental evidence of the student benefits of digital differentiation. *British Journal of Educational Technology*, 46(6), 1161-1174. retrieved from doi:10.1111/bjet.12209.
- Baecher, L. (2011). *Differentiated Instruction for English Language Learners: Strategies for the Secondary English Teacher*. Wisconsin English Journal, 53(2).
- Bersin, J. (2004). *The Blended Learning book. Best practices. Proven methodologies and lessons learnt*. San Francisco: Pfeiffer.
- Dziuban, C. D. Hartman, J. L. & Moskal, P. D. (2004). *Blended Learning*. Education Center for Applied Research. Research Bulletin. 7. Retrieved December 2010 from: <http://www.educause.edu/ir/library/pdf/ERB0407.pdf>
- Al-Jarf, R. S. (2006). *Impact of Blended Learning on EFL college*. Riyadh: Readers. King Saud University.
- Barenfanger, O. (2005). Learning management: A new approach to structuring hybrid learning arrangements. *Electronic Journal of Foreign Language Teaching*. 2 (2),14-35.
- Burgon, H. & Williams, D. D. (2003). Bringing off-campus students on campus: An evaluation of a blended course. *The Quarterly Review of Distance Education*. 4(3). 253-260.
- Iyer, H. (2003). Web-based instructional technology in an information science classroom. *Journal of Education for Library and Information Science*. 44(3). 296–315.
- Vamosi, A. R. Pierce, B. G. & Slotkin, M. H. (2004). Distance learning in an accounting principles course— Student satisfaction and perceptions of efficacy. *Journal of Education for Business*. 79. 360–366.
- Jones, K. T. & Chen, C. C. (2008). Blended Learning in a graduate accounting course: Student satisfaction and course design issues. *The Accounting Educator's Journal*. 18. 15–28.
- Chen, C. C. & Jones, K. T. (2007). Blended Learning vs. traditional classroom settings: Assessing effectiveness and student perceptions in an MBA accounting course. *Journal of Educators Online*. 4(1). 1-15.
- Al-Jarf, R. S. (2006). *Impact of Blended Learning on EFL college*. Riyadh: Readers.

- King Saud University.
- Harklau, L. (1999). The ESL learning environment. In C.J. Faltis & P. Wolfe (Eds.), *So much to say: Adolescents, bilingualism, & ESL in the secondary school* (pp. 42-60). New York: Teachers College Press.
- Hadley, A. O. (1993). *Teaching language in context*. Boston, MA: Heinle & Heinle.
- Richards, J. C., & Rogers, T. S. (2003). *Approaches and methods in language teaching* (2nd ed.). Cambridge, UK: Cambridge University Press.
- Yu, Y., & Wang, B. (2009). A study of language learning strategy use in the context of EFL curriculum and pedagogy reform in China. *Asia Pacific Journal of Education*, 29(4), 457– 468.
- Khan, B. H. (1997). Web-based instruction (WBI): what is it and why is it? In B. H. Khan (Ed.), *Web-based instruction* (pp. 5–18). Englewood Cliffs, NJ: Educational Technology.
- Kim, H. K. (2008). Beyond motivation: ESL/EFL teachers' perceptions of the role of computers. *CALICO Journal*, 25(2), 241–259.
- Benesch, S. (1999). Thinking critically, thinking dialogically. *TESOL Quarterly*, 33(3), 573–580.
- Kovalik, D. L., & Kovalik, L. M. (2007). Language simulations: the blending space for writing and critical thinking. *Simulation and Gaming*, 38(3), 310–322.
- Shaaban, K. (2005). A proposed framework for incorporating moral education into the ESL/EFL classroom. *Language, Culture and Curriculum*, 18(2), 201–217.
- Crismore, A. (2000). Helping ESL and EFL university students read critically: A 2000's challenge In ERIC Document Reproduction Service No. ED450592.
- Pally, M. (1997). Critical thinking in ESL: an argument for sustained content. *Journal of Second Language Writing*, 6(3), 293–311.
- O'Toole, J.M., & Absalom, D.J. (2003) The impact of blended learning on student outcomes: is there room on the horse for two? *Journal of Educational Media*, 2003 28(2-3), 179-190.
- Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk and C. R. Graham (Eds.), *Handbook of Blended Learning: Global Perspectives, Local Designs*. San Francisco, CA: Pfeiffer Publishing.