

ARTÍCULO RECIBIDO: 14/07/17

ARTÍCULO ACEPTADO: 03/02/18

DIFFERENTIATED INSTRUCTION: PRODUCTIVE SKILLS DEVELOPMENT WITH HIGH SCHOOL AND UNIVERSITY STUDENTS

INSTRUCCIÓN DIFERENCIADA: DESARROLLO DE HABILIDADES PRODUCTIVAS CON ESTUDIANTES COLEGIALES Y UNIVERSITARIOS

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ABSTRACT

The Differentiated Instruction (DI) approach addresses individual learner's needs in a mixed ability class by focusing instruction on student learning profiles. The purpose of this study was to describe the effects of the implementation of four DI strategies suggested by Herrera (2011) in order to analyze their impact on students' productive skills within two different educational settings: the high school and university. A total of 105 students and two English teachers participated in this study. An online survey assessed learners' perceptions of the DI strategies. The results confirmed that the 4 DI strategies implemented in both settings had a positive effect on the development of students' writing and speaking skills. This study concluded that there is not a universal, one-size-fits-all strategy for teaching that includes all students. In-depth knowledge of students' needs, and interests is a starting point for addressing instruction in a more effective way. Finally, the DI approach is starting to emerge in Ecuadorian EFL classrooms, and teachers are showing interest in applying the corresponding strategies as an aid to student learning.

Keywords:

content, differentiated instruction, learning strategies, process, student-centered teaching.

RESUMEN

El enfoque de instrucción diferenciada (ID) aborda las necesidades individuales de los alumnos en una clase de habilidades mixtas enfocando la instrucción en los perfiles de aprendizaje de los estudiantes. El propósito de este estudio fue de describir el efecto de la implementación de las cuatro estrategias ID sugeridas por Herrera (2011) para analizar su impacto en las habilidades productivas de los estudiantes en dos entornos educativos diferentes: el colegio y la universidad. Un total de 105 estudiantes y dos profesores de inglés participaron en este estudio. Una encuesta en línea evaluó las percepciones de los alumnos sobre las estrategias. Los resultados confirmaron que las 4 estrategias implementadas en los dos contextos tuvieron un efecto positivo en el desarrollo de las habilidades de escritura y expresión oral de los estudiantes. El estudio concluyó que no existe una sola estrategia universal para la enseñanza que incluya a todos los estudiantes. El conocimiento profundo de las necesidades e intereses de los estudiantes es un punto de partida para abordar la instrucción de una manera más efectiva. Finalmente, el enfoque de ID está comenzando a surgir en las aulas de Enseñanza de Inglés como Lengua Extranjera (EFL) y los maestros están mostrando interés en aplicar las estrategias correspondientes, con el fin de apoyar el aprendizaje de los estudiantes.

Palabras clave:

contenido, estrategias de aprendizaje, instrucción diferenciada, proceso, enseñanza centrada en el estudiante.

INTRODUCTION

English has been taught in Ecuador as a foreign language (EFL) in all educational levels for almost three decades, such as pre-school, primary, secondary and higher education. However, effective learning has been impeded by traditional language teaching methodologies, inappropriate language assessment and low level of command of the language on the part of the teachers. A study, carried out in Loja (Ecuador) by León (2013), based on classroom observations, concluded that most English classes used the grammar translation method with virtually no class participation because teachers were largely unfamiliar with different teaching methods and terminology; an issue situation that has characterized EFL classrooms in Ecuador for many years.

Since 1992, efforts have been made to reform the English Curriculum with varying degrees of success. These have included a developmental reform on language skills teaching. In 2012, a new National English Curriculum was based on a more communicative-functional language approach, aligned to the Common European Framework of Reference for Languages (CEFR). In addition, there was a focus on teacher development, part of which involved initiating The Go Teacher Scholarship Program. In this program, Ecuadorian teachers were sent to American universities, where they were first exposed to the Differentiated Instruction (DI) through Tomlinson's work. During the program, teachers were challenged to reflect on the one-size-fits-all teaching approach that had characterized EFL in Ecuador, and to move towards more meaningfully tailored-learning activities suggested by Herrera (2011) and applied at Kansas State University.

Differentiated Instruction

In the late 1990s, Tomlinson, (1999) defined DI as a process of tailoring instruction to meet individual needs by using ongoing assessment and flexible grouping where students support each other and share responsibility. Additionally, Tomlinson stated that DI is not a matter of creating more individualized lessons, but rather of paying attention to students' learning styles, needs and learning preferences (Tomlinson, 2000).

Heacox (2002) defined DI as the instruction which meets students' level, needs, learning styles and interests, while Willis (2000) argued it is a pedagogy in which teachers adapt instruction to students' differences. Furthermore, Dixon (2014) stated the importance of teacher training on DI strategies in order to implement educators effectively and to address their students' needs and support their learning difficulties. Once they

know how to meet their learners' needs through the use of DI, teachers are better prepared to manage mixed ability classes (Weiner, 2003). Similarly, Gieh-hwa (2014) contended that having teaching experience with DI strategies engages learners and encourages language development. Meanwhile, one caveat raised by Hogan (2014) was that implementing DI in the class may be challenging because it involves radical changes to teachers' teaching routines and methodology.

How to Differentiate Instruction?

Roberts (2012) suggested three simple ways to differentiate instruction in the classroom: differentiation by outcome, by teaching method and by task. Bearing in mind these three aspects in everyday planning, teachers would be considering students' needs. Tomlinson (2013) and Weselby (2014), on the other hand, recommend four ways to differentiate instruction: based on content, process, product, and affect/environment.

A further consideration is that of implementing DI with flexible grouping. Here, teachers organize the class in groups, in which learners interact in pairs, in small groups or work as a whole class. Long & Porter (1985) stated that working in groups is an effective interaction pattern, students learn and support each other and a positive work environment for teachers is created, where students pay full attention during the learning process (Gieh-hwa, 2014) and Oxford (1997) argued that working in groups promotes cooperation rather than competition. Additionally, teachers may encourage peer feedback on errors made by group members. While by working in pairs or small groups student frustration at not being able to act or participate spontaneously may be mitigated. These views were supported by Tomlinson (2003) and Crandall & Arnold (1999) who stated that by having flexible grouping in the EFL classroom, teachers meet their students' different learning styles, different personalities, while allowing high achievers to consolidate their knowledge by helping low achievers to succeed in learning.

Another way to differentiate instruction is by using Blooms' Taxonomy model. Blaz (2013) contended that this allows the teacher to examine and differentiate the level of challenge in learning tasks. When teachers assign tasks, it is required to employ several strategies to support differentiated teaching and learning. These tools contribute to effective differentiation in distinct ways. For example, Armstrong (2016) and Skehan (1998) categorize tasks in the classroom as open-ended, structured or teacher fronted, and delivered as small groups or pair-work. At all times, tasks are designed according to students' proficiency

levels and learning styles.

A third way to differentiate classes is by process. In this regard, Borja, Soto & Sanchez (2015), stated that choosing materials which meet students' readiness level and interests guarantee that learners perform speaking and writing tasks. For instance, during the speaking task, the researchers provided visuals

such as pictures, posters and videos to evaluate students' oral performance with a checklist. Furthermore, they gathered student profiles to learn about students' interests, learning styles and language skills. Students performed role-plays, debates, discussions and interviews based on different topics they felt interested in.

METHODOLOGY

This study aimed to determine the effects of the implementation of DI strategies on students' speaking and writing skills within two different educational settings: high school and university. Specifically, it sought to address the following research question. ¿To what extent do the four DI strategies impact students' writing and speaking skills?

Two public institutions were used for the study. From the Technical University of Ambato (UTA), 105 students were chosen as participants: 64.76% were male and 35.24% were female and all were between 15-23 years old. Their level of English language proficiency ranged from beginner A1 (69%) to upper intermediate B2 (29%) and advanced C1 (2%). The students who attend English courses in this Center are from both private and public high schools. It is important to mention that all English courses are aligned to the Common European Framework of Reference for Languages. According to these standards, students must acquire a C1+ level to be awarded a certificate of proficiency or expertise in English.

The second setting was Neptalí Sancho high school, from which 90 students were chosen as participants: 75.5% were male and 25.5% were female, with a large number of students coming from indigenous ethnic groups. The age range varied between 12 -18 years, all of beginner level A1 English language proficiency. The majority came from poor families and they had few opportunities to interact in English language. In fact, 85% of the students assessed were not motivated to learn English.

In order to provide accurate differentiation, information on student's needs, cognitive abilities, socioeconomic background and learning styles was of vital importance. Roberts (2012) contended that this is a crucial step if the teacher is to know the students' learning profiles and therefore to be able to meet their

needs and foster their learning. To this end a survey was carried out to gather significant information on all of these areas that would support the implementation of DI strategies.

The instructors' sample included 2 English teachers who work at Language Center. Both teachers taught A1 English level (beginner) at the UTA, while one of the teachers worked at the high school as well. Both were assessed as highly experienced (more than 15 years of teaching), and highly qualified (trained to master's degree level).

In order to determine the effectiveness of the implementation of DI strategies in improving students' speaking and writing skills within the two different educational settings, all students completed an end-course questionnaire to assess their perceptions of the implementation of DI strategies in productive-skills development.

The questionnaire was delivered in Spanish to ensure full comprehension of all the items. Question 1 was related to the students' acceptance level and preference about DI strategies for developing their writing skills. Question 2 ranked on a Likert scale the effectiveness of the foldables technique to develop speaking skills. Question 3 ranked the effectiveness of the magic book strategy for improving the quality of writing skills. Question 4 rated student acceptance of the U-C-ME strategy for improving writing skills. Question 5 evaluated the effectiveness of the pictures and words strategy for fostering student interaction in pairs or in groups. Finally, Question 6 rated student acceptance level and preferences on DI strategies for develop speaking skills.

RESULTS

DI Strategies for the development of Productive skills

The four strategies were taken and adapted from Herrera, Kavimandan & Holmes (2011), and were implemented in the English classes in both educational settings. Prior to implementation, students from both the high school and university were given instruction on how to use each DI strategy, including clear examples to follow.

The first, referred to as foldables, is a visual, auditory, kinesthetic and interpersonal strategy in which Learners develop their writing or speaking skills. This note-taking aid promotes collaborative and independent learning and fosters of students' both thinking and writings skills and the ability to store and remember information. However, it is important that teachers know their students' learning styles in order to plan their lessons effectively and provide the most meaningful activities and tasks (Zhou, 2011).

Title: Foldable strategy used in the study



Source: Photo 1 taken by the author based on student's final product

Strategy number two was to uncover ideas, concentrate on the topic, monitor understanding and evaluate learning (U-C-ME). This strategy is designed for visual and interpersonal learners and encourages communication between peers. Learners analyze and synthesize information from a written text by taking notes in a non-standard way. This strategy encourages student engagement and creativity, as well as facilitating the monitoring of their learning. The need for the successful learning of communicative skills is the goal of all English language instruction, and this may be achieved by using strategies that allow learners to develop

their language and critical skills at the same time (Jabeen, 2014).

Title: The U-C-ME strategy used in this study



Source: Photo 2 taken by the author based on student's final product

The third, referred to as The Magic book, is a strategy best suited to visual, kinesthetic and interpersonal learners. Learners' attention and retention of information increased. Therefore it may be considered a tool for learning, applying and recycling vocabulary from previous lessons.

Title: The Magic book strategy used in this study



Source: Photo 3 taken by the author based on student's final product

Strategy number four was referred to as The Topic in Pictures and Words. This strategy caters to visual, auditory, interpersonal

and kinesthetic learning styles. It develops the skills of retelling, synthesizing and summarizing information through interaction with a text. Additionally, it promotes discussion about the text content using pictures made by students. This strategy is

effective for learners because it aids speaking and writing through pictures. This follows Hamner's (2010) recommendation that teachers design activities to promote speaking and writing skills.

Title: The Topic in Pictures and Words strategy used in this study

TEMPLATE: Topic in Pictures and Words

Name: Leonardo Sisa
Date: November 2016

People's jobs in Pictures and Words



 My father is a taxi driver. He works from 7:00 am to 5:00 pm. He likes his job. He doesn't work in the evening.

 My mother is an English teacher. She teaches at university. She has three classes. She loves her job.

 My uncle is a vet. He cares for pets for example cats, dogs, hamsters and parrots. He cuts dog's hair and nails.

 I'm a student. I study at university. I start class at 7:00 am. I finish classes at 1:00 pm. I do homework in the afternoon.

Source: Photo 4 taken by the author based on student's final product

DISCUSSION

The data from the questionnaire revealed that in general the implementation of the foldable strategy developed the students' writing skill. In high school: 37 out of 90 students used the foldables to write in English which means 41.1%. Additionally, foldables allowed them to draw, connect their ideas and write their paragraphs with accuracy and fluency. At the same time, by using the foldables, students became actively involved when interacting in pairs and small groups. There was a significant acceptance of the foldables at the university: 35 out of 105 students which is 33.3% chose the foldables as their favorite strategy for writing. This strategy offered students from both educational settings opportunities to practice writing using words or phrases they were learning (Harmer, 2010). In the implementation of the Magic books for developing students' speaking skills, at the university: 28 out of 105 students chose the magic books to develop their fluency which is 26.6%.

Students found that talking about their last vacation, families, daily routines, and favorite hobbies was facilitated by using the clues on the magic book to talk about each topic. Furthermore, the magic books encouraged shy learners to perform their speaking tasks with more confidence and supported their interaction with classmates. Furthermore, in high school: 21 out of 90 students found the magic books a useful strategy for developing their speaking skills. This group represents 23.5% of the total population.

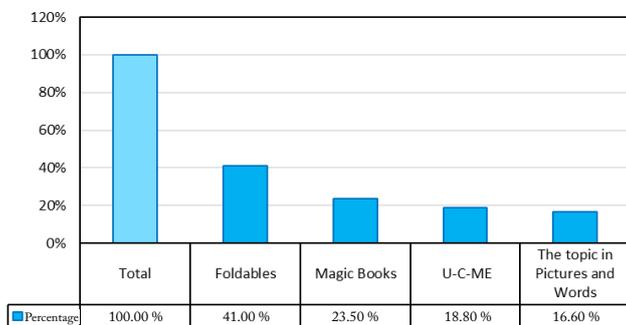
The U-C-Me strategy developed students' analysis and synthesis as well as encouraged their creativity by asking and answering question. In the high school: 17 out of 90 students used this strategy as an aid to perform speaking activities in small groups which is 18.8%. However, at the university: 25 out of 105 students, which is 23.8%, enjoyed using this strategy because

this strategy allowed them to develop authentic communication in pairs and in groups. In addition, using It allowed learners to develop their background knowledge and understanding of the content -area topic.

The fourth strategy implemented was the topic in pictures and words. It stimulated students' mental imagine representing their understanding of the topic with a drawing. It developed learner's language skills to articulate personal connections when sharing the information. In the high school: 15 out of 90 students selected this strategy to develop writing and speaking skills. This is 16.6% of the total population whereas at the university context: 17 out of 105 students, which is 16.3% of the total population, found this strategy useful because they were provided with opportunities to interact with the text at a personal level, they discussed their understanding with their peers.

The data obtained relating to the use of foldable strategy in the high school showed that 37 of ninety respondents (41.10%) found it more appealing. It is assumed that hands on activities provided learners more opportunities to exploit their learning styles as well as to foster their communicative skills.

Figure 1 Results of DI strategies implementation in the High School



Source: elaborated by the authors based on students' questionnaire

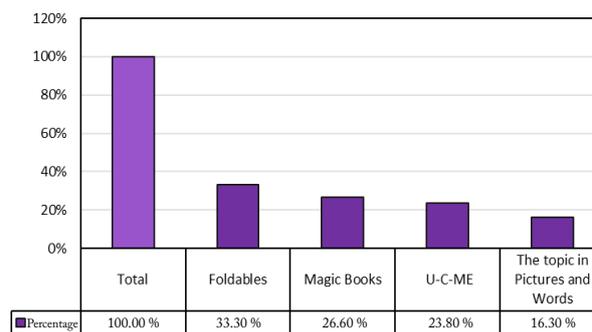
CONCLUSION

This paper intended to answer the following research question: ¿To what extend do the four DI strategies impact students' writing and speaking skills? The results of this study show that the implementation of the four DI strategies had a positive impact on the development of the productive skills in high school and at university. Specifically, the tools facilitate students learning by increasing their motivation and class interaction. At the same time, the analysis of the strategies focused on the study lead to the conclusion that there is not a universal, one-size-fits-all strategy for teaching, capable of including all students equally.

However, a variety of strategies is required to meet the range of needs and learning styles typically present in the classroom. In-depth knowledge of student needs and interests is the basis for designing the package of strategies to be implemented.

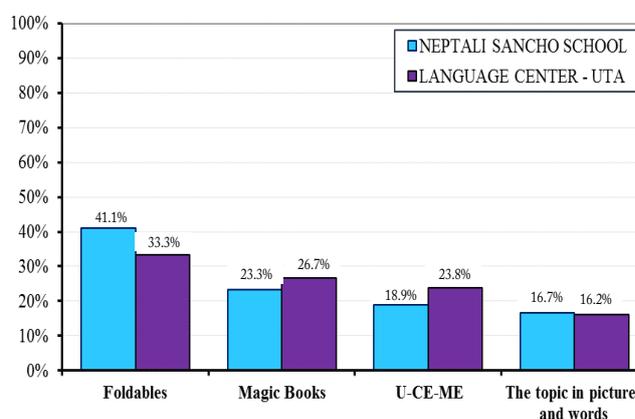
It is important to remember that implementation of DI requires major changes in teaching practices and curriculum design. This is especially true in the aforementioned contexts, since such approaches have not featured in the traditional teaching methods of the wider educational system here. Awareness of DI

Figure 2 Results of DI strategies implementation at University



Source: elaborated by the authors based on students' questionnaire

Figure 3 Comparative Results of DI strategies implementation



Source: elaborated by the authors based on students' questionnaire

approach and practical techniques are required as part of initial teacher training as well as continuous professional development programs whether the strategies are to have any impact on English language instruction in Ecuador. The strategies analyzed in this study are distinctive of teaching and learning throughout the Ecuadorian public education system. Future analysis of other DI strategies, applied to a wider range of age groups and

proficiency levels, may allow a more detailed understanding of the relation between specific approaches and different learner profiles. This would include a study of the quantifiable effects on achievement of each strategy.

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