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Selected Articles on Teaching EFL

ELF

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Evelyn Almeida Garcia

INTRODUCTION

Second language teachers face a number of challenges when teaching a foreign language. Worse yet, when learners do not really have the need of a second language to survive. There are various factors that play a very important role in the success of the acquisition or learning of a second language. For instance, the lack of self-motivation. Lamentably, most students who attend college have to take a language as a requirement. It is the teacher's job to make them aware of the advantages of learning a second language. On this process, many teachers fail to do so due to different circumstances. At the end of a course those students who reached a certain number grade are passed or failed without any significant learning. Another backset is the students' background knowledge. It is well known that the knowledge students possess in their first language can greatly contribute or interfere in the learning of a second language. One of the biggest issues, especially in Latin America is the scarce amount of books people read. This is one of the reasons why students learning a second language have a very limited source of information in their first language. Thus, communication in the target language becomes harder. The role of the teacher is key to the success on this process. No matter how experienced the teachers are they tend to set aside the individuality of learners and end up planning activities which do not necessarily consider students' particular abilities, interests, intelligences, and prior knowledge. It has been proven that one-fits-all belief does not allow teachers to reach all students. On the other hand, when students are given the opportunity to develop activities

based on their individual strengths, they are much more likely to success and gain useful and significant knowledge. One very positive aspect which greatly add to the process of learning a language is technology. In the global world, we live today technology offers such a great variety of ways to bring knowledge to the students so that they experience a more realistic learning. Furthermore, the new generations better known as digital natives process information much faster than students in the past. This has definitely changed the methods and obliges educators to keep themselves technology updated. The issues mentioned above were the basis for the compilation of this book. The first article offers a review of the reading panorama and proposes three novel strategies to pursue a better reading comprehension in both English and Spanish. The second article provides the reader with theory regarding Differentiated Instruction and an example activity. The third one is a theoretical review of curriculum building. In the conclusion, the best model is recommended. Finally, educators interested in better understand how the brain of new generations work will find the answers on the last article.

Effective reading as a means to critical thinking: Alternative strategies for teachers and students` motivation

Soledad Parra

Introduction

“Don’t just teach your kids to read, teach them to question what they read. Teach them to question everything”.
George Carlin.

The purpose of this study is to recommend alternatives aimed to improve the motivation for reading in the EFL students in Ecuadorian high schools, in order to help them develop critical thinking. In Ecuador, people are not used to read in their native language; therefore, using this skill in a second language is challenging. One of the reasons why Ecuadorians do not read is the limited instruction on how to read critically. Students do not have the opportunity to develop high order thinking skills because reading instruction is restricted to simple gap filling, true or false, and matching exercises. Furthermore, at present, the National Curriculum for EFL focuses on the development of basic interpersonal communicative skills (BICS). This fact has prevented teachers and students from developing academic language skills (Ministerio de Educacion del Ecuador, 2012)

The lack of well-equipped libraries is another reason for the little motivation to read (Puente, 2013). According to the researchers’ experience, it can be said that the majority of

libraries at secondary schools have few materials, not professional staff, and few updated services. Moreover, the Internet service, if it exists at school, does not work properly. Likewise, teachers are not always willing to use this technology and other web tools because of their lack of confidence for using them for educational purposes. Additionally, it is important to consider that teachers are not allowed to ask for extra books or any other reading material, besides the textbook provided by the government (Ministerio de Educacion, 2014). This situation hinders the integration of extended activities, which support the reading instruction.

Currently, the Ecuadorian system of education has a complete curriculum for EFL which aligns with the principles stated in the Good Living Plan that aims to improve the quality of public education. For that purpose, specific standards, guidelines, and specifications were generated. These documents recommend the implementation of reading instruction through the communicative approach and the use of cognitive strategies as well as the integration of web sources (Ministerio de Educacion, 2014). However, the researchers' experience argue that students in the classroom have very few opportunities for high order thinking skills development, social interaction and exposure to technology due to lack of teachers' preparation and confidence.

The government plan is to transform education system in Ecuador. This process of transformation embraces the improvement of schools infrastructure and endowment of necessary equipment (SENPLADES., 2013). At this time, the

emblematic institutions are in the process of restoring buildings including libraries. One of the main objectives of the government is to reduce the digital gap; that is why by now 10,000 teachers have already received a lap top. It is expected that by 2015; 145,000 teachers will have received a lap top. Regarding students, the plan is to distribute 200,000 tablets for second and fifth graders (Ministerio de Educacion, 2014)

Considering this panorama, the researchers propose the following alternatives to improve the instruction of reading. First, the effectiveness of three types of strategies: metacognitive, differentiated instruction and biography driven instruction strategies is evidenced. Second, the use of technological devices such as smart phones, Ipads, computers and web tools is proposed as a source of motivation to engage students to reading. Third, the improvement of libraries including materials, services, and staff is recommended to promote and develop the interest and motivation for reading.

Educators and students are benefited with these proposals. Teachers will have the opportunity to expand their instructing spectrum by meeting new methodologies and keeping updated with the digital age technologies. This contributes to their personal and professional growth. Concerning students, the existence of friendly libraries in the schools which offer professional service, books according to the age interest, and access to internet will develop their motivation for reading; consequently, their critical thinking skills will be developed as well.

The present research study is directed to the policy makers from the Ministry of Education in Ecuador and

secondary schools authorities. The restructuration of libraries in the schools is at the ministry level, while the implementation of the proposed strategies and integration of technology concern to the authorities of the schools. What makes this study particularly valuable is that it clearly describes the current difficulties in terms of reading in Ecuador. These difficulties have caused Ecuador to be in the last position of reading rates in Latin America. This fact urged the researchers to propose feasible solutions which should be known by the whole educative community in order to apply them into the school site. Thus, the level of reading literacy in the country will eventually increase for the benefit of critical thinking skills development.

2. Statement of the problem

Ecuadorian high school students who learn English as a foreign language have very limited instruction of critical reading strategies in middle school. They usually feel bored during EFL reading activities; they are not exposed to metacognitive strategies and do not use digital resources. Research shows that Ecuadorian people do not have interest in reading activities in L1. The last census, which took place in 2012, included a set of questions in order to assess the rate of reading in Ecuador. Data obtained revealed that 26, 5% of Ecuadorian people has not developed the reading skills. The National Institute of Statistics and Census (INEC), which is the government body of the national statistics and responsible for producing the official data for decision-making in public policy organ of the Ecuador, was in charge of it. Of those who do not

read, 58% have lack of interest, 31.7% lack of time, 3.1% have problems with concentration and 8.2% other problems (INEC, 2012). The sample was obtained from the big cities of the country, from the regions of the coast and the highlands. The interviews made contain the essential information about the interest in reading, possible causes of disinterest, time devoted to read, gender considerations, age considerations, and specific topics.

The Regional Center for Book Promotion in Latin America and the Caribbean region (CERLALC), in its 2012 report, located Ecuador as a country that does not have figures about reading habits (CERLALC, 2012). This organization is sponsored by UNESCO and seeks to promote the production and circulation of the book, whereas access to books and reading are directly related to development of countries. CERLALC highlights the need to address the fact that a large number of children and adolescents have not learned to read and or write, even though they attended school. Today, Ecuador is still member of this organization; in fact, the president of CERLALC today is the Ministry of Culture of Ecuador, Mr. Francisco Velasco. He is now leading the new call for the region, which is to address without hesitation the enormous challenges of the transition to digital and opportunities that they offer to help close the social gaps in the world of books and reading (CERLALC, 2014).

2.1 Previous EFL projects in Ecuador

Conventionally, the educational system in Ecuador has drawn very little attention to the development of reading skills in students of English Language. The researchers of this paper found that in the classroom do not bring together theory and practice. On one hand, teachers do not set daily routines to increase the habit of reading for pleasure. Since students reject the participation in reading activities, teachers do not find additional motivation for attracting students to books. It seems that veteran teachers were used to follow the same routine from previous experiences and did not look for opportunities to update their methods. The first attempt to improve the English learning pedagogy in Ecuador was fulfilled from 1972 until 2010 and was called Cradle Project.

“El proyecto de inglés Cradle fue el resultado de programas de cooperación entre Gran Bretaña y Ecuador, reducido a la capacidad administrativa y manejo de recursos del Ministerio de Educación y Cultura de los años 70 (De la Bastida, 2013). Este programa fue implementado sin tener una visión real y concreta de las capacidades y responsabilidades como estado y gobierno cooperante (p. 24). Sin adecuado proceso de evaluación y monitoreo (p.29) ” (De la Bastida, 2013) [English Cradle Project was the result of cooperation programs between Britain and Ecuador, reduced administrative capacity and resource management of the Ministry of Education and Culture of the 70s. This program was implemented without any real

visión and concrete of the capabilities and responsibilities as a cooperating state and government (p. 24); without proper monitoring and evaluation process (p. 29)].

After the evaluation of teachers, the government of President Rafael Correa decided to design the first National Curriculum of English Language for Ecuador.

2.2 Curriculum design

National Curriculum Guidelines of English Language in Ecuador proposed that public educational system focuses its instruction in reaching the basic interpersonal of communication skills (BICS), mentioning that learners would be able to use “personal information, their home, and belongings to people”, or emphasizing “simple tasks and routine activities”, without challenging students to learn academic language. At the advance level, the goals to reach were the readings related to work, personal life, and leisure activities” (Ministerio de Educacion del Ecuador, 2012). According to Jim Cummins (1981), Basic interpersonal Communication Skills is the type of language used in social situations (Herrera, 2010); while Cognitive Academic Language Proficiency (CALP), helps students to deal successfully with academic demands from other subjects. Research shows that the development of CALP takes between 5-7 years for a learner who has interaction with native speaker. Cummins (1981) states that learners of a first language (L1) acquire implicit metalinguistic knowledge which can be transferred to a second language (L2), developing both languages at the same time. This cross linguistic transfer is called *common underlying proficiency* (CUP). These skills and

knowledge has not been used during the instruction of English Language in Ecuador.

2.3 Libraries in public schools

According to the experience of researchers, there are not adequate library services in high school. The staff has not been prepared for these positions, the schedule is uncertain, and the materials are not updated. Therefore, teachers do not boost students to visit libraries. According to Luis Puente (2013), Ecuador has 4198 libraries. Most of them, 3274 are located in schools, which corresponds to the 78% of all libraries. This percentage represents to only 11.2% of schools throughout the country. Only 7.05% of public education institutions have libraries. Of this, 80% is outdated collections (Puente, 2013). This author states that “many local government authorities do not consider important the purchase of library materials; as a result of the shortfall, there is a lack of technological equipment, and adequate infrastructure (p. 46). Training to librarians in Ecuador is scarce. The author points out that most of these people who work in these activities in empirical way. This is one of the reasons why libraries are not attractive places for teenagers.

2.4 Prohibition of purchasing reading material

On the other hand, most of the teachers do not practice what they propose; they include very little reading material for pleasure and prefer other ways of enjoying their free time. This behavior models the interest of students. Reading instruction at high school courses in Ecuador is limited to short paragraphs

and simple guidelines proposed by the textbooks at the end of each unit true or false, gap filling or chart filling exercises. Additional materials are not allowed, since the government wants to protect the family budget avoiding expenditure in books. Ecuadorian Government decided to provide free English textbooks to all students who are registered in public and religious-state institutions. The decree 1241, published in the Second Official Register of the Ecuadorian Law Nr. 286, of July 10, 2014 says:

“Art. 12.- **Elección de libros de texto.-** ... Los establecimientos educativos que reciben textos escolares por parte del Estado tienen la obligación de utilizar dichos libros, por lo que no podrán exigir la compra de otros textos para las mismas asignaturas (Armas, 2012).

[Art.12.- **Choosing school textbooks.-** Educational institutions that receive textbooks from the state are required to use these books, so that my not require the purchase of other texts for the same subjects” (Armas, 2012)].

The same policy was applied in the coastal region of the country by sending an official letter from the Vice-Ministry of Education:

“Se prohíbe la venta de folletos, fotocopias, discos compactos o cualquier otro material que fuere promovido por los docentes del establecimiento” (Rodríguez, 2013).

[The sale of brochures, photocopies, CD's or any other material promoted by teachers is prohibited (Rodríguez, 2013)].

According to the Reglamento a la Ley Orgánica de Educación Intercultural (LOEI), [Regulations for the Organic Law of Intercultural Education], the education supports systems providing access to information technology and communications. The same law looks to maintain networks of libraries, archives and information centers, culture and art related to the needs of the education system (Ministerio de Educación, 2014).

2.5 Scarce use of technology

Ecuadorian students are not using technology as a catalyst for improving reading abilities. According to the Ministry of Education (2014), teachers are reluctant to use technological resources, since they are not digital learners.” Con relativa frecuencia, los profesores muestran menor seguridad y una baja percepción de competencia o autoeficacia frente a las TIC en comparación a sus estudiantes (Ministerio de Educacion, 2014). Research conducted by the interactive generation in Ecuador, Ministry of Telecommunications (Mintel) analyzed the percentage of teachers who use technology in the classroom and found that 53% of teachers do not consider technological resources in instruction. (Grupo El Comercio, 2013).

Overlooking reading habits has caused Ecuador to be in the last position for reading in Latin America. According to a study carried out by Centro Regional para el Fomento del Libro en America Latina y el Caribe, Ecuadorians read half a book per

year (CERLALC- UNESCO, 2012). This rate is reflected on the poor performance of EFL teachers' TOEFL scores, and high school senior students who struggle to pass the admission exam for college. In both cases, not only the academic knowledge is tested, but also their ability to infer, compare, contrast, make connections, and solve problems in a short amount of time. Having a complete master of these skills is a useful tool to successfully achieve personal and professional goals such as passing standardized exams like those mentioned above.

3. Current Approaches

3.1 Improvement of education system in Ecuador

Mrs. Gloria Vidal (2012), ex-Ministry of Education, attending the process of reaching an education for excellence, was in charge of evaluating English teachers and designing the first curriculum and guidelines plan for English language subject in Ecuador. Vidal's activities were supported and lit by President Rafael Correa (2012), who wanted to destroy the social deception about teaching English in secondary public schools without well prepared teachers, because English used to be taught in Spanish language only (Ministerio de Educacion, 2012). Results of evaluation in 2009 and 2010 showed that more than 50% of English teachers reached the A2 level (basic users of the language), according to the Common European Framework of Reference (De la Bastida, 2013).

Over the last ten years, teaching English as a foreign language in Ecuador has changed to meet the expectations of the Good Living National Plan, "Efforts must focus on guaranteeing

the right of education under conditions of equality, placing human beings and localities at the center” (SENPLADES, 2013, p. 60). According to Ecuadorian Government, English teachers are committed to improve the quality of public education and look for the excellence and the settlement of the democracy in the classrooms. What goes on inside the schools is greatly influenced by what occurs outside of school (Manning, 2007). Since the present government was elected, Ecuadorian teachers have observed a great improvement of professional conditions. For example, the salaries were raised, the positions were recognized, the schools were repaired and new buildings with necessary equipment were built, and scholarship were offered to those professionals who decided to grow academically; the government rescheduled the work time to 40 hours per week, so that teachers have time to improve their class management, plan their lessons, have currency and advocate for students.

Today, the Ecuadorian system of Ecuador is purposely changing the lives of teachers and learners with the revolutionary movement for education in the good living plan. Its main goal is “to place human beings over capital” (Senplades, 2013, p. 15). In the past, public education has been left aside for many years and it seems that education community used to see damages and deterioration of services as regular activities.

Public spending on education in Ecuador grew 390.8 million in 2012. This figure shows that investment in education reached 2.849,1 million of euros, which accounted for 10.32% of public expenditure. In 1999, public expenditure was 282.7 million euros (Datosmacro, 2014). The Government is now investing 15'812.990, 99 dollars in this enterprise; including

repairmen of floors, masonry, windows, doors, hydro-sanitary system, adaptation of system for voice and data (Internet, telephony, surveillance cameras) (Ministerio de Educacion, 2014). The Ecuadorian English standards are inclusive. Given the fact that Ecuador has a multicultural population, including indigenous, afro-Ecuadorian, and mestizo communities, it meets the principal objective of our government which is the “recognition of equal rights for all the individuals that implies consolidating policies for equality to prevent exclusion and encourage social and political coexistence” (SENPLADES., 2013, p. 54).

They form part of the Quality Standards of Education and were built with the participation of Ecuadorian teachers, stakeholders, students, parents, and other professionals who work in education issues. During this process some meetings and workshops offered a precious opportunity for these people to learn how to elaborate this kind of projects. The text of these standards presents a language addressed to male and female individuals instead of just male sex adjectives, as usually happened in official documents in Spanish Language in the past. These characteristics make this document an example of inclusion of all members of the society.

English Language instruction in Ecuador is optional for primary school students. However, the registers of students who decide to join the public schools make it difficult for English teachers to differentiate the instruction. The Ministry is now working on an obligatory subject for all primary schools in order

to prepare students to communicate with foreign populations at earlier ages and be ready for high school instruction.

3.2 Researchers' experience as observer educators

After teaching for one year in a public school, the authors of this paper have observed that teachers of English language in Ecuador usually do not design a reading plan for the school year. The reading activities are carried out according to the textbook called "English", for levels 1, addressed to 8th. Courses; level 2, addressed to level 9th. Course and level 3, addressed to 10th. Course, 1st. Bachillerato and 2nd. Bachillerato; level 4, addressed to 3rd. course Bachillerato (Ministerio de Educacion, 2014). Every unit of these books contains three reading activities: one text related to the topic, embedded vocabulary, and grammar structure charts. All students read the same information, without considering their second language acquisition stages, silent period, early production, speech emergence, intermediate fluency and advanced fluency (Krashen, 2009). The teacher usually follows the instruction of the book, reading out loud for students and then asks them to complete a worksheet in their workbooks. Sometimes students need to bring that worksheet as homework. In short, most of teachers apply the traditional approach (Ezema, 2014). There is not application of communicative approach.

3.3 Communicative Approach

Teaching a second language by using a communicative approach means that learning takes place when the teacher and students interact and use natural communication strategies. The activities that involve this kind of approach are usually student

centered ones (Herrera, Socorro; Murry., Kevin, 2011). This approach promotes the use of material in real life situations, such as newspapers, magazines, flyers from businesses, exposing students to vary sources, addressing the interest of students, motivating their interest of reading (Ezema, 2014). The origin of communicative approach is not certain. It emerged in contrast to the use of grammar based approaches. It encourages learner to use functional aspect of appropriate social language and real expressions, which are common to the target language and methods to develop the four skills: reading, listening, writing, and speaking (Imawati, 2012). This approach creates associations to making information more memorable, asking for clarification about complex material, or highlighting important ideas. It also uses the strategies of summarizing, synthetizing and evaluation to understand the new vocabulary and pronunciation (Imawati, 2012). In public schools in Ecuador, teachers do not consider the four dimensions of each student, sociocultural, linguistic, cognitive and academic (Herrera, 2010), for elaborating reading plans. On the other hand, students are used to be receptive and passive people who do not want to go beyond the regular knowledge. Therefore, the curriculum for English language is not challenging.

3.4 Review of initial education curriculum 2014

The lack of reading interest is not noticeable at the initial education system. During this time, students are not learning a second language; however, the technical team of the Ecuadorian Ministry of Education has designed a new curriculum in L1, for children who range the age of 0 to 5 years (kindergarten curriculum). These children attend school and require education

and care according to their age, based on the commitment of “teaching-learning conceived as a systematic and deliberate process by which they construct knowledge and promote the development of skills, values and attitudes that strengthen their comprehensive training through positive interactions that facilitate the pedagogical mediation in an environment of stimulating learning” (Educacion, Ministerio de, 2014, p. 14). As part of this process, this curriculum recommends the development of language as a mean of expressing comprehensible thoughts, feelings and emotions, using their native language and the language that their culture and environment speak. The pedagogical recommendations are the promotion of corners of learning, the use of authentic materials, and the motivation to read and have agreeable experiences in reading for pleasure. The Ministry of Education should consider the idea of teaching these children a second language and take advantage of the critical period hypothesis developed by Lenneberg (1967). He states that there is a biological determined period of life when language can be acquired more easily (2 to puberty) due to the brain’s plasticity and neuromuscular mechanisms that helps children master aspects like pronunciation and intonation (Karavasili, 2014).

3.5 National Curriculum Specifications

Secondary schools in Ecuador do not count with the same methodology of initial education in developing reading abilities in L1 and L2. Therefore, the Ministry of Education team, aware of the need to improve every day curriculum proposal for English learners, proceeded to prepare a document called curricular specifications to broaden the goals of language

learning proficiency mentioned in the National Curriculum Guidelines. The strategies and techniques described in this document help teachers and students to cope with academic demands of developing cognitive skills like sustained attention, selective attention, use of short and long-term memory, and auditory processing (Learning Rx, 2014), and critical thinking activities by exposing them to multiple input sources or genres of reading. It demands from learners the effective information processing, control, monitor, and evaluate the process of reading (Pressley, 2000).

The Ecuadorian National Curriculum Specifications looks for the “effective learning and use of English” (Ministerio de Educación, 2014, p. 3) by applying some methodological suggestions “inside and outside the classroom”. These specifications are based on the levels of language proficiency described by the Common European Framework Reference that apply to Ecuadorian students, which are, A1 to A2 for basic users, and “gradually develop the B1 communicative language competence benchmark” (p. 3), for independent users. Proficiency in Level A1.1 provides students the necessary tools to communicate in a basic and simple way, respecting their pace, and recognizing their social background. Proficiency in level A1.2 challenges students to use “transactional, expository, and informational genres” (p. 19), such as letters, flyers, and newspaper articles. (Ministerio de Educacion, 2014).

The reading section of the curriculum specifications takes in consideration the initial reader’s schema and suggests teachers to implement functions, grammar, and vocabulary to reach the Communicative Language Teaching method. These

specific guidelines explain that, at basic level, teachers will use *informational texts*, defined as those readings found in daily communication, such as newspapers, letters, or email messages. Furthermore, it highlights the use of authentic materials, narrative texts, appropriate to the age of students and the use of intensive and extensive reading, like media articles, and “research on cultural information” (p. 12). Among the activities suggested, this document recommends the instruction by using pre-reading, during-reading, and after-reading phases. It suggests teaching vocabulary, appealing topics, and stimulating discussions. However, in the curriculum specifications there are not suggestions for using libraries as primarily sources for improving reading skills.

3.6 Public libraries and integrated technology in Ecuador

According to Puente (2013), public libraries in Ecuador are abandoned; those places in general are locations where problematic people are in charge; the kind of people who are not productive, neither proactive. These places are designated for laggards. However, the libraries at Universities have recovered their lives thanks to the changes of education system in the country. They are considered a basic tool for learning and teaching. This space is conceived as the spot for joining different activities of the community, such as art, theater, and workshops. Places where people meet each other and besides reading, interact, critique, and gain knowledge. Today, there is not public policy on the use of libraries and reading motivation. This should be the effort of every school and community driven from teachers (El Telegrafo, 2013).

Puente (2013) suggests Ecuadorian government needs to implement a national plan for reading; therefore, raising the quality of life and meeting the good living dream. He also mentions that the use of technology in the libraries is scarce or does not exist in high school education. The researchers of this paper are witnesses of this reality. Teachers in Ecuador ask students to use technological devices at home or public Internet cabins, which exist in every neighborhood along the country.

According to data obtained from the Instituto Nacional de Estadísticas y Censos (INEC), only 28.3% of Ecuadorian population has a computer at home and 51.3% of the population, older than 5 years has an active cellphone. However, during the last 12 months, 40.4% of population had access to Internet. (INEC, 2014). The Ministry of Education announced that students of 2nd and 5th grade will receive tablets for each student (Ministerio de Educacion, 2014). The endowment of these devices will become an incentive to promote development of reading and research at high school level. The renewed library in Simón Bolívar high school of Quito is a very good example of the ideal library for many other institutions. According to the principal of this high school, Mrs. María de las Mercedes Loachamín, this library has today 6400 books. She mentions that 3000 students attend this library; 1000 use textbooks and 2000 use the Internet access. Teachers in charge of this place say that students are required to research information and write essays, as well as reflective narratives instead of reading and summarizing information in L1 (El Comercio, 2013).

4. Recommendations section

4.1 Differentiated Instruction

Regarding methodology, three types of strategies have been considered essential to be integrated in the reading instruction: differentiated instruction strategies, metacognitive strategies, and biography driven instruction strategies for the

Differentiating instruction (DI) is an approach which identifies students' different learning styles and talents to accommodate teaching accordingly. This way of teaching is considered to meet the needs of a diverse classroom (Morgan, 2013). By its nature, differentiation implies that the purpose of schools should be to maximize the capabilities of all students taking into account differences on how students learn, learning preferences and individual interests (Anderson, 2007). For some time, the term has been debated in the field of education. Teachers incorporate differentiation in their classes when assigning a different homework, giving more time for a particular activity, or giving choice in what students read. However, classrooms can be more responsive to students' needs by being more systematic in the approach of differentiation. Mastering DI strategies will help teachers start instruction where students are and move forward as far as possible on their educational path. (Levy, 2008)

The fundamental point of differentiated instruction is flexibility in content, process and product according to students' learning styles, needs, interests and strengths (Levy, 2008). Content includes the topics, concepts or themes students are exposed to (Heacox, 2012). Levy (2008) wonders why teachers

would want to limit children who read and write above the grade level to go much further. Process refers to the “how” of teaching. Learning styles and students’ preferences are considered at the moment of instruction. It can be modified by making tasks more complex and challenging, by giving students opportunities to develop critical and creative thinking, or by providing several options for them to choose (Heacox, 2012). Products are the outcomes of instruction. They reflect students’ understanding and externalization processes in the form of a report, brochure, dialogue, debate, or speech. Products are differentiated when teachers offer a variety of options for students to choose according to their individualities. Projects proposed should match students learning styles. They should be oriented to strengthen students’ skills or challenge their weaknesses (Heacox, 2012).

English language learners learn to read in a variety of methods. Considering the theory of multiple intelligences helps teachers meet individual students’ needs. Methods that use graphic organizers, sketches, drawings, timelines, songs, rhythms, realia, rhymes, facial expressions, choral reading, work with cognates, and hands-on activities all can contribute to the process of learning to read. For example, students can draw pictures or cartoons of stories events in sequence to retell the story. Similarly, reading workshops provide students with the opportunity to read a passage, reflect on it, and discuss with their partners. Students are able to write their questions, comments and thoughts and share with a partner (Teele, 2004). Differentiated instruction increases engagement and motivation for a diverse students’ population (Servilio, 2009). “Not only

will the students' motivation for reading improve but so will their grades in reading" (pg. 9).

In order for differentiated instruction effectively to be applied in the classroom, the following become critical:

- A mastery of strategies which offer students choices (choice boards, challenge centers, literature circles) according to students' academic level, interests and abilities.
- A deep knowledge of students' individual interests, skills, and learning styles.
- An assessment reading system which determines the reading level of students
- A deep understanding of the multiple intelligences theory as well as a variety of activities which meet students' different learning styles.

4.1 Metacognitive Strategies

The term metacognition was introduced by Flavell in 1976. It defined metacognition as the process of thinking about one's own cognitive processes and outcomes (Flavell, 1979). Metacognitive strategies indicate how readers perceive an assignment, in which ways they try to make sense of the reading material and what actions they take when the reading material becomes difficult to understand. These are processes that learners use to expand and facilitate their reading comprehension and overcome failure (Singhal, 2001).

Critical thinking occurs in the brain's frontal lobe. It is here where prior experiences are blended with the reading to

construct new knowledge. Critical readers evaluate the validity of the text by asking questions about themselves, the writer and the writing itself. In this process learners make use of higher order thinking skills to make inferences, evaluate evidence, draw conclusions, and defend their points of view. Metacognitive strategies include the following: previewing, contextualizing, questioning to understand and remember, challenges to the students' beliefs and values, evaluating an argument, outlining and summarizing, comparing and contrasting related readings (Sousa, 2005). When students read critically they:

- “Underline key words, phrases, and sentences
- Write comments or questions in the margin
- Number related points in sequence
- Bracket important sections of the text
- Connect ideas with lines or arrows
- Make note of anything important, questionable, or interesting” (pg. 105)

The use of strategies to better comprehend a text is deliberated for strategic readers. To successfully use the most appropriated strategy for a specific purpose, readers have to be able to perform that strategy, recognize in which ways a certain strategy will help them in different situations, and above all be motivated to use it. Strategic readers exhibit three qualities: a) competence or the knowledge of how to do the strategy; b) awareness of how and when to use the strategy in the process of reading; c) self-initiation, the ability to choose the strategy often on pertinent circumstances. (Taboada & Guthrie, 2004).

The implementation of metacognitive strategies must be done by:

- Creating a classroom environment that nurtures inquiry by promoting questioning, making predictions, and supporting students' value judgments.
- Teaching strategies explicitly and have students use them so they find out by themselves what strategies work better for them.
- Prompting questions that promote critical thinking such as: what do I know about this topic? What is the writer's background? What evidence does the writer present to support argument?
- Developing competence, awareness, and self-initiation

4.2 Biography Driven Strategies

Henry Mintzberg, in his book, *The Rise and Fall of Strategic Planning*, defines strategy as a plan, a how, a means of getting from here to there (Mintzberg, 1994). Biography Driven Strategies consider the integration of students' background knowledge with the school curriculum. Students are placed at the center of instruction by getting to know them as individuals and then using that information to design formal instruction. Educators are prompted to understand the four dimensions of the learner's biography. The sociocultural dimension represents the body of knowledge and experience students have gained along their life. Linguistic dimension considers language as a tool to interact with students and let us know what our students are thinking and feeling. The cognitive dimension addresses the

need to give students the opportunity to demonstrate their individual mental processes when making decisions, solving a problem or sharing a story. Finally, the academic dimension incorporates all the formal school instruction students have received (Herrera, 2010). Having a deep understanding of who the students are, from these four perspectives, provides the guidelines to plan instruction.

The first step is to investigate students' biographies, so the instruction can be based on students' assets. The lessons are designed following a three-phase of the teaching and learning process: the activation, connection, and affirmation. In the activation phase, students are required to demonstrate their background knowledge which is encompassed in three systems: funds of knowledge, prior knowledge, and academic knowledge. In other words, students show what knowledge they bring from home, community and school accordingly. In the connection phase, teachers are able to help students construct the knowledge by using students' biographies and the background knowledge that was gathered in the activation phase. In the affirmation phase, teachers assess students' progress by providing feedback, showing students how their prior knowledge served as the foundation for the new learning and making them reflect on how they changed or strengthened their beliefs (Perez, Holmes, Miller, & Fanning, 2012).

Designing lessons that encourage students to contribute to the class is essential to promote students' engagement. Thus, educators have to find effective ways to involve students in the process of learning. Otherwise, there are very little possibilities of getting students engaged. Having them fill out worksheets or

wait to be called for participation has no impact on students' engagement. Conversely, BDI strategies such as foldables for note taking, extension wheels, KWL charts, Picture This, Story bag make comprehension easier and give students the opportunity to take responsibility of their own learning. It is critical to make students put extra effort to learn, understand, and master the knowledge and skills. Similarly, it is important to address students' state of mind. Feelings like anxiety, frustration, and boredom must be addresses before engagement can be promoted (Herrera, 2010). "The teacher has the potential and control to create classroom conditions that will increase student motivation and engagement" (pg. 63).

4.3 BDI and cognition

Traditional methods of second language acquisition like the grammar approach reflect the behaviorist theory which considers learning as the result of a stimulus-response activity. Information processing theories suggest that the mind is constantly processing information and different mental processes are activated when learning a language. However, there are still schools where the non-communicative approach is used. This practice limits students' academic achievement (Herrera, 2010). On the contrary, according to the Sociocultural Theory developed by Vygotsky, social interaction is the basis for language learning. The knowledge is constructed when learners transform the social learning to individual. Vygotsky argues that this learning happens in the learner's zone of proximal development. Students learn through their interaction with more capable peers or under adult guidance (Walqui & Lier, 2010). From the sociocultural theory perspective reading

is a social skill which requires active participation and interaction of the learners involved in it (Remi & Lawrence, 2012).

BDI strategies allow learners to constantly interact with each other. Furthermore, they prepare the field for high cognitive demanding tasks where contextual support is key. This contextualization can be done by using visuals, manipulatives, or objects that help students to make sense of the content. In the same way, activities should vary the degree of cognitive involvement. By varying the complexity of tasks, students' engagement and understanding improve. To vary the cognitive complexity of tasks, teachers consider the Bloom's taxonomy to challenge students to go from recalling information to creating. Equally important is providing students with strategies instruction. Teachers who model and implement cognitive learning strategies create the ideal environment for students to activate their background knowledge, make associations with the new information, and summarize what has been learned (Herrera, 2010).

Biography Driven Instruction offers a variety of engaging and cognitively demanding strategies which align with the process of activation, connection and affirmation. For example, mind maps help students better understand concepts, make sense of their learning and identify what they know and do not know about the content.

By applying BDI strategies teachers are able to:

- Get a clear understanding of who the students are from the four dimensions sociocultural, academic, linguistic

and cognitive. This knowledge will allow them to select reading material according to students' interests and academic level.

- Design lessons which address the process of activation, connection, and affirmation. Following this process allows students to make sense of their reading. The connections they make with the reading material and their lives contribute to produce long life and meaningful learning.
- Create a safe and stress-free classroom ecology for students get actively involved in the learning process.
- Contextualize the reading by activating students' prior knowledge.
- Incorporate well-designed activities which challenge students' brains considering the Bloom's taxonomy.
- Create opportunities for students to interact and learn from their more capable peers

4.4 DI, BDI, and Metacognitive Strategies

For students become proficient and motivated readers, there are three essential conditions to be met. First a complete knowledge of students' backgrounds which include prior academic knowledge, and personal interests. BDI strategies are useful tools for this purpose. Second, having identified student's individual interests, differentiated instruction strategies allow teachers to plan differentiated lessons according to students' different learning styles, interests, and level of readiness. Differentiating the content, process, and product means

permitting students select the book they are interested in reading, giving them challenging tasks and teaching strategies which demand higher order thinking skills, and giving them choices to demonstrate their understanding. Third, students need to be aware of their thinking processes. Teaching them how strategies work allows them to recognize those strategies that better work for them and can apply them in different circumstances. In short, these three types of strategies give teachers and learners the necessary tools to make of reading an enjoyable journey to high levels of thinking.

4.5 Integration of Technology

The rapid technological development of today's world provides a great variety of devices which are great tools for educators to promote literacy learning. Technologies like cell phones, Ipads, internet are used to create classrooms where teachers differentiate instruction, promote multimodal teaching-evaluation and student engagement (King-Sears, Swanson, & Mainzer , 2011). Using technology for instruction moves classrooms from teacher-centered to student-centered. Students develop independence since they have self-control of their own learning as well as they have multiple opportunities for thinking critically and analytically(Pitler, Hubbell, Kuhn, & Malenoski, 2007). The integration of these technologies in class, when applied effectively, has the power to increase not only students' achievement but also motivation to learn, promotes cooperative learning and supports the development of critical thinking and problem solving skills (Schacter & Fagnano, 1999).

Marc Prensky (2001) identifies students as Digital Natives, a generation who grew up with technology. They have been surrounded by a variety of devices like computers, iPhone, cell phones, video games and all the other tools of this digital age. On the contrary, those who were not born in this digital era are called digital immigrants. The problem in education is that some immigrant teachers are still trying to instruct students following step by step methods and lectures. The reality is that new generations simply do not learn this way anymore. Therefore, teachers' attitudes to technology play an important role in the incorporation of technological strategies in the classroom. Teachers who have not been exposed to the use of devices and gadgets tend to exhibit a reluctant attitude towards technology and deny the possibility to incorporate video games, web tools, iPads, or even cell phones to their lessons. One of the reasons might be their lack of confidence in using these devices. More updated teachers might feel confident using technology for personal reasons. However, they demonstrate a total lack of knowledge on how to use it for educational purposes. If teachers have the skill to use technology and know strategies to apply in the classroom, they will be more likely to take technology into the curriculum (Prensky, 2001).

The Internet is the technology for literacy in the 21st century. Most of the world's population will be online in 10 to 15 years (Leo, et al., 2011). Regarding education, the Internet offers a great variety of web sites which support reading literacy. The Ecuadorian National Curriculum states that reading media articles are great teaching resources in the EFL classroom when they are well structured and have a purpose. Websites like

www.weeklyreader.com, <http://classroommagazines.scholastic.com/issues/SN3102212/book>, <http://www.scholastic.com> are part of a long list of web sites which teachers can use to prepare reading material so that their classes are more effective and challenging (Ministerio de Educacion , 2014).

In order for teachers to take full advantage of the multiple options that technology offers it is vital to:

- Organize workshops where teachers with little technological abilities get informed about the great variety of resources available on line and learn how to use them in the classroom.
- Make sure that teachers and students have access to any technological device and be allowed to use it for educational purposes within the classroom.
- Integrate on line and off line reading activities to the lesson plan.

4.6 Libraries improvement

Libraries and librarians play an important role in guaranteeing the success of students by providing them with instruction in using different information sources, enriching experiences, and a supportive atmosphere where students have the possibility to explore the world. It has been identified that a supportive atmosphere is as important as books and videos. Similarly, after school programs run by libraries give adolescents opportunities to develop positive relationships with supportive adults (Bishop & Bauer, 2002).

In the Ecuadorian context, professional development is a need of common agreement among librarians. The majority of the personnel in the libraries are professionals in other fields. Therefore, if universities offered a career specific for librarians as well as permanent training, the staff would be better prepared to offer efficient service. Likewise, one of the biggest concerns of librarians is the urgent need to provide libraries with appropriated infrastructure, high tech equipment; electronic catalogues for librarians and users, and updated books collections according to the age and interests of the population. Furthermore, library projects such as the creation of spaces for children, well -designed plans to foster the development of reading habits which primarily consider youth cultural interests can all contribute to the improvement of reading motivation.

One controversial issue in Ecuadorian libraries is the open shelving mode. The controversy emerges due to the loss of the library materials. Librarians are afraid of being required to pay for the losses. Therefore, they are opposed to this system. This attitude harms the development of libraries in the country. In this situation, the concept of marketing is applicable. The best way to promote and sell a product is by making it available to the client. The idea is that the population has free access to the knowledge and information by its own which guarantees the democratization of the service (Puentes, 2013)

Undoubtedly, modern and efficient libraries can positively impact the reading current conditions in the country. In order to do so, some aspects should be considered:

- Librarians in schools should be expert professionals who offer support and guide students when selecting a book.
- Librarians' role should go beyond handing in books. They should also design after-school programs, have special guests, plan and execute permanent projects (such as reading contests, book talks, or reading corners), and teach students how to find and use information.
- Books should be available for students to easily take them out of the shelves.
- The libraries at the schools should offer a variety of updated reading material according to the grade level, book genres, and adolescents' interests.
- Librarians and students should be able to find information electronically.
- The library should offer attractive and comfortable areas for adolescents to have the desire of visiting and staying.

5. Conclusions

Research has demonstrated that there is a strong correlation between reading and academic success. Good readers have more opportunities to better perform school tasks and pass exams than weak readers (Pretorius, 2001). In Ecuador, reading instruction has received very little attention both in English and in Spanish. Therefore, the majority of the population of all ages do not consider reading as a pleasant and educative experience. Actually, Ecuador was positioned in the last place of reading rates in Latin America by the Regional Center for the promotion of the book in Latin America and

Caribe (CERLALC) in 2012. According to this study, Ecuadorians read half a book per year. This lack of attention to reading instruction has caused students in schools to be exposed to very few opportunities to develop high order thinking skills which allow them to become successful lifelong learners.

At present, the National Curriculum, which started to regulate the English teaching in 2012, provides EFL teachers with clear guidelines and specifications for planning. This curriculum proposes the communicative approach as the basis for instruction and recommends the selection of materials based on students' interests, and the integration of on line resources for reading. However, a mismatch between this theory and the practice in the classroom is observed in most schools. Furthermore, reading receives very little emphasis in the EFL lessons.

There are some limitations that hinder the development of reading skills. The lack of systematic libraries is one of them. Most school libraries do not offer a supportive atmosphere for students to feel the desire to go there. The processes of finding, borrowing, and checking out books are complicated. Moreover, there is not a variety of reading materials which respond to adolescents' interests. The prohibition of requiring students to buy books together with the teachers' reluctance to search for on line reading resources and use them for their lessons is another limitation. On the one hand, the only reading material available is the section that the textbook, provided by the government, offers. On the other hand, the lack of teachers' technological skills prevents them from exploring alternative and more interesting readings on line.

One very positive aspect is the government investment in education. Emblematic schools are being repaired and provided with spaces for libraries with high technology. In the same way, teachers are being given free lap tops and students of second and fifth grade will receive tablets. This process of transformation will contribute to

On the basis of this study, it can be claimed that teachers' preparation on alternative strategies for reading, integration of digital resources, and improvement of libraries will increase the adolescents' motivation to read English language materials. The integration of differentiated instruction, metacognitive and biography driven strategies for reading give teachers the possibility to effectively contribute to the development of reading skills. When teachers take into account students' learning styles, levels of readiness, personal interests to plan different activities accordingly, students have the opportunity to choose from a variety of options. This opportunity increases the levels of students' motivation to read. According to Servilio (2009), differentiated instruction increases motivation and engagement. Similarly, helping students to become independent, critical and lifelong readers implies making them aware of the way they learn by proving them with strategy instruction. "Specifically, developing students' critical thinking skills is facilitated through metacognition" (Magno, 2010) pg. 137. Eventually, students are able to plan, control, and evaluate their own learning. This way, reading becomes much more dynamic and substantial and thus, students understand difficult material better (Sousa, 2005).

Along this study, it has been remarked that the lack of motivation for reading is one of the causes for the students' reluctance to reading. It is argued that incorporating the body of knowledge, experiences, and interests that students bring to school into the curriculum positively impact their level of engagement. Biography Driven Instruction strategies focus on students and their backgrounds to build lessons which activate their prior knowledge, make connections with what is being learned and then affirm their understanding. This practice gives students more opportunities to get engaged in the process of learning. Likewise, BDI strategies demand students use higher order thinking skills. Strategies like the U-C-ME promote the development of the skills of planning, focusing, monitoring and evaluating learning (Herrera 2010). When effectively applied BDI strategies have the power to become students' critical readers and lifelong learners.

In the article *Does computer technology improve students learning and achievement?* Schacter and Fagnano, 1999 claim that integrating technology effectively increases not only students' achievement but also motivation to learn, promotes cooperative learning and supports critical thinking. Considering that students are digital natives who speak the language of technology fluently (Persky, 2001) and that the national curriculum specifications for EFL in Ecuador recommend teachers to enhance their reading instruction with extra activities and material available on line (Ministerio de Educacion, 2012), the incorporation of technology to reading instruction is highly believed to contribute to improve students'

motivation for reading and promote critical thinking development.

Bishop and Bauer, 2002 sustain that libraries and librarians' main role is to help students become effective users of information in a supportive atmosphere which provides enriching experiences. For this role to be accomplished, it is necessary that libraries in Ecuadorian public high schools offer attractive areas for students as well as a variety of reading material according to adolescents' interests. Equally important is to facilitate the process of borrowing books. Students should have access to the books on the shelves (Puente, 2013). Moreover, librarians should be expert professionals who have the ability to create programs that encourage reading such as comfortable areas for young readers, a large collection of books and magazines which interests teenagers; organization of book talks, storytelling, and book discussions; and community projects (Bishop and Bauer, 2002). Libraries that meet these requirements can contribute to the improvement of reading motivation (Puente, 2013).

Considering that the scientific and technological development of a society depends much on the level of education of the population; educators, authorities, and administrators should take immediate action in positioning reading as an essential element within the instruction. Efficient readers develop skills such as analyzing, comparing, solving problems, making inferences, finding and evaluating information; and reflecting critically (Sousa, 2005). These abilities guarantee students' academic success. They have more opportunities to pass exams and pursue the career of their choice

(Pretorius, 2001). Good readers are well-informed and knowledgeable people who are able to come up with creative solutions for any type of problem.

According to the researchers' experience traditional methods and even worse the lack of instruction on reading have produced limited minds unable to survive in a society where the rapid advance of technology has made the information available. Regretfully, schools which still keep the old-school practices have prevented students from benefiting from all the information out there and have not given them the tools to actively participate and collaborate in the world of science and research. Therefore, inspiring students to read is critical for them to become active researchers; and independent and lifelong learners who contribute to the scientific and technological development of the country which is one of the objectives of the Good Living National Plan of the current government (SENPLADES., 2013)

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Differentiated Instruction for Diverse Learners in EFL Ecuadorian Classrooms

Wilson Chiluiza Vásquez

Defining Differentiated Instruction

Differentiating instruction is a method of identifying differences and teaching according to different students' talents and learning styles. This way of teaching is expected to meet the needs of a diverse classroom (Morgan, 2013). Differentiated instruction intends to permit every student has access to the same classroom curriculum by providing learning tasks and objectives that fit all students' learning needs. It is not a single strategy but an approach to instruction that incorporates a variety of strategies which focus on meeting unique individual needs (Susan Watts, 2012). By its nature, differentiation implies that the purpose of schools should be to maximize the capabilities of all students considering differences on how students learn, learning preferences and individual interests (Anderson, 2007). For some time, the term has been debated in the field of education. Teachers incorporate differentiation in their classes when assigning a different homework, giving more time for a particular activity, or giving choice in what students read. However, classrooms can be more responsive to students' needs by being more systematic in the approach of differentiation. Mastering DI strategies will help teachers start instruction where

students are and move forward as far as possible on their educational path. (Levy, 2008).

Theory

The concept of differentiated instruction is grounded in the fact that there is great variance among students, and therefore teachers should expect student diversity and accommodate their instruction accordingly (Tomlinson, 1999). From Vygotsky's theory it is well known that individuals learn in a better way when they interact in an environment which provides a challenge. This environment is called *zone of proximal development*. Thus, learning should be adjusted to each individual learning zone (Brimijoin, 2003). Furthermore, based on Vygotsky's concepts, it is believed that learning truly happens when teachers design lessons that challenge students' abilities. Teachers or more capable peers offer support to develop understanding while students interact with each other. This peer collaboration goes beyond simple assistance. In order for learning to happen, students work collaboratively to find out their zone of proximal development, so they can have appropriate support (Walqui & Lier, 2012).

Why Differentiated Instruction

There is evidence that differentiated instruction can be an effective instrument for schools and educators to address students' social-emotional learning. The personal situation of each individual student is considered (Martin, 2013). Research has demonstrated that programs where teachers practice social and emotional differentiation in instruction have a very positive effect on both academic and social areas (Bondy, Ross,

Galliangane, & Hambacher, 2007). Teachers can have a very positive impact on students' performance when they create an environment where children appreciate social behaviors modeled by peers and adults and the needs and preferences of each student is emphasized (Kidron & Fleishman, 2006). Additionally, differentiated instruction helps students to meet standards that instruction pursues. If all students, no matter their individual learning style or academic level, are required to meet the same standards, then teachers must use different approaches for different students (McTighe & Brown, 2005)

Content, Process and Product

The fundamental point of differentiated instruction is flexibility in content, process and product according to students' learning styles, needs, interests and strengths (Levy, 2008).

Content includes the topics, concepts or themes students are exposed to. It is determined by districts and it responds to national standards (Heacox, 2012). Levy (2008) wonders why teachers would want to limit children who read and write above the grade level to go much further. Similarly, students who are below the grade level would be more successful with content appropriated for the learner's level. "Differentiated instruction allows for variation in content without losing sight of the curriculum to which all children are entitled." (p.62).

Process refers to the "how" of teaching. Learning styles and students' preferences are considered at the moment of instruction. It can be modified by making tasks more complex and challenging, by giving students opportunities to develop critical and creative thinking, or by providing several strategies

for them to learn (Heacox, 2012). The activities provided must address different students' skills, learning styles, and interests. The teaching style should reflect the needs of students. Teachers must find out the academic level of students before starting instruction and build on the prior knowledge to develop learning. It is essential to determine the level of support students will require through formative assessment (Levy, 2008).

Products are the outcomes of instruction. They reflect students' understanding in the form of a report, brochure, dialogue, debate, or speech. Products are differentiated when teachers offer a variety of options for students to choose according to their individualities. Projects proposed should match students learning styles. They should be oriented to strengthen students' skills or challenge their weaknesses (Heacox, 2012).

Multiple Intelligences

Howard Gardner's theory of multiple intelligences is the basis for Differentiated Instruction. According to this theory, students learn through various intelligences. Gardner identified the logical /mathematical, verbal/ linguistic, musical, visual/spatial, bodily/kinesthetic, interpersonal, and intrapersonal intelligence (Gardner, 1983). Students learn in different ways through different intelligences. Therefore, teachers may want to use a variety of intelligences at the moment of teaching rather than just one or two (Silver, Strong, & Perini, 2000). Learners can be classified into three main categories: visual learners, auditory learners, and kinesthetic learners. Visual learners have a better understanding by observing written

language, posters, charts, videos and other visual demonstrations. They remember better when they see written information. Auditory learners prefer instruction through oral communication. They enjoy participating in discussions and debates. Kinesthetic learners are benefited from hands-on activities and enjoy being engaged in role plays or any movement activity (Pham, 2012).

Grouping according to Ability Levels, Learning Styles and Interests

Teachers who use the differentiated instruction model know that grouping should be made based on specific criteria concerning students' ability, interests, learning styles, and needs. After the lesson is taught the teacher, realizes that a group of students need further instruction. This group of students is pulled out for additional support. On the other hand, the group of students who already knew what was taught are given more challenging work. This classification responds to students' needs.

Grouping according learning styles is related to the theory of multiple intelligences. Different students learn in different ways. Some pay attention to what the teacher says, others pay attention to what the teacher does. Some students do not learn anything until they can do something concrete. When teachers get to know their students' individual learning style it is more likely that they are able to group students according their objectives. At times, all visual learners might be grouped to achieve a common goal. Other times one of each style should be in a group for them to learn from each other. Students'

interests also play an important role when grouping. For example: when teaching reading, students who are interested in animals can work together while those who are not interested in animals might choose a different topic that is of interest to them (Levy, 2008).

Tiered Activities

Tomlinson (1999) described tiered lessons as a differentiation strategy that addresses a standard curriculum but create various ways for students to reach understanding of the content based on their interests, readiness, or learning profiles. A class tiered by readiness level requires that the teacher is well-informed about students' ability levels regarding the lesson and has planned the tiers to meet those needs. Many lessons tiered in readiness have three tiers: below grade level, at grade level, and above grade level. However, this is not the rule. The number of levels will depend on the range of ability levels of a particular classroom.

Tiered activities encourage accomplishment because the students decide at what level of achievement they want to aim. Teachers develop tiered activities based on the main curricular concept that must be learned by the students. After the content is identified, then the teacher proposes tasks of varied complexity, number of steps and products. Students are encouraged to choose the activity they wish to accomplish. Rubrics describing product requirements at each level are offered (Kapusnick, 2001). Tiered lesson planning is a form of keeping focused on the curriculum and standards while

conserving flexibility of content, process, and product (Levy, 2008).

STUDIES

A lot of research has been conducted on the field of differentiating instruction. In a study of the National Hsinchu Univeristy of Education in Taiwan, Professor Chin –Wen Chien shares his experience of implementing differentiated instruction in an elementary school EFL classroom. Professor Chin-Wen chose the book *Riddle-Me-Ree* to design his lesson. This big book is fun and motivate students to learn. He used the book as a vocabulary review for the sixth graders in the beginning of the semester. He chose six riddles from the book. The he read the riddles aloud and ask students to guess the meaning of the words from pictures or teacher's actions. Students with higher English proficiency levels yelled out different answers in English, but students with lower level tended to respond in Chinese. Some other students were not engaged at all due to their limited English abilities. Therefore, he modified the activity by having students to write down the answer on a piece of paper. Students were allowed to either write in English, Chinese or draw a picture. For word instruction, he included 16 vocabulary words from the riddles and asked the students to color them according to their knowledge. They colored the words green if they knew the word and could use it, they used yellow for the words they knew but could not use it. For the words they do not know at all, they used red. Then he led the whole class in reading through the words marked in green. For the words marked in yellow and red he used word cards and phonics cards to teach the whole class. Then he had students make word cards of the 16 vocabulary words. Each word was written on the top of the card and had a picture below it. While students were working on their

word cards, he pulled out students who had marked words in yellow and red and gave them additional word instruction. Then he tested students based on their proficiency level. The beginning level learners were required to point words for recognition. These students did not feel anxious but gained confidence in learning. More advanced students were required to spell words and even recognize additional words. After the recognition test, he gave students different choices of tasks. Task a: working in pairs and testing each other to spell out the words; task b: working in pairs and using the word cards to play the concentration game and task c: making word cards on two additional riddles. Students with lower proficiency level chose games and easy tasks, and students with higher proficiency levels tended to choose more challenging tasks. Professor Chien- Wen concluded that the success of differentiated instruction relies on the design and delivery of the instruction in content, process, and product as well as on the establishment of a class routine. It is important to explain to students that everyone learns differently and that if they complete tasks they will have the opportunity to choose other tasks. If they have difficulty completing the task, they still will have a chance to learn the content with the teacher's support.

Diane Kern from the University of Rhode Island reports the study of North Topsail Elementary School. The administrators in the school found that most of their teachers were employing whole-group instruction methods, taught to the average student in the class even though the student body was quite diverse. Tests scores started to demonstrate that students were not meeting the state's requirements. The school

began a collaborative professional development effort, including focus on differentiation of instruction. In this case study research, the teacher Katherine Martez uses a variety of flexible and effective strategies. Some of her practices include: *compacting*: she uses results from informal and formal assessments to identify students' strengths. She allows students who have already mastered contents of the next unit to enter into contract with her to either explore the content in more depth or through interdisciplinary study. Katherine also uses tiered lessons. She regularly designs activities that achieve the same content or standard with varying levels of support or challenge. Graphic organizers help Katherine to meet the needs of visual learners by demonstrating how information is conceptually connected. Anchor activities and task cards are also used to provide meaningful activities for her students to engage in while she works with small groups of students differentiating instruction. The task cards provide students with step-by-step instructions for enrichment or remediation activities related to the area of study. As a result, a progressive improvement in the tests scores was reported (Kern, 2009).

in the following research, a case study was conducted to identify the strengths and needs of Gayle, a 10-year-old third grade boy, who has been performing below grade level in several reading skill areas. A district reading specialist interviewed Gayle about his school experiences, likes and dislikes. His parents were also interviewed. Gayle was also given oral and listening comprehension tests. Based on all this information, the researcher concluded that Gayle needs extensive support to process print materials. From the interviews, they learned that

Gayle enjoys basketball, riding bikes and computers. Though he does not enjoy reading, he likes magazines and sports internet sites. Knowing this they planned activities and assignments that follow his interests by looking for internet sites that are focused on sports, and using sports magazines such as Sports Illustrated for Kids. From his parents' interviews they learned that he is also interested in mountain bike. So, they selected materials that capitalized his motivation to learn about this topic and provide exposure to words related to mountains, geography, or land forms that he might encounter in language arts activities. They also considered using Lexia Early Reading software. This program allows individual readers to practice a variety of reading skills necessary for literacy. Gayle was described by his teachers and his parents as an outgoing, friendly boy. So, they built on those characteristics and had him engaged in some leadership role in group activities. He could serve as a resource for the group especially in areas he enjoys. The conclusions of the study suggest that creating opportunities for Gayle to participate in different learning contexts is a good start for success. Gayle continues to progress slowly but surely, and the teachers are confident that through differentiated instruction he will reach his goal of becoming a fluent reader (Demos & Foshay, 2009)

Differentiated Instruction Strategies

Flexible Grouping: Differentiating the process

The average class size of Classrooms in Ecuadorian high schools is 50 students. On a regular basis, students are identified as: struggling students, academically average, and advanced

students. Therefore, this flexible grouping strategy is intended to meet all students' needs based on their readiness.

The students are grouped according to their tests results. Those whose scores range from 8 to 10 are assigned to the advance learners group. Scores 6 and 7 are in the average group and those with scores of 5 and below 5 belong to the struggling students group. Every student is given a color index card where they are required to write their names. There are three different colors which will help the teacher identify what student belongs to what group. (green for advanced, blue for average, yellow for struggling students)

At this point students have not moved yet. The teacher introduces the topic of the reading as a whole class through pre-reading activities such as making predictions from an illustration or text. Students' predictions are written down on the board. Having the students think about the topic creates the schema about the text and develops background knowledge. Besides predictions, teacher also pre-teach key vocabulary and concepts related to the reading topic.

Students are organized in groups of four by colors. Each group gets a copy of the reading: "The last leaf" by O. Henry. Groups are assigned a different task for the same piece of reading. Each group completes their particular task (Appendix A). The teacher monitors the groups focusing attention on yellow groups. After the group session, one group representing each level (color) shares their conclusions with the whole class. The yellow group gives a quick overview of the reading, the blue group retells the story using visuals and explains the story

context, and the green group explains how the story could have been different. This way all students come to a full understanding of what the story is all about.

Choice Board: Differentiating the Product

As a follow-up activity, students complete a home project assignment. Students choose the task they want to work on from the choice board according to their own interests or skills.

Complete an on-line book review of the story you read. Visit the following web-site http://teacher.scholastic.com/activities/swyar/write.asp 10 points	Write a letter to the author explaining why and how you would change the end of the story 10 points	From Jhonsy's perspective write a letter for Mr. Berhman 10 points
Compare and contrast the two girls of the story. Use a Venn diagram 5 points	Make a graphic organizer to map the progression of the story 5 points	Rewrite the story in the form of a song, rap, or poem. Include

		the major ideas of the story 5 points
Create a foldable to briefly describe the beginning, middle and end of the story 5 points	Create a die and use each side to share: 1. Title and author 2. Setting 3. Problem 4. Solution 5. Characters 6. Illustration of the main part of the story. 5 pts.	Make a bookmark for the story. On one side, draw your favorite scene. On the back, describe the scene. 5 points

The activities are thought to provide opportunities for visual, verbal, and kinesthetic learners to tap into their particular skills. Every student will choose either one or two activities to complete a score of 10 points.

Reading Choices: Differentiating the Content

Focus: students will develop the ability to scan a text to find the main idea. They will compare and contrast ideas to

reach agreements. The standards require students develop the ability to understand and identify longer and more complex texts. For the next activity a variety of authentic reading materials are proposed for students to choose the reading they are more interested in.

Pre-reading:

Students will identify their own interests by playing the game Glass, Bug, Mud. First the teacher models the activity by having volunteers to respond prompts like: I know how to cook, I love pop- culture, I like to travel, I am good at playing sports, I like to read about famous people. If the student is really into sports, she goes to the Glass corner. If she might be interested in it, she goes to Bug corner. But if she is not really interested in it, she goes to the Mud corner. Many students might find difficult to identify their own interests. The template will help them to be sure about their preferences for further grouping (Appendix B)

Reading:

Students get in groups of four according to their interests. The teacher presents a variety of reading material: biographies of famous people from history, travel brochures from different countries, music and movies trivia facts. Students select the piece of reading of their like. Now the class is divided in groups. Some groups are reading about pop-culture, others about traveling, and the last group is reading about history. However, all the students are following the same process guided in the worksheet. (Appendix C)

After reading:

Students share their ideas from the final section of the worksheet. Even though, students are reading different texts they are all learning how to identify key points, compare and contrast facts, and develop new ideas based on the reading.

Challenge centers: Differentiating Product

The students have finished reading the short story “The Bank Robbery” to assess comprehension they are required to choose one of the activities from the challenge center for a class project.

1. Individually, summarize the story in the form of a comic strip. Describe the beginning of the story, the middle and end. Make sure to include descriptive illustrations.
2. Create a comic strip describing a funny criminal story of your own.
3. In groups of four perform a role-play about the story: “The Bank Robbery”. You either can record it and show the video or make a live performance.
4. Write a true or false quiz based on the story. Your quiz must have ten items. Make sure to include the answer key.
5. You were one of the customers at the moment of the robbery. Write a short paragraph describing your experience. Include your feelings, thoughts and reaction at the end of the story.
6. Find a partner and decide on how should the criminal be judged? Write the judgment in the form of a rap or hip-hop song.

7. You are the criminal's lawyer. Prepare yourself for the trial. What would you say to support your defendant?

During the first session students choose the activity they are more likely to perform. There are explanation cards for each of the activities available. The students will work in class for one more session before turning in their final products. The activities have been planned according to the different learning styles. There are activities for musical, verbal, visual, and kinesthetic learners. The levels of complexity and challenge from Bloom's taxonomy are also considered. Activities one, three, and four are in favor of struggling students. While activities two, five, six, and seven are designed to use higher thinking processes.

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Appendix A

Worksheet for group “yellow”

THE LAST LEAF

Student's name:.....

Who is the author of the story?.....

List the three main characters:

.....

.....

.....

Describe each character:

.....

.....

.....

.....

.....

What was a common health problem at that time?

.....

.....

Jhonsy believed that she would die when.....

Who saved her life?.....

THE LAST LEAF

Activities for group “blue”

Directions:

- Sketch the main scenes of the reading: the beginning, turning point, ending
- Present them to the class through story telling.
- Explore and explain to the class why a lot of people would die because of pneumonia in the past? What is it different today?

THE LAST LEAF

Activities for the group “green”

Directions:

- In the group discuss the author’s purpose for writing the story
- Create a new ending for the story

Appendix B

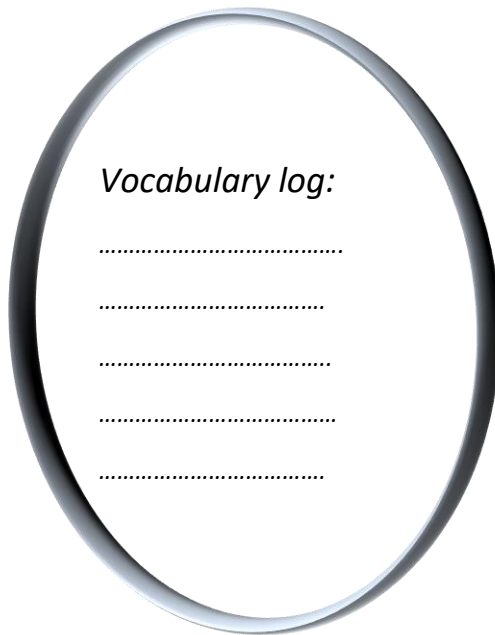
Appendix C

MY INTERESTS	Glass, Bug or Mud
Visiting a museum is a great adventure	
I can recommend what places to visit	
Reading biographies is funny	
I go to movies regularly	
I know about distances from one place to another	
I like going to concerts	
I can plan fun activities for visitors	
We can learn a lot from history	
I know all the latest musical hits	

READING WORKSHEET

Students' names:.....

Fill out the vocabulary log:



Vocabulary log:

.....

.....

.....

.....

.....

Write three key points from the text:

.....

.....

.....

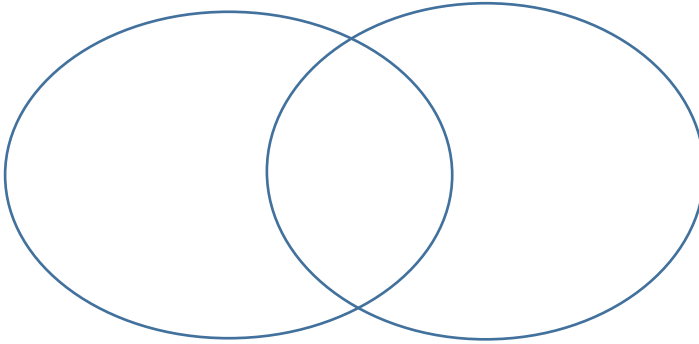
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.....

.....

Complete a Venn Diagram. In which ways A is similar and different from B?



Choose one of the activities accordingly:

- Invent the perfect place for a vacation. What is the name? where is it? What can people do?
- Choose any pop star. Invent an interesting trivia fact about him/her.
- Think of a historical character. What questions would you ask her/him if he/she were alive?

Curriculum Development

Diana Castillo Conde

Introduction

The word curriculum can be defined from two perspectives. From a narrow point of view, it is understood as all the subjects taught in a school. From a broader angle, the curriculum is perceived as all the learners' experiences in and out the school. In practice, the curriculum consists of a series of plans which define the desired learning experiences. Thus, the curriculum may be a unit, a course, a sequence of courses, or the school's entire program of studies (Oliva & Gordon, 2012).

According to Oliva and Gordon the experiences that students have outside the school is also considered part of the curriculum. Similarly, Wilson (1990) argues that students are learning all the time when they are exposed to behaviors. They learn important lessons from the secretaries, janitors, peers, cafeteria workers as well as from teachers. However, not all educators are conscious of the way students can be influenced by these contacts.

Based on these definitions, all influences that students have from their families, neighbors, media, and peers are learning experiences that become part of the curriculum. This fact has made theorists propose different types of curriculum: some of the essential ones are the explicit, implicit, null, and rhetorical. The explicit curriculum is the document that provides a whole guide for the teaching and learning process.

The implicit is also called the hidden curriculum and it refers to those daily experiences students are exposed to. Those topics that are not taught are identified as part of the null curriculum. And the rhetorical curriculum refers to the ideas developed by policy makers and professionals in charge of educational initiatives.

In Ecuador, the absence of a well- designed curriculum was a common practice until 2007. The government of Rafael Correa has transformed the educational system radically. Today, there is a national explicit curriculum which gives direction for teachers and administrators to follow the educational process. However, elements from the implicit and null curriculum are not being seriously considered by educators at the moment of planning. Many teachers agree on the fact that the current curriculum seems to be excessively rhetorical. Hence, the purpose of this paper is to explore the process of curriculum construction to shed light on the overall EFL Ecuadorian curriculum.

Social Forces that Impact Curriculum

In the constitution of 1998, education is declared as a primary duty of the government. It is recognized as democratic, diverse, humanist and scientist. The new law also guarantees education for the disabled and rural population. It dictated that the 30% of the national budget must be assigned for education. Even though the laws seemed powerful enough, in reality the educational system remained as chaotic as before. The new law for superior education, the program for pre-school education, the division of education into levels, and the implementation of a national curriculum were some of the achievements at this time.

The division of education into levels exposed a series of problems. Pre-school education lacked well trained teachers. There was no continuity in the basic education. Some content was repeated in the following years. Planning was not mandatory and improvisation was part of the daily teaching practices.

The disorganization and chaos of public education contributed greatly to the growing of for-profit schools. Middle and high class parents opted for private schools to provide their children with a better quality of education. In 2002, after recognizing the need of a viable and executable curriculum as a national policy, the National Plan for Everybody 2003-2015 was created. There were great expectations around this new plan. However, the variation of ministries, strikes, poor commitment, and lack of attention to the institutions created a hostile scenario for the educational process to develop (Palma, 2013).

As described above, Ecuadorian education was not the priority for governments. Many positive intentions have been put into law, but they have paid lip service. This historical background influenced the desire of the actual government to make a profound, extensive, and definite plan to systematize education nationwide. The government of Rafael Correa and his progressive policies has impacted positively the entire society. Particular attention is given to education. The amount of money invested has progressively increased. Unlike past governments, today the laws are put into practice. The Ten-year plan 2006-2015 started to build a solid structure to achieve goals. Education is conceived as the government's obligation and it is nonprofit until the third level. A new national curriculum has

been created supported by the Constitution Reform of 2008. New bills and institutions which regulate teachers, students, administrators and procedures are passed and become the guidelines that conduct education (Palma, 2013).

Starting from 2007, the transformation procedures in Ecuador related with thoughtful consequences for redefining education became a priority public investment sector. The 'Good Living' Plan in the Ecuadorian Constitution seeks the universalization of quality social services to guarantee and maintain the fundamental rights. Quality education based on the principles of equality, fairness, national sovereignty, multiculturalism, multilingualism in function of the Latin American integration and strategic integration in the international context is considered a priority challenge (Damme, Aguerrondo, Burgos, & Campos, 2013).

The Ministry of Education of Ecuador focuses on 20 specific ruptures with the status quo in education. These ruptures were classified into four groups: (a) ruptures that should contribute to the re-conceptualization of education as a right of individuals and communities, (b) ruptures aimed at a profound change in the structure of the national education system, (c) ruptures that strive to transcend the old paradigm of quality education and equal opportunities to guarantee better learning for students and (d) ruptures that contribute to the revalorization of the teaching profession (Ministerio de Educacion, 2012).

President Correa is going about his reforms sensibly. By 2009 he had spent around \$280 million repairing schools and

building new ones. In impoverished places like Zumbahua, a remote village in the Andes where the president once did voluntary work, high-tech “schools of the millennium” have risen among the maize and potato fields. But it is not just about spending more money. President Correa wants to supervise more closely how the education budget is spent, and to improve the quality and consistency of teaching. The government is now making tests required for existing teachers. Those who fail them will be offered a year's training and then be required to take the tests again. Those who fail a second time face the fact of being fired. So far the reforms seem highly popular except among the teachers. Some complain that coercion is the wrong way to go about reforming. Ecuador's universities also have to shape up. Low-quality private ones were closed while state-funded ones will have to account publicly for the money they receive every year (The Economist, 2009).

Educational Forces that impact the curriculum

Educational philosophies are theories of learning that focus on how learning happens. They provide a guide for decision making concerning aspects of teaching and learning. Theoretical approaches can be transmissive. That is, information is given to learners. Constructivist approach suggests that the learner has to make meaning from experiences in the world (Cohen & Gelbrich, 1999).

Identifying a teaching approach in Ecuador before 1992 is not an easy task considering the inexistence of an official EFL curriculum. Before that time, English was considered a non-mandatory subject. Class hours were limited to one or two per

week and there was a deficit of English teachers. Consequently, the few professionals based their teaching practices on the traditional grammar approach. Learners tried to learn a language just by memorizing short dialogues, repeating and imitating the teacher's pronunciation. More intuitive teachers would go beyond that to the behaviorism theory.

This theory was founded by J.B. Watson. The theory was developed in part as a reaction to traditional grammar. Behaviorism was advanced in America as a new approach in the early decades of the 20th century. It made emphasis on the importance of verbal behavior. It received a considerable trust from the educational world during the 1950s. The major principle of this theory is based on the stimulus-response learning. Learning is recognized as the establishment of habits as a result of reinforcement and reward (Demirezen, 1988)

In 1992, the British and Ecuadorian government agreement gave way to a total transformation of EFL education with the implementation of a major project *Curriculum Reform and Development for the Learning of English* (Cradle). The project proposed the use of the book *Our World through English* which was based on the principles of the Communicative approach and the Constructivist Theory.

Constructivism suggests that the learner is much more actively involved in an interaction with the teacher when creating new meanings. It is necessary to make a distinction between cognitive constructivism which is related to the way individual learners understand things in terms of developmental stages and learning styles and social constructivism which

emphasizes how meanings and understandings grow out of social encounters. Constructivist theory draws back to the writings of John Dewey who emphasized the place of experience in education. In the same way, Piaget demonstrated that children's minds are not empty but actively processed the material with which they are presented. However, the most significant bases of a social constructivist theory were established by Vygotsky in his theory of the Zone of Proximal Development (Atherton, 2013)

After the referendum approval in 2006, the eight policies of the *Ten-Year Education Plan* became state's policies. A new national curriculum for English is established based on the communicative-functional approach characterized by two main features: focus on real-world contexts and the relationship of language forms and function (Ministerio de Educacion, 2012).

The implementation of this new curriculum was gradually introduced in schools. Teachers have reluctantly adapted their professional practices and modified their lesson plans to adapt themselves to the communicative approach. Those who have not, blame it to the lack of professional development and lack of efficiency. Many other schools have gone one step further and have implemented a new model called the ecological model of human development, proposed by Urie Bronfenbrenner.

The ecological model of human development proposed by Bronfenbrenner, argues that the entire ecological system in which growth happens has to be considered in order to

understand human development. The model conceives set of structures that move from the inner level called the microsystem to the macrosystem. Microsystem refers to the relationship between a developing person and the immediate environment, such as school and family while the macrosystem refers to institutional patterns of culture, such as economy, customs and bodies of knowledge. Internal and external circumstances and situations interact with individuals' thoughts, feelings, and actions to shape development and learning. (Bronfenbrenner, 1994)

Needs of the curriculum

In Ecuador, a Spanish speaking country, English is taught as a foreign language. People have few opportunities to be exposed to authentic communicative situations where English is required. EFL teachers must modify the methodology. The foreign language is introduced through the basic conceptualizing processes of L1. Learning a foreign language is more a personal goal instead of a necessity (Lewis, 1975)

In the process of achieving goals, motivation plays an important role. According to Brown (2000) there are two kinds of motivation, intrinsic and extrinsic motivation. Concerning language learning, intrinsic motivation becomes applicable. Ecuadorian students exhibit a tremendous lack of motivation. Learning objectives, content, methodology, materials, class periods and all the elements of the curriculum have to be derived from students' needs. These needs have to be analyzed from two perspectives: a) the gap between what is and what should be; b) tensions that must be released for a healthy condition

(Tyler, 2013) In summary, curriculum workers must fit the curriculum to the student, not the student to the curriculum.

I believe that the model proposed by Taba exhibits a number of benefits. It is inductive, non-linear and gives teachers the power to build the curriculum.

The content, methods, processes are grounded on the reality that the students and the school are experiencing. In Ecuador, one of the biggest issues that the education system faces is the fact that the policies are made by authorities that have no experience in working within the classrooms. They create educational programs that are far from meeting the needs of the students, the school or the society. The world changes every minute. Consequently, a curriculum which does not permit changes during the process might not be successful. I think flexibility should be one important element when constructing a curriculum. It should be designed by the teachers rather than just supplied by authorities. Teachers have the enough experience and knowledge concerning the everyday work in schools. Therefore, they should be the primary participants in the building of a curriculum. I consider that the philosophical and psychological screen proposed by Tyler should be also taken into account. This suggests that a combination of different models contribute to the construction of a curriculum which responds not only to one single theory but to the school and participants' reality.

My teaching philosophy says that classes have to be student-centered, based on the constructivist theory. The content, methodology, objectives of education should all be

grounded on students' needs, interests, and perspectives. One important element is the quality of education. I strongly believe that students not only have the right to access education but worthy education which allows them to develop their potentialities holistically no matter their socio economic status. A model of curriculum development as described above might allow teachers and authorities to guarantee students' educational equity no matter their social position. The subject matter should demand thoughtful discussions from teachers. They should reflect on the priority of subjects and consider arts, physical education, and foreign languages as important as math or science.

Components of Curriculum Development Process

Selecting the Model

As previously mentioned I consider that the Taba model provides a clear guidance for constructing a curriculum that considers students as the starting point. Furthermore, this model enables teachers to be the developers instead of administrators or specialists that know little about the reality within the classrooms. The model proposes the development of a curriculum based on students' needs, gaps, deficiencies and different backgrounds. I consider that this model is aligned with the new tendency in education that requires teachers to see students as individuals who live unique realities. The objectives, content, and strategies selected on the basis of students' requirements might contribute to the achievement of the educational goal: transform students' life in a positive way.

Considering Philosophy

The next step that curriculum developers have to consider is the Philosophy. As previously mentioned my teaching philosophy follows student-centered strategies based on the constructivist theory. I strongly believe that objectives, content, and methodology have to be derived from students' reality. My teaching practices are based on three principles: a) get to know who my students are; b) diagnose where they are at; and c) have great expectations. Getting to know my students is the first step for instruction. This knowledge allows me to plan classes based on their interests and likes. This is fundamental for getting students to get engaged in the class so that their learning experience is productive and meaningful. My second principle requires me to find out where my students are at to properly design lessons which provide them with opportunities to gain knowledge in their Zone of Proximal Development described by Vygotsky. Apprenticeship will not happen if activities are too easy or too difficult to fulfill. Students get either bored or frustrated. I want my students rather feel challenged and able to discover knowledge. Finally, I think that believing in students has the power to make them believe in themselves. As a teacher I feel committed to help young generations to discover and develop their skills and potentialities and make a difference in their lives.

Considering Aims

Curriculum developers then derive educational aims based on the philosophy adopted. Aims are statements that provide direction to the educational action. I think that in my EFL curriculum I would include two main elements: The Good Living National Plan objective which intends to provide student

population nationwide with quality, inclusive, and equal education; and the contemporary life challenges. We are living in a global world where communication happens at any time and at any place. The frontiers between countries are disappearing. For certain people, it will improve their way of life, but for others, it means just the opposite. Thus, my main aims which will direct my teaching are as follows: a) students will develop a high sense of social justice, equity, and self-motivation for learning in order to contribute to the society; and b) students will be able to manage technological tools and a foreign language to efficiently interact and communicate as citizens of a globalized world.

Determining Needs

Following the process of constructing a curriculum, developers will determine the needs of students, society, and the subject matter. Regarding students' needs I will mention motivation for learning, pertinent instruction, and a safe learning environment.

One of the biggest issues Ecuadorian education has to fight is the lack of self-motivation of students for learning. Some of the reasons might be related to the little exposure they have to the language in schools. They do not really see the value in learning English since they do not have the need of it to communicate in an everyday situation. The students' overpopulation might also be the cause of students' lack of interest. It is difficult for teachers to provide students with individualized instruction when the average class size is fifty students or more. To overcome this situation, it is important that

educators plan activities that contribute to students' understanding of the importance of setting goals in life. Classes should be opportunities for them to discover the world around them and have high expectations for their future.

Students cannot be successful without efficacious teachers. Students need teachers who are able to understand the world where they are living at a certain point of time. They need teachers who are interested in getting to know who their students are so that they can plan lessons accordingly. They need the type of instruction that recognize them as individual beings with specific needs, interests, and learning styles.

Finally, students need a healthy and safe learning environment. The hidden curriculum tells us that students might develop wrong *values* depending of the place where instruction takes place. Thus, if the school's infrastructure invites to paint walls, scratch desks, or break windows, students develop the idea that those are common practices and they are more likely to reproduce them in the society. Therefore, students need a clean and safe environment inside and out of the school so that they learn real values such as respect, tolerance, and care.

In regard to society, productive global citizens, scientific researchers, and positive leaders are needed. The rapid technological growth demands citizens who are able to keep up with the new ways of communication, business, and social relationships. Ecuadorian society needs individuals with high intellectual development who assist the country to keep up with more advanced societies. The level of development of a society is measured by the body of research that is conducted. In

Ecuador, the need of serious research is high priority. Teachers in schools should be encouraging the natural curiosity of children who later on might become professional researchers. Another essential need is leadership. Ecuador society needs men and women with a high sense of identity who deeply understand what being an Ecuadorian means. We need people who do not know the meaning of corruption and do not to place their personal interests before those of the society.

Concerning the subject matter, a clear and well thought curriculum as well as permanent control and evaluation and technology access are needs that have to be met. The curriculum should allow more time for English learning. Forty five minutes, five times a week is not time enough to develop language skills effectively. The textbook selection should be extensively analyzed before making a decision. I think it is time to consider not using a textbook at all. The current evaluation system needs to be revised. The way teachers are required to evaluate students has transformed instruction into a process of *getting things done* neglecting the actual objectives of teaching and learning.

Permanent control and evaluation from professional authorities is required. The first authority within the school is the area coordinator. Coordinators need to keep regular meetings with teachers and administrators to evaluate processes and solve problems at school level. District directors should control the correct functioning of the curriculum at a higher level. They are the people in charge of making accommodations when things are not going well.

Finally, the 21st century lifestyle demands people master technological tools. There is plenty of online material for EFL teaching and learning available. Unfortunately, lack of funding, slow bandwidth, insufficient technical support, unaffordable software, and teachers' reluctance has prevented too many schools from integrating technology to classrooms. Technology integration should be one important element in the EFL curriculum.

Instructional Objectives

According to my teaching philosophy these are the instructional objectives that I consider essential: a) to develop speaking skills to a level that allow students to effectively interact and communicate in social and academic settings; b) to read various genres of books to nurture pleasure for reading; c) to enable students to independently create technology-based projects.

Strategies for Learning Experiences

In order to achieve my second objective: *to read various genres of books to nurture pleasure for reading* I plan the following strategies: storytelling, literature circles, and book choices.

No matter the age of students, they will always enjoy having the teacher read to them. First, it is important to choose a text that is familiar for students so they can make connections while listening. Second, teachers need to have the ability to actually act out the characters in the reading so students can picture the story in their minds. This activity can be carried out

on a regular basis before starting class without the pressure for students of being evaluated.

The use of Literature circles is a more formal and integrative activity. It is a significant part of a lesson rather than a simple warm-up. In literature circles, students are given a book to read. There are four roles that each member of the group will take alternatively. The discussion director is the student in charge to make a list of questions about the assigned portion of reading. He or she will help students to talk over the big ideas and share their reactions. The Literary laminator is in charge of locating a few special sections or quotations in the text for the group to talk over. The idea is to help people go back to some especially interesting, powerful, funny, puzzling, or important sections of the reading and think. The vocabulary builder's job is to be on the lookout for a few words that have special meaning in the reading selection. He or she should jot down puzzling or unfamiliar words while reading and look them up the definitions. Finally, the checker controls the participation of each member of the circle. He or she will make sure that everybody has an opportunity to share. Literature circles are a great strategy to develop students' like for reading. They become independent learners. Their cognitive skills, critical thinking, reflection, analysis and synthesis abilities are developed as well.

Another key strategy to develop the pleasure for reading is giving students the opportunity to choose the reading material they are interested in. Thus, I will have students identify the genre they like the most. It might be drama, science fiction, history, comedy, poetry, romance, myths or any other they are

interested about. Before students make their choices, we will have discussions regarding outstanding authors, their biographies, fun and trivia facts. At this point, students will be making connections that will help them to make a better book choice. This is meant to be a mid-term project. Students will have plenty of time to finish the reading. Additionally, they will be allowed some time before or after class for reading or make questions they might have about their individual readings.

Evaluation of Instruction (students)

The purpose of evaluation is to provide continuous feedback to improve instruction. This improvement should lead teachers to make necessary accommodations for learners to achieve higher results. In order to evaluate the effectiveness of the learning experiences, I have to consider two facts: a) satisfying results; b) experiences produce different outcomes. Tyler (2013) argues that in order to develop students' interest, learning experiences should give them the occasion to explore the areas where their interests are placed into consideration and more importantly to have satisfying results from these explorations. When students succeed in certain activities, they are more likely to develop interest in these activities. Another important point to consider is the uniqueness of students. A given learning experience might produce different outcomes. "It is possible for two students to be in the same class and for them to be having two different experiences" (p.63).

Considering these two points, I think differentiation instruction strategies are great tools to evaluate students bearing in mind their individual learning styles and interests. Thus, to

evaluate the learning experiences proposed above I will use a *choice board*. Students will write a book review, prepare a poster, make a graphic organizer, create a film strip, or construct a representation. These activities are planned based on the multiple intelligences theory and intend to meet every student's learning style. Students have the opportunity to choose the activity they feel better at and stand out. In doing so, the possibilities for the students to succeed and have a satisfying experience are great. As mentioned before, a satisfying experience has the power to develop students' interest in this case: the development of the like for reading.

Evaluation of Curriculum (program)

Curriculum evaluation considers to what extent the objectives, content, methods, and activities are producing the desired results and how the curricular program might be improved. The process of evaluating the curriculum should address the answers to key questions concerning students, teachers, and instruction. The following questions are examples of topics that teachers, administrators, and curriculum specialists should discuss.

Key Questions	Comments
Are the goals of this subject clearly and explicitly stated?	
Are those goals congruent with the national curriculum?	
Is the content in accordance with the needs of the society?	

Is the methodology meeting all students' needs?	
Do pupils believe that what they are learning is useful and meaningful?	
Do the evaluation strategies provide valid evidence of students' performance?	
Do teachers allocate the required time to teaching?	
Do teachers make necessary accommodations according with students' needs and readiness?	
Are there any unintended effects of the curriculum?	

After the committee discusses the whole functioning of the curriculum, they should compare results and analyze them to determine strengths and weakness to make modifications if necessary.

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Integrating Technology into the EFL Classroom

Evelyn Almeida

Introduction

Technology has become an essential tool for daily survival. However, many schools are failing to integrate technology into classroom learning due to teacher's beliefs, non-availability of resources, and lack of new ways of learning research knowledge.

Teachers' attitudes to technology play an important role in the incorporation of technological strategies in the classroom. Teachers who have not been exposed to the use of devices and gadgets tend to exhibit a reluctant attitude towards technology and deny the possibility to incorporate video games, web tools, iPads, or even cell phones to their lessons. One of the reasons might be their lack of confidence in using these devices. More updated teachers might feel confident using technology for personal reasons. However, they demonstrate a total lack of knowledge on how to use it for educational purposes. If teachers have the skill to use technology and know strategies to apply in the classroom, they will be more likely to take technology into the curriculum.

One of the biggest issues, especially in underdeveloped countries, is the availability of resources. The lack of funding, bandwidth, technical support, software, and mobile devices are some issues that seriously prevent teachers and administrators from developing permanent technology-based programs. Governments assign a certain amount of money which never

seems to be enough. Some schools have access to internet but the service is slow. There is not efficient and constant technical support. Software and devices can become unaffordable. Overcoming these barriers is essential to successfully include technology in schools.

Historically the teaching methods have evolved according to the development of new theories. Since technology invaded all aspects of life, it is believed that a new generation emerged, those born after 1980, identified as digital natives (Prensky, 2001). Apparently, this new generation's brains process information and learn in different ways due to the early contact with technology. This belief has contributed to the substitution of outdated teaching methods for new ones which satisfy the demands of digital learners. Unless teachers recognize that technology is here to transform the lifestyle of individuals, family, and the entire society, they will not be able to positively adapt to the changes and keep up with the rapid growing of technology in this world which is permanently changing. Therefore, the purpose of this paper is to gather evidence which, supports the need of technology integration in the classrooms as well as to explore potential challenges.

Why Should Teachers Integrate Technology in the Classroom?

Technology influences almost every area of people's lives. However, most schools are failing in incorporating technology into classroom learning. Some are just beginning to discover the real potential that technology offers for teaching and learning. Appropriately applied, technology will give

students the necessary skills to survive in a technology- based society (Edutopia Staff, 2008). Technology can be identified as any tool that promote human learning including iPads, smart boards, video cameras, digital cameras, MP3 players, lap tops, and computers. The rapid spread of these technologies has changed people's lifestyles completely including how knowledge is taught in the classrooms (Huneycutt, 2014).

The use of technology in the classroom allows students to be mentally challenged. They have the opportunity to develop their analysis and problem-solving skills. The innumerable resources online provide teachers and students with a great variety of interesting, diverse, and current learning materials. The Web has the power to connect students to experts in the real world. Understanding is achieved through images, sound, and text. Furthermore, integrating technology tools into learning contribute to students' engagement and reduction of behavioral problems in the classroom. Technology has also changed the way of teaching. It offers educators several effective ways to reach different types of students and assess them through diverse means (Edutopia Staff, 2008). Technology in the classroom contributes to keep students on task for longer periods of time. Well –conducted projects will keep students focused much longer than they would with books. They develop better learning through exploration and research. It also allows students to learn at their own pace. Technology give students the opportunity to get individualized instruction from the computer at more convenient times. This way students become more self-directed in the learning process. Learning to use technology, both teachers and students develop skills essential

for the 21st century. Education is no longer learning and memorizing facts; it is solving problems, collaborating with others, developing communication and leadership skill, and improving productivity (Huneycutt, 2014).

Advocators of technology in the classroom suggest a number of concrete reasons why teachers should use technology. Interactive reproductions and diagrams produce a deeper understanding of concepts. Using a projector, the teacher can demonstrate concepts better than with just words. The process of learning goes from the push approach to the pull approach. Instead of teachers pushing knowledge into students' brains, they are given projects that require them to pull the information themselves. The ability to get information without the presence of a teacher is key. Technology opens new places for self-expression. During past teaching, students would write on their notebooks and the responses were read only by the teacher. The use of modern technology allows students to make a PowerPoint presentation, do digital photography, make a video, run a class newspaper, make a website, or create a blog. The worldview of students is expanded. Free video conferencing permits students get in touch with other cultures from around the globe through direct dialogue in real time (Page, 2007).

Are new generations' brains different?

Currently the debate is focused on whether new generations, better known as digital natives, process information in a different way from older generations. Some of the questions are being explored with the rise of the neurosciences and the use

of functional magnetic resonance imaging to watch the brain in action. Researcher Nancy Herther interviewed some neuroscience experts. Some of the findings are described below (Herther, 2009).

Gary Small, popular writer of neuroscience topics believes that due to both age and experience, young generations are more likely to accept technology. Small explains that the age differential is a gradual process and not so time-bound. There are many digital immigrants who spend just as much time with technology as digital natives do. Research has not been able to demonstrate that this generation gap is not at a biological level. Small sees the brain as intrinsically flexible and trainable. In one of his studies he assessed the effect of internet searching on brain activity among volunteers between the ages of 55 and 76. Half of them had previous experience searching; the other half did not. Using magnetic resonance imaging to scan the subjects' brains while they surfed the web, he found that people with prior Internet experience had a much greater activation in their brain when they searched online than those who had never searched online. After a week of training, the less-experienced group was retested. This time the subjects showed brain neural circuitry similar to those of the experienced Internet searcher. If something can be remediated in as little as a week, it seems that this generational difference does not influence much but rather it is a matter of choice.

John Medina author of the popular book *Brain Rules: 12 Principles for surviving and thriving at Work, Home and School*, 2009 believes that people are influenced by the behaviors of the

particular date when they are born. He affirms that digital natives will have their brains wired differently in response to specific types of media exposures than others not so exposed. However, this is also true if this generation never saw a computer, spoke French instead of English, or spoke English but one person learned tennis and the other learned pinball. Medina explains that the brain reacts to its environment by continuously rewiring itself in response to external experience. The same argument is supported by Gary Marcus psychology professor at the New York University who identifies himself as a digital native in spite of having been born in 1970. He explains that his studies indicate that the genetics of the brain are unlikely to have changed in recent times. He rather suggests that experience can indeed radically alter the cognitive capabilities of individuals. Apostolos Georgopoulos director of the Center for Cognitive Sciences strongly affirms that there is absolutely no scientific basis for claiming that young people's brains have changed in recent times or that there is such a major difference between the brain at different ages (Herther, 2009)

Contrary to these beliefs, Mark Prensky firmly considers that today's students think and process information differently from old generations. In his article *On the Horizon*, he cites Dr Bruce D. Berry of Baylor College of Medicine who affirms that the different kinds of experiences lead to different brain structures. Thus, Prensky believes that it is very likely that new generations of students' brains have physically changed. He compares the way digital immigrants use technology to the process of learning a new language and emphasizes on the fact that it is scientifically proven that a language learned later in life

goes into a different part of the brain. Prensky grounds his theories in neurobiology and social psychology evidence. He states that there is no longer any question that stimulation of different kinds changes brain structures and affects the way people think, and these transformations go on throughout life. The brain is massively plastic and it is constantly reorganized based on the inputs it receives. Earliest neurological research discovered that rats in enriched environments showed brain changes compared with those in impoverished environments in two weeks. The sensory areas of their brains were thicker, other layers were heavier. Changes showed consistent overall growth, leading to the conclusion that the brain keeps its plasticity for life (Prensky, 2001). Whether arguments from both sides are valid or not more research has to be conducted before reaching a fully understanding of brain evolution in young generations.

Digital Natives vs. Digital Immigrants

Today students are referred as Digital Natives, those who were born after 1980 who are considered native speakers of the digital language of computers and internet. In contrast, those born before 1980 are better known as Digital Immigrants (Prensky, 2001).

Research has demonstrated that adolescent digital learners are multitaskers. They are able to do several things at once. They can listen to music, talk on the phone and answer email. Their literacy is beyond text and includes images and screen literacy. Their way of reasoning is not deductive or abstract but rather more concrete. The digital learner focuses on

learning in situations. Learning is as much social as it is cognitive (Brown, 2000)

In the book *Born Digital: understanding the first generation of digital natives* children are described as different. They study, work, write, and interact with each other in very different ways. They are connected to one another by a common culture, major aspect of their lives social interactions, friendships, civic activities are mediated by digital technologies. And they have never known any other way of life. Now the problem is that instructors in schools are digital immigrants who speak an outdated language to teach a population that speaks an entirely new language. Hence, students often cannot understand what the immigrants are saying (Herther, 2009).

In short, digital natives are used to receive information fast, they like to parallel process and prefer graphics. They better work when the networked and prefer games to serious work. This generation grew up spasm of video games. They are used to the instantaneity of hypertext, download music, phones in their pockets, a library on their laptops and instant messaging. They have no patience for lectures or step by step logic. Unfortunately, digital immigrants do not have appreciation for these skills. They are totally unfamiliar with them and choose to teach slowly, step by step, one thing at a time, individually and seriously. They just do not believe that students might learn while watching tv, listening to music or playing a video game because they, the immigrants, cannot (Prensky, 2001).

Digital Immigrants do not understand how natives process information, so by the time a digital immigrant has read the table of contents of a manual, the digital native has already figured out 15 things that will work and 15 things that won't. While the digital immigrant is afraid they'll break the device, the digital native knows they can just hit the reset button and do it all over again. Trial and error is the standard way of learning (Dosaj & Jukes, 2006).

Digital Natives Learning

Digital natives process information and learn differently. The new model of learning is based on discovery and participation. That is, that the broadcasting learning (the teacher transferring knowledge) is being replaced by interactive learning. Educators and students can move from a traditional class to a new more powerful and more effective learning paradigm by using digital media. Tapscott in his book *Growing up digital* describe eight basic shifts of interactive learning. Learning has evolved from being linear to being hypermedia. Linear learning is exhibited in books, stories, novels, and text books which are supposed to be read from the beginning to the end. Digital Natives go back and forth between web sites, television channels or video games. They usually participate in several activities at once. When surfing the net, they hyperlink to servers and information sources all over the place. Learning has gone from instruction to construction. "The scandal of education is that every time you teach something, you deprive a child of the pleasure and benefit of discovery" (p. 143). This approach is well known by educators. It is referred as the constructivist approach. This approach argues that students

learn better by doing rather than simply being told. Learning is not teacher-centered anymore. The new media enable centering of the learning experience on the learners. Learner-centered education improves students' motivation to learn. Absorbing material is replaced by learning how to navigate and how to learn. This includes learning how to synthesize, not just analyze facts. Students engage with other people on the net and build higher level structures and mental images. Knowledge jumps from school to lifelong learning. Wrongly some people think that once they graduate from university they are ready to survive for the next ten years. The reality is that they are just ready for the next ten seconds. Today knowledge is reinvented constantly. Learning has become a continuous, lifelong process. Digital media education has allowed learning to be more customized rather than one-size-fits-all. Digital media enables students to be treated as individuals and have customized learning experiences based on their background, individual talents, age level, cognitive style and interpersonal preferences. Finally, using technology in the classrooms make students see learning as fun instead of a torture. Entertainment has always been an essential part of the learning process. Using the media, the teacher becomes the entertainer and in doing so builds enjoyment, motivation, and responsibility for learning (Tapscott, 1998).

Evidence

Research has been conducted on the field of the use of technology in the classrooms to find evidence about the power of technology to enhance learning. A study was conducted in 2012 to evaluate the impact of the use of XO computers, a beta

version of a laptop, in schools. This study covered 14 primary schools in an urban city of Mongolia, of which 7 received XO computers and other 7 did not receive XOs. Over 2,000 5th grade students in these 14 schools were tested on Math and Reading skills, based on items from the 2008 National Primary Education Assessment. In addition to these tests, students were asked to respond to a questionnaire, which consisted of demographic and ICT-related questions.

The study uses quasi-experimental design with control and treatment groups of students. Math and Reading abilities of students are measured before and after the treatment, which in this case is the use of XO computers. In total, 2,011 5th grade students participated in the study. A half of the students studied in schools which did not receive XO computers, and the other half studied in schools that have access to XO computers at school (2-3 times in a week) and at home. The findings of this study contributed to the body of research that shows positive effect of using XO computers on students' academic achievement. It points out that the use of XO computers enhance students reading and math ability. There was a statistically significant initial difference in math score between One Laptop Per Child and non-OLCP schools. The study suggests that XO computers is a factor that positively affected reading, writing and listening abilities of students (Yamaguchi, JavzanSukhbaatar, Jun-ichiTakada, & Dayan-Ochir, 2014).

A second study examines the impact of incorporating a web- based discussion forum on the achievement of university students enrolled in a Distance Education course in United Arab

Emirates. The study was conducted with 34 students divided into two sections, one a treatment group and one a control group. The treated group was exposed to the use of a World Wide Web (WWW) interactive discussion forum. The control group used the textbook and other course materials. The findings demonstrated that the treatment group showed more significant improvement. The study also indicates that students do better because they participate more and are more actively involved in the web discussion forum. It also affirmed students' satisfaction with on-line discussion and instruction especially when e-learning is used as a supplement to face-to-face instruction. Results of this study have thus demonstrated the integration of e-technology to traditional learning situations in which students are passive recipients of information and facts. It illustrated the conversion of the one-way flow of instructions to threaded discussion to encourage active engagement with course material which in turn leads to a better and more meaningful learning experience (Shana, 2009).

In the search for more evidence of the value of technology use in the classroom, a study conducted in suburban and urban locations in Texas is explored. This study included Grades 6–8 middle schools. An experimental study of the Technology Immersion model involved comparisons between 21 middle schools that received laptops for each teacher and student, instructional and learning resources, professional development, and technical and pedagogical support, and 21 control schools. They develop their study to answer these two questions: 1.) What is the effect of Technology Immersion on

students' learning opportunities; 2) Does Technology Immersion affect student achievement?

Based on longitudinal survey and achievement data, the researchers found that Technology Immersion had a positive effect on students' performance. Individual laptops and digital resources allowed middle school students to develop greater technical proficiency and reduced their disciplinary problems in classes. Students in treatment schools made significantly greater progress than control students in meeting state standards. Especially noteworthy was the positive immersion effect on students from lower socioeconomic backgrounds. Economically disadvantaged students in treatment schools reached proficiency levels that matched the skills of advantaged students in control schools. Students exhibited stronger engagement in academic work through more positive classroom behavior. Having fewer disciplinary actions suggests that individual laptops allowed teachers to create more active classroom learning experiences that more closely matched some students' preferred learning styles (Shapley, Sheedman, Maloney, & Caranikas, 2011)

In the following study, the use of Web 2.0 tools, blogs and wikis and the impact on the process of learning a language is explored. The study was conducted at the Islamic Azad University in Iran. The researchers answered the question: Which of the web2.0 tools, weblog or wikis can help the Iranian EFL learners to improve their reading comprehension more? To answer this question, 113 sophomore students majoring in English were randomly selected. The research was done in three main phases. The pre-test, the treatment, and the post-test. Before the treatment the participants were classified into two groups. Then the First version of Oxford Quick Placement Test

2004 was administered. There was no significant difference in the two groups' reading performances so the participants were considered homogenous and properly randomly selected. The second phase of the study was instruction. It lasted for two years. All learners took reading lessons in the classroom. However, out-of-class activities were different. The first group practiced their reading comprehension through weblogs, the second group had access to wiki pages. After the treatment, the participants took a post-test of reading comprehension. The scores in the pre and post –test were used as the data for the study. The means scores for both groups' gain scores revealed that although both groups had improvements in their reading comprehension after the instruction, those who practiced through wikis outperform the other group. Hence, compared to weblogs, wikis are better tools in enhancing reading comprehension. The reason might be the editability of wiki pages which increases the wiki attraction. EFL teachers have the opportunity to create their own weblogs and find wiki pages to use in their reading classes. Technology-based lessons are more likely to be interesting considering that technology has stepped into all areas of human life (Behtaj, Sadegh, & Yamini, 2012).

Challenges

The previous exploration has shed light on several reasons why schools should integrate technology into the teaching practices. However, it is well known that too many schools around the world fail in doing so for a number of reasons. The following paragraphs describe barriers that are

preventing teachers from effectively integrate technology in the classrooms. In a recent study conducted in the elementary schools in Turkey six major barriers were identified. a) Limitations of physical setting, b) availability of materials, c) conditions of equipment and maintenance, d) lack of training and interest, e) low socio-economic status and f) crowded classrooms.

Physical settings when technology was introduced to this schools the availability of appropriate space was a problem. The classrooms that became computer labs were too small with no air conditioning. Teachers would complain about the little room for a lot of computers. Regarding availability of hardware, software and other materials, many teachers agreed on the fact that availability of computers was a big problem. In the same way the school did not use any educational software at all. Conditions of equipment and maintenance were one of the most serious problems. Many of the computers in the school were extremely slow. They were connected to the internet, but the service was also very slow. The monitors were small and outdated. Maintenance was another important problem. Technology requires continuous hard-ware and software maintenance. The Ministry of Education did not provide any support. The school tried to deal with it using their own resources, however, they did not have the money to do regular maintenance work. Lack of training and interest is another big issue. Many teachers recognized lack of training as an important barrier because they did not know how to use computers and other complex machines. Lack of interest is another big barrier. Most of the teachers were well- experienced but with very little technology training. In addition, most of them had no interest

in technology at all. Some of them think that taking students to the lab is a waste of time and therefore, unnecessary. Instead, they prefer traditional sessions in their classrooms. Socio-economic status has its influence in the use of technology. It can be very expensive financially. There are three important socio-economic issues. First Turkey's socioeconomic status. Teachers think that Turkey being a poor country, its Ministry of Education is poor too, and it is difficult to create the conditions for successful technology adoption. The second is the socio-economic status of teachers. Many teachers complained that their salaries are not enough for them to afford a computer. The last point is the socio-economic status of students. The teachers believe that most of their students come from low income families who are technology illiterate. Crowded classrooms impacted negatively in the noise and control issues. Teachers believe that crowded classrooms are forcing them to apply teacher-centered teaching methods. They feel that if the number of students in classrooms is decreased, they can apply more student-centered approaches including using different instructional technologies. One of the teachers said: "I once tried using a laptop and a projector in my class. It was chaos. Classrooms are very crowded and there is not enough space. I put the projector and laptop in front; and we had to push the student desks to the back. Then, the class became crazy. I learnt my lesson and will not do it again" (Kurt & Ciftci, 2012).

Barriers to technology integration into classroom might arise from different angles. However, the largest barrier is the teachers' beliefs. Teachers often have to catch up because they are digital immigrants. Although some of them might feel confident using technology for personal reasons, they feel

uncertain about applying technology in the classroom. In order for real changes to happen in the classroom, the shift must begin with the teachers rather than the students. Educators might be skilled at basic usage. Thus, they have to learn how to use the technology itself first and then how to use it instructionally. This lack of skill and knowledge is the reason of teachers' negative attitudes. Professional development can transform this belief and might help teachers recognize the value of technology to improve parent-teacher communication, customize instructional materials, communicate and collaborate with colleagues, engage and motivate students (Hammonds, Matherson, Wilson, & Right, 2013).

Similarly, Hixon and Buckenmeyer (2009) state that teachers are usually seen as the reason responsible for failing to integrate technology into their teaching due to reasons like lack of training, equipment, time and support. However, the authors argue that teachers' values about teaching and learning are the primary obstacles to successful technology integration. In order to change teachers' beliefs, it is important that teachers are provided with experiences with technology where they observe successful implementation. Teachers have to find the way to make technology fit into their lessons. They should reflect on how technology will impact their lesson/unit, classroom, and teaching. Hence, effective professional development must focus on helping teachers to recognize the multiple benefits of technology-based classrooms and provide them with support according to their needs during the integration process.

Conclusions:

Research has evidenced the great contribution of technology to students' better learning. Teachers must understand that new generations learning processes differ greatly from past generations. It is vital that teachers work on narrowing the generational gap between them and students.

The fact that students were born and raised with technology make them digital natives. Even though research has not proved that their brains might be different yet, the way they learn is different. They process information much faster than adult generations used to. They are multitasked, visual, and cooperative learners. Thus, teachers must integrate step-by-step methods, lecturing, or teacher-centered with modern teaching-learning methods.

Research has also demonstrated that the theory of digital immigrants is rather a matter of attitude. Teachers might have been born before 1980 and still be technology friendly. A positive attitude and the desire to keep up with technology innovation is key especially for teachers who are in charge of the education of young generations. Traditional classes which do not necessarily offer access to technology. Therefore, teachers should commit themselves to permanently participate in professional technological development so that they grow self-efficacy. Efficacious and confident teachers will easily adapt technology to their lessons and will be more willing to fight barriers to technology adoption more effectively.

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