

Didactic Experiences Physical Education and English: constructivist vs traditional approaches in bilingual and non-bilingual education...

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Physical Education and English: constructivist vs traditional approaches in bilingual and non-bilingual education.

Educación Física e Inglés: enfoque constructivista vs enfoque tradicional en la educación bilingüe y no bilingüe.

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Abstract

This article presents an action research study in two subjects of Primary Education: Physical Education and English. The main objective aims at comparing student's satisfaction index between constructivist approach and traditional approach in the academic year 2015-2016. The 6th A class is control group (traditional approach) and the 6th B class is experimental group (constructivist approach). On the one hand, in second language teaching, constructivist approach is based on content and language integrated learning (CLIL); bilingual Physical Education is based on CLIL, games and modified sports. On the other hand, traditional approach is based on grammatical-translation methods; in non-bilingual Physical Education, tasks are more analytical than global. Two hypotheses are designed. The first hypothesis states that students' satisfaction is greater with innovative methodology than traditional. The second hypothesis states that error handling in an appropriate manner increases student's satisfaction.

Keywords

Satisfaction's index; constructivist and traditional approaches; error handling.



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Resumen

El presente artículo realiza un estudio de investigación-acción en dos áreas de Educación Primaria: Educación Física e Inglés. El objetivo principal es comparar los índices satisfacción de los estudiantes que son instruidos en estas áreas con un enfoque constructivista frente a los que son instruidos con un enfoque tradicional durante el curso académico 2015-2016. La clase de 6º A es el grupo de control (enfoque tradicional) y la clase de 6º B es el grupo experimental (enfoque constructivista). Por una parte, el enfoque constructivista en 6ºB, se fundamenta en la enseñanza del Inglés con metodología AICLE (aprendizaje integrado de contenido y lengua); en Educación Física bilingüe el enfoque se basa en AICLE, los juegos y los deportes modificados. Por otra parte, el enfoque tradicional en 6ºA, se fundamenta en la enseñanza del inglés a través del método gramática-traducción; en Educación Física no bilingüe las tareas son más analíticas que globales y con poca interacción social. El estudio diseña dos hipótesis. La primera indica que los estudiantes que son instruidos con metodología innovadora tienen mayor índice de satisfacción que los que utilizan una metodología tradicional en relación a las asignaturas estudiadas. La segunda hipótesis expone que el trato del error de manera adecuada aumenta la percepción de satisfacción de los estudiantes.

Palabras clave

Índice de satisfacción; enfoques constructivista y tradicional; tratamiento del error.

Introduction

The present work aims at analyzing and comparing two pedagogical approaches in Physical Education and English subjects. In the academic year 2015-2016, two different schedules are piloted in 6th grade of Primary Education in both curricular subjects. The main aim is to collect data for improving the educational quality.

The Educational Systems usually have a close relationship with the cultural, social and contextual principles. In Physical Education discipline, Devís and Peiró (1992) indicate that modified games allow maximizing achievements and rewards for all students through teamwork.



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The globalization process and bilingual education imply a need for communication and sharing knowledge, although the learning of a foreign language is a stressful activity (Hewitt and Stefenson, 2011). It is important to bear in mind that language teaching will be a key component in developments and curricular designs.

As a historical review, theories about the teaching of a second language are unsystematic in antiquity. Latin is the predominant language until the mid-eighteenth century where the teaching of other languages arises based on Latin language teaching. The grammar-translation method had its peak until the mid-twentieth century, where it began to fall into disuse as a traditional method against innovative and didactic approaches.

In the XXI century, there is some resistance against innovative approaches; it is a method used to a greater or lesser extent by teachers, professors and university professors. This method known as the grammar-translation approach has three main principles in mind: high degree of correctness as a key to success, predominance of written skills and deductive teaching in which L1 (mother tongue) is important to develop grammatical explanations.

Some researchers highlight arguments in agreement with translation. Valero Garcés (1996:187-197) gives translation a special value by calling it "quintessence". Newmark (1991) indicates "in the advanced or final stage of language teaching, translation from L1 to L2 is recognized as the fifth skill and the most important social skill since it promotes communication and understanding between strangers" (Newmark, 1991: 62).

On the other hand, there are some arguments against translation. Vermes (2010) indicates that translation is not the objective of the language, since it is the aim of the translator's preparation, both being different fields of study. Malmkjaer (1998) states that translation is aimed at translation trainers. Duff (1989:6) writes "translation is not a communicative act and, thus, has nothing to do in a communicative approach to language teaching".

Some authors have recognized translation as an educational method that has lasted the longest and nevertheless portrays deficiencies. Duff (1989:25) writes "translation only involves writing and reading". Nowadays, the lack of oral skill is a hindrance rather than an advantage



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in the globalized world. As regards the transfers and interferences produced in the learning process, Malmkjaer (1986) indicates that translation is a resource endowed with a negative transfer.

In the second half of the twentieth century, the educational constructivist approach was born due to the influence of several disciplines, whose main authors are Piaget (1966): "Theory of cognitive development" and Vygotsky (1962): "Theory of sociocultural development"; and despite some differences in their approaches, they share the importance of the game in the psychological, individual and social development of the child. Vygotsky's followers consider that language is a principal agent in the development of the child. Piaget's followers consider that language depends on learning from other means, giving more importance to action than to external influences.

At the end of the 20th century paradigms have emerged based on language as a means of communication and concern in cognitive processes. Cognitive linguistics will discover factors previously ignored by linguists, psychologists, pedagogues, anthropologists, philosophers and educators. Lakoff (2017), basing on his theory "metaphorical thinking", brings together concepts such as emotions, morals, politics, time, etc. And he does not forget our direct experience with the world.

In the linguistic field, Arzamendi, Ball and Gassó (2014) highlight the following theories within the communicative approach Krashen (1985) in his comprehensible input; Canale and Swain (1985) in their communicative competence; Hallidays (1986) in his seven functions theory; Prabu (1987) in task-based teaching and Lewis (1997) in the lexical approach. Lewis (1997) specifically indicates that language does not consist only of traditional grammar and vocabulary, but packages or prefabricated structures of words, where the language is grammaticalized lexicon, not lexicalized grammar.

Mohan (1986:62) is in favour of linking language and academic contents having a constructivist vision, since this way learning will be more significant.

Language is a system which relates what is being talked about (content) and the means used to talk about it (expression). Linguistic content is inseparable from linguistic expression. In



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subject matter learning we overlook the role of language as a medium of learning and in lan guage learning we overlook the fact that content is being communicated. (Mohan, 1986:62).

In Physical Education (PE), at the twentieth century, an interest arises in increasing students' motivation related to sports; the approach to date was based on repetitive techniques in teaching sports. Bunker and Thorpe (1982) propose a model based on tactics, known by the acronym TGFU "Teaching Games for Understanding". In the twenty-one century, Mitchel et al. (2006) bring together several methodological approaches that have emerged under the name of Game-Centered Approaches, where tactical teaching is at the forefront. The main consequence of smart players training is polite viewers trained (García López and Gutiérrez Díaz del Campo, 2016).

As regards the modern methodological revolution, an approach arises for integrating content and language; it is known as CLIL -Content and Language Integrated Learning- and it emerged at the end of the twentieth century which is closely related to those methods in which the language is not an end to become a vehicle of meaning transmitting. The student is the protagonist and the linguistic skills (listening, reading, writing and talking) are taught in an integrated manner. Some research highlights the advantages of this type of innovative methodology (García-Calvo, 2015, García-Calvo and Salaberri, 2017, 2018, Hunt, 2011, Lasagabaster, 2011, Lorenzo et al., 2009, Seikkula-Leino, 2007).

Bentley (2009:5) defines CLIL as "an evolving educational approach" and he points out that Content and Language Integrated Learning has many definitions, Marsh (1994) states that CLIL is an umbrella term covering teaching contexts in which subject is taught through another language. Therefore, the context and non-linguistic subjects can be used in languages teaching. An innovation in the scholastic scope merges which supposes a revolution in curricular design and development.

Integrative methodology has some advantages specified by Coyle et al., (2010) based on 4Cs framework and its four essential principles: "Content, Communication, Cognition and Culture"; the language is the vehicle of the content and Communication is divided into: "language of learning", "language for learning" and "language through learning". The balanced use of communicative aspects will be key to success in CLIL (Coral, 2012).



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In a similar vein, García-Calvo and Salaberri (2018:24) state that "CLIL is a link between Physical Education and linguistics that starts from Bloom's taxonomy to develop educational competencies and the achievement of skills in a hierarchical manner". The cognitive scope sequenced in Bloom's methodology will be complemented with the communicative aspect in the teaching of a second language, all bearing in mind the subject matter contents (PE) and culture (essential context in a globalized world).

Mehisto (2009) deepening in CLIL methodology considers that it implies the following aspects: multiple approaches, enriching learning environment, authenticity and realia, fostering active learning, cooperative learning and scaffolding; the last term was proposed by Vygotsky's theory. Vygotsky (1962) indicates that in the Zone of Proximal Development – that is, a synonymous of scaffolding- the processes of teaching and learning are located, and therefore the student needs help or scaffolding to solve the problems raised; starting from the ZDP (Zone of Proximal Development), the scaffolding theory indicates that the action of the person who teaches is inversely proportional to the level of competence of the learner (Bruner, 1971).

When a building is constructed, scaffolding is necessary because it serves as a support to reach higher levels. As the student goes up the level that scaffolding is removed. The student, thanks to the scaffolding (teacher, student, resources, tools, etc.) can be involved in higher tasks, from his/her cognitive level. In the learning and teaching process, it means progressively increase the difficulty in cognitive, linguistic and motor demands (Coyle et al., 2010), being essential integrative mind, degree of flexibility and practical methodology.

Satisfaction is studied in this research and it could be defined as the extent to which the educational attention and the expected educational status meet the expectations of the student, since it is a thermometer for reflecting the quality of education. Satisfaction and self-esteem are interrelated terms; their concomitance can be found in the effectiveness of the mind and the experience of being competent to face basic challenges of life and to be worthy of happiness (Branden, 1995).

The student's self-esteem and satisfaction index will be low if the student does not respect him/her self and she/he does not feel effective. Self-esteem and high satisfaction index are able to positively influence learning and performance (Alonso Tapia, 2001).



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García-Calvo and Salaberri (2018:37) state that in BPE-in-CLIL (Bilingual Physical Education through CLIL) the student who leaves the comfort zone improves in satisfaction, and therefore he/she reinforces him/her self-esteem. Thus, an initial imbalance in the system will produce a subsequent equilibrium that will affect overall satisfaction. In the learning of a second language, a minimum stress or anxiety is necessary as representative of the motivation level (Bodnar, 2000). Self-control over learning generates lower levels of anxiety and a greater degree of satisfaction.

In relation to the reflections made and in order to contextualize the study, we have not found research that analyzes satisfaction specifically in these two subjects (Physical Education and English). The aim is to analyze and compare the perception of students in each one throughout an academic year and therefore, two initial hypotheses will be proposed in section 2.2 for helping us pilot the research.

Method

2.1 Sample and design

In the academic year 2015-2016 an action research project is developed in a public school in Toledo capital where the European Sections are implemented progressively.

First of all, the present study was presented to parents and teachers. It was approved by the Management Team and the Inspection Service. An action research was aimed at two groups of 6th grade (10-12 years old) who had received the same teaching from Early Childhood Education in the subjects of Physical Education and English. In English, a traditional teaching was applied and in Physical Education a constructivist approach was followed based on games.



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Secondly, students' academic records were reviewed throughout Primary Education to verify that no significant intergroup differences are observed, and students' academic results being very similar in both groups.

Thirdly, a control group and an experimental group were assigned. The control group (6th A) has twenty students (10 girls and 10 boys) and three hours a week in English, according to the traditional approach (grammar-translation), where the skills are not integrated; the handling error does not exist and the translation method is the driving axis of the class. Physical Education is taught based on directive methods more focused on teacher- centered approaches rather than student- centered approaches; the game has hardly presence at the curricular level and analytical exercises imply lower level of motor commitment.

The experimental group (6°B) has nineteen students (10 girls and 9 boys) and six hours a week in English (three in the English subject and in the Physical Education subject). In English, a communicative and integrative approach is followed; it is based on CLIL methodology, in which skills are integrated and the error is a tool, since error handling is treated as a cognitive and psychological strategy. Student centered learning has been used according to non-directive methodologies such as guided discovery and problem solving. It focuses on creating a pleasant atmosphere, fostering comprehensible input and enhances student output. In the Physical education subject, a constructivist methodology is used fostering teaching styles which allow students to share in decision making; as regards second language teaching CLIL methodology is used which does implies to reduce motor time, feedback is continuous and positive for improving the teaching-learning process. Dalton-Puffer (2007) indicates that a negative feedback used by teachers should not be a feature that prevails in classes with CLIL methodology.

A qualitative and quantitative research has been implemented. A vertical communication is developed. The questionnaires used provide us data about students' satisfaction (likes for subjects, preferences, teacher assessment, etc.), a liker-scale from 1 to 6 is used and the interviews guarantee a horizontal communication; the interviews aim is to know how the students value the treatment of error. Newby (2010) points out that the combination of



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qualitative and quantitative research methods is a fundamental requirement to obtain a better understanding.

The analytical and prospective characteristics let us to choose groups randomly, since students take part in the groups from Infant Education. It is about minimizing the Hawthorne's effect or induced response of the students, starting from the base that is being evaluated. Therefore, students find a normal situation conditioned only by the teacher's circumstances and they will not feel evaluated by other factors.

Below, the methodology used in English and Physical Education subjects is detailed.

-6th A: 1st, 2nd, 3rd, 4th and 5th grades of Primary Education. Traditional methodology in English and constructivist approach in non-bilingual Physical Education. In 6th grade, traditional methodology in English and traditional methodology in non-bilingual Physical Education.

-6th B: 1st, 2nd, 3rd, 4th and 5th of Primary Education. Traditional methodology in English and constructivist methodology in non-bilingual Physical Education. In 6th grade, CLIL constructivist methodology in English and in bilingual Physical Education.

2.2 Hypotheses

- a) The 6th grade students of Primary Education who receive a teaching with constructivist and integrative methodology in Physical Education and English will have more satisfaction than the students who receive a traditional teaching.
- b) 6th grade students who are taught considering error handling will show more satisfaction than those who are taught without considering it.

2.3 Procedure

It is intended to know students' satisfaction index in the sixth grade of Primary Education following a student-centered approach. They are taught in different methodological approaches. Therefore, several instruments were implemented in the 2015-2016 academic year such as a questionnaire of satisfaction, open-ended questions and students' interviews.

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The students completed a questionnaire based on IADO's logical framework which has been reformulated (López, 1993 cited in López and González, 2001). It is adapted in English and Physical Education subjects of Primary Education. Therefore, we have taken into account suggestions and tips from the Psychopedagogical Staff. At the beginning and at the end of the school year, students' satisfaction degree has been evaluated in order to establish the pertinent correlations.

The questionnaire used consists of ten questions with three closed questions inserted indicating the satisfaction index of each student and two open questions that detect the cause of the level of satisfaction detected. The interrelation of the questions indicates the position of each student in the satisfaction scale indirectly because the student does not know the interrelation. The scale goes from 1 (maximum satisfaction) to 6 (maximum dissatisfaction index).

Table 1 illustrates the indirect questions inserted in the questionnaire as a key factor in our analysis.

Table 1. Iadov's algorithm

	3. In English/ Physical Education. Do you prefer to do something different?										
	No				No sé			Si			
10 Do you like	-	8. If you could choose to go or not to go to English/Physical Education class. Would you go to class?									
English/Physical Education?	Sí	No sé	No	Si	No sé	No	Si	No sé	No		
I like it very much	1	2	6	2	2	6	6	6	6		
I like it more than I dislike	2	2	3	2	3	3	6	3	6		
I do not care	3	3	3	3	3	3	3	3	3		

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I dislike it more than I like	6	3	6	3	4	4	3	4	4
I do not like it	6	6	6	6	6	6	6	6	6
I do not like it	O	0	0	0	0	0	0	0	o .
I do not know it	2	3	6	3	3	3	6	3	4

The number that results from correlating the three closed questions (3, 8 and 10) indicates the degree of satisfaction of a student in relation to the subject in question. The score obtained by the student will be reflected in a satisfaction scale that is presented according to the rubric: 1. Clear satisfaction; 2. More satisfaction than dissatisfaction; 3. Uncertainty; 4. More dissatisfaction than satisfaction; 5. Clear dissatisfaction; 6. Contradictory.

Table 2 shows the scale used in order to know the satisfaction index.

 Table 2. Rating scale GSI (Group Satisfaction Index)

Maximum satisfaction index	1
More satisfaction than dissatisfaction	0,5
Contradictory/ not defined	0
Less satisfaction than dissatisfaction	-0,5
Maximum dissatisfaction index	-1

$$A (1)+ B (0,5)+ C (0)+ D (-0,5)+ E (-1)$$
GSI =

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N

N, is the number of students; ISG, is group the satisfaction index. López Rodríguez and González Maura (2002) value this technique in a positive way to assess the satisfaction index in several areas.

Results

3.1 Data analysis

At the beginning and at the end of the academic year, data collected allow us a later evaluation. The percentages are obtained in relation to the students' satisfaction index in each case.

The data obtained in the present study are reflected in table 3

Table 3. Data collected (Physical Education and English). 2015-2016

	6 th A at the beginning		6 th B at the beginning		6 th A at the end		6 th B at the end	
	E. Física	Ingles	E. Física	Inglés	E. Física	Inglés	E. Física	Inglés
Maximum satisfaction	9 (45%)	0	9 (47,3%)	0	6 (30%)	0	10 (52,63%)	12 (63,1%)
More satisfaction than insatisfaction	8 (40%)	0	9 (47,3%)	0	3 (15%)	1 (5%)	8 (42,10%)	6 (31,5%)
Not defined	1	0	0	0	1	0	0	1



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	(5%)				(5%)			(5,4%)
Less	1	7	0	8	8	12	0	0
satisfaction than insatisfaction	(5%)	(35%)		(42,1%)	(40%)	(60%)		
Maximum	1	12	0	10	2	7	0	0
insatisfaction	(5%)	(60%)		(52,6%)	(10%)	(35%)		
Contradictory	0	1	1	1	0	0	1	0
		(5%)	(5,4%)	(5,3%)			(5,27%)	
IGS	+0,625	-0,775	+0,710	-0,736	+0,125	-0,675	+0,7368	+0,789

Taking into account Iadov's logical table and considering the value +1 as maximum satisfaction and -1 as maximum dissatisfaction, data have been analyzed regarding the students' satisfaction degree in Physical Education and English subjects.

In Physical Education, initial data and results are very similar +0.625 in 6th A and +0.710 in 6th B so that satisfaction over non-satisfaction stands out; it is inferred that students have a very satisfactory assessment in both classes and the constructivist approach in which they have been taught from 1st to 5th grade. At the end of the academic year, data and results in Physical Education (P.E) offer the following results: +0.125 in 6th A, and +0.7368 in 6th B, therefore, data are very similar to the initial ones in 6th B and lower in relation to 6th A so that students have less satisfaction in traditional approach than in constructive approach.

In the English subject, initial data are: -0,775 in 6th A and -0,735 in 6th B, valuations are practically identical and dissatisfaction prevails over satisfaction; data indicate that students make a negative assessment of traditional approach which they have known from 1st to 5th grade in the English subject. Data obtained at the end of the academic year in this area are: -0.675 in 6th A and +0.789 in 6th B, initial and final values are similar in 6th A and significant in 6th B, the difference is three quarters (from the beginning to the end).



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In open answers and interviews students manifested themselves regarding error handling. The experimental group (6^{th} B) 85% (16/19) is satisfied with error handling according to CLIL methodology; the control group (6^{th} A) 80% (16/20) is not satisfied with error handling according to the traditional approach.

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 GRADE
 % students are satisfied in error handling
 % studies are unsatisfied in error handling
 Media

 6th A
 15
 80
 X=1,5

 6th B
 85
 20
 X=8,5

Table 4. Satisfaction index and error handling. 6th A y 6th B.

Satisfaction and therefore self-esteem also has its relation with punishments handling, since it corroborates the idea that mistakes must be made to learn. Students value negatively punishment handling in second language teaching according to the traditional methodology and they do not feel stressed without having a negative perception of punishment handling according to CLIL methodology.

To conclude the intervention phase, we would like to show some students' comments in the Physical Education subject:

- Control group: "I love P.E. but from on I am getting bored because I can hardly play games", "We usually work indoors and not outdoors" and "The P.E classroom is monotonous and it is difficult to work in groups".
- Experimental group: "I enjoy learning through games in class", "I am less and less afraid of speaking English" and "It has always been my favourite subject and I am looking forward to P.E time."

Some students' comments in English subject are:

- Control group: "We do not play games and we translate a lot", "The computers and laptops are not used" "I pass the time writing and I cannot speak", "The digital whiteboard is not used", "The teacher is boring and unsophisticated", "If I make a mistake, I do not feel well" y "Daily activity is to copy and translate".



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- Experimental group: "If you make a mistake, it does not matter", "The teacher has a good character and I do not feel bad if the teacher corrects me" "I enjoy doing different activities", "We usually use digital whiteboard", "I love interactive digital games such as word-search, memory games, bingo, listening comprehension, etc.", and "I love to learn... if I make a mistake (when a word is pronounced) the teacher teaches me... then, I repeat the correct world".

After the analysis of the results, we can see similarities connected to Coyle et al., (2010) since CLIL methodology improves the degree of satisfaction compared to a traditional teaching. It is necessary to maintain students' self-esteem in order to face the challenge which requires teacher's feedback and scaffolding.

Discussion

The origin of this work arises from the commitment to document and analyze satisfaction in Primary Education. In English and Physical Education subjects, two pedagogical methodologies are compared. It is difficult to document research in relation to both subjects. It has been found some research when disciplines are studied individually.

The main objective of this research discusses how students' satisfaction level in a constructivist approach is higher than students' satisfaction in a traditional methodology. The constructivist approach is more appropriate than the traditional one from a pedagogical point of view according to the criterion of the teaching staff (Saez-Lopez, 2010) and based on the student's perceived satisfaction. "Student's satisfaction improves when they are learning P.E with constructivist methodology and it does not decrease when they are learning in BPE-in-CLIL through English" (García-Calvo, 2015: 43).

On the other hand, CLIL brings more advantages than disadvantages, despite the study reveals that teachers who apply CLIL methodology need more time to prepare their classes, (Khalid and Azeem, 2012) state that most of the teachers usually use traditional methods more than innovative methods.



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As regards second language teaching, Hamer et al., 2001 (quoted in Knoerr, 2005) conducted an investigation with Secondary Education students for three years. The students who were instructed through teaching styles based on digital resources and constructivist methodology improved their linguistic abilities in comparison with those that used more traditional resources. Some researchers find similarities to the previous ones like Egiguren, 2006; Lasagabaster and Ruiz de Zarobe, 2010; Merisuo-Storm, 2011; Núñez, 2009; Ribe, 2000 and Seikkula-Leino, 2007.

In our study, the pre-intervention and post-intervention show a positive assessment through CLIL methodology. In the English subject, data obtained are quite significant between both classes and approaches used. 6th grade students who have been taught in an integrative way have a higher satisfaction index than students who have been taught in a traditional way.

Salvador-García, et al., (2018: 141) write "CLIL motivation and participation in Physical Education ... it denotes a high degree of interest and motivation in the classes". Alias (2011), Coral and Lleixa (2013) and Chiva et al., (2015) highlight the improvement of meaningful learning and motivation in Physical Education through CLIL.

In non-bilingual Physical Education, Conte et al., (2013) compare traditional and comprehensive methodology in Primary Education through a Didactic Unit about Basketball. The results indicate improvement in the performance and decision making when the students are taught in the understanding of sport. Some studies are related like Allison and Thorpe (1997), Griffin et al., (1995) and Turner and Martinek (1995).

Error handling in both methodologies is a key factor according to students' satisfaction. As regards BPE-in-CLIL methodology, García-Calvo and Salaberri (2018) indicate that a tolerant teacher attitude toward error increases the level of satisfaction and it is a useful tool for learning; the student show that error handling generates anxiety and stress when using excessive penalties.

Muchoz Basols (2004) in his work: "An error to day keeps the doctor away" considers the didactic application in error handling as a great resource to improve the ability to



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communicate in the target language. Corder (1981) indicates that we live in an imperfect world and, consequently, errors will always exist, even if we make. Gerver (2010) states that you only learn from an error or when you realize that you do not know something and that way you do not learn by just guessing.

Error handling is punished in the traditional approach; error handling provides information as a leaning tool, in the constructivist approach. A didactic approach in error handling increases satisfaction levels of students; therefore if the students do not get stressed in a pleasant atmosphere they will assume the corrective feedback better. "People can not learn languages without first making mistakes systematically" (Dulay et al., 1982: 138).

Pfenninger (2016) states that CLIL's communicative approach fosters talking and writing, productive skills more than receptive skills listening and reading. Accordingly, Navarro & García Jiménez (2018) consider that CLIL has a greater effect on comprehension and oral expression skills.

In BPE-in-CLIL students show an initial apprehension to CLIL due to the fear of the language becoming progressively interactive, self-perception and communicative competence of the student (Salvador-García, Chiva-Bartoll and Vergaz, 2018).

Conclusions

The present study interprets the perception of satisfaction of two groups of Primary Education students while being taught with different methodologies. It is not intended to evaluate teachers or question any type of methodological approach. The main objective is based on the student-centered approach in order to know the student's perception.

In the PE subject, students are taught in understanding according to modified games and sports having high satisfaction rates, either in their mother tongue (L1) or in a second language (L2). The comprehensive methodology known by the acronym TGFU (Teaching Games for Understanding) has many links with the CLIL methodology, since they have constructivist roots.



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The results obtained confirm the initial hypotheses. On the one hand, the perception of satisfaction of the 6th B group is greater when they are taught with a constructivist methodology (games and modified sports) in both subjects. On the other hand, in 6th A group the satisfaction is lower while they are taught with traditional methodology in both subjects.

In relation to error handling, it is confirmed that it affects the perception of students' satisfaction. The students show higher satisfaction index with the constructivist approach than with traditional methods.

Bilingual Physical Education in CLIL is an innovative methodological approach. In order to "enhance in students a greater feeling of satisfaction / fun with bilingual PE classes, a work methodology is necessary that facilitates the transition from teaching English to teaching in English" (Lova et al., 2016 cited in Baena et al., 2017: 89).

Bilingual Physical Education in the 21st century, rather than a hindrance, must become an excellent breeding ground to develop new approaches that improve educational quality and overcome certain identity crises.

Limitations

The study shows some limitations and the results should be interpreted cautiously. The sample size is not very wide, so it would be convenient to expand the size of it in future studies to compare better the results. In order to carry out future investigations in bilingual Physical Education, it would be fruitful to integrate comprehensive teaching in sports, CLIL and perceived satisfaction.

References

 Alias, D. (2011). El valor didáctico del juego y del movimiento en la enseñanza del inglés en el primer ciclo de Primaria. *Campo abierto*, 30 (2), 23-41. https://dialnet.unirioja.es/servlet/articulo?codigo=3899059



- 2. Allison, S. & Thorpe, R. (1997). A comparison of the effectiveness of two approaches to teaching games with Physical education. A skill approach versus Games for Understanding approach. *The British Journal of Physical Education, Autumn*, 9-13.
- 3. Alonso Tapia, J. (2001). Motivar per aprendre. Escola Catalana, 376, 10-12.
- 4. Arzamendi, J. Ball, P. & Gassó, E. (2014). Communicative approaches: A dominant paradign in ELT. *In Methodological Approaches*. Barcelona: Fundación Universitaria Iberoamericana, 4 (2) 5-130.
- Baena Extremera, A., Gomez-Lopez, M. & Granero-Gallegos, A. (2017). Aprendizaje de la Educación Física Bilingüe a partir de las metas de logro y el clima de aprendizaje. *Porta Linguarum*,
 28,
 http://www.ugr.es/~portalin/articulos/PL_numero28/6%20Baena.pdf.
- 6. Bentley, K. (2009). *Primary Curriculum Box. CLIL lessons and activities for younger learners*. Cambridge: Cambridge University Press.
- 7. Bodnar, P. (2000). Manual de Mediación. Cuba: La Cañada.
- 8. Branden, N. (1995). Los seis pilares de la autoestima. Barcelona: Paidós.
- 9. Bruner, J. (1971). The relevance of education. New York: W.W. Norton & Co. Inc.
- 10. Bunker, D. & Thorpe, R. (1982). A model for the teaching of games in secondary schools. Bulletin of Physical Education, 18 (1), 58.
- 11. Chiva, O., Isidori, E. & Fazio, A. (2015). Educación Física bilingüe y pedagogía crítica: una aplicación basada en el judo. *Retos* (115), 110-115.
- 12. Conte, L., Moreno-Murcia, J.A., Pérez, G. & Iglesias, D. (2013). Comparación metodología tradicional y comprensiva en la práctica del baloncesto/ Comparison of traditional and understanding methodology in the practice of basketball. *Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte*, 13 (51), 507-523.
- 13. Coral, J. (2012). *Physical education and English Integrated Learning: PE in CLIL in 5th grade of primary school.* (Tesis doctoral inédita). Barcelona: Universidad de Barcelona.
- 14. Coral, J. & Lleixa, T. (2013). Las tareas en el aprendizaje integrado de educación física y lengua extranjera (AICLE). Determinación de las características de las tareas mediante el análisis del diario de clase. *Retos*, (24), 79-84.
- 15. Corder, S. P. (1981). Error Analysis and Interlanguage. London: Oxford University Press. For cite this article you must use this reference: García-Calvo Rojo, S; Salaberri Ramiro, Mª. S. (2018 Physical Education and English: constructivist vs traditional approaches in bilingual and non-bilingual education.. Sportis Sci J, 4 (2), 364-387. DOI:https://doi.org/10.17979/sportis.2018.4.2.3330



Didactic Experiences Physical Education and English: constructivist vs traditional approaches in bilingual and non-bilingual education...

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- 16. Coyle, D., Marsh, D. & Hood, P. (2010). *CLIL: Content and Language Integrated Learning*. Cambridge: Cambridge University Press.
- 17. Dalton-Puffer, C. (2007). Discourse in Content and language Integrated Learning (CLIL) classrooms. Amsterdam etc.: Bejamins.
- 18. Devís, J. & Peiró, C. (1992). *Nuevas perspectivas curriculares de la Educación Física: la salud y los juegos modificados*. Barcelona: Inde.
- 19. Duff, A. (1989). Translation. Oxford: Oxford University Press.
- 20. Dulay, H., Burt, M. & Kranshen, S. (1982). *Language Two*. New York: Oxford University Press.
- 21. Egiguren I. (2006). *Atzerriko hizkuntza goiztiarraren eragina gaitasun eleaniztunean*. (Tesi dokorala). Euskal Herriko Unibertsitatea.
- 22. García Lopez, L.M. & Gutierrez Diaz del Campo, D. (2016). *Aprendiendo a enseñar deporte. Modelos de enseñanza comprensiva y educación deportiva*. Barcelona: Inde.
- 23. García-Calvo, S. (2015). CLIL curriculum design in Physical Education: transforming theory into practice. Tesis de Master. Filología Inglesa. *TAUJA*: Universidad de Jaen. http://tauja.ujaen.es/handle/10953.1/2229
- 24. García-Calvo, S. & Salaberri, S. (2017). Satisfaction index in bilingual and non-bilingual Physical Education. En actas VII Jornadas doctorales. Escuela Internacional de doctorado. Albacete, 43. ISBN 978-84-17238-22-3.
- 25. García-Calvo, S. & Salaberri, M.S. (2018). Educación Física bilingüe en el siglo XXI. Investigación-acción. Análisis de satisfacción en Educación Física bilingüe y no bilingüe. Berlín: Editorial Académica Española.
- 26. Gerver, R. (2010). *Creating tomorrow's schools today*. UK: Network Continuum Education.
- 27. Griffin, L. L., Oslin, J. L., & Mitchell, S. A. (1995). An analysis of two instructional approaches to teaching net games. *Research Quarterly for Exercise and Sport*, 66, 64.
- 28. Hewitt, E. & Stephenson, J. (2011). Foreign language anxiety and oral exam performance: A replication of Philips's MLJ study. The Modern Language Journal, 96, 170-189.
- 29. Hunt, M.J. (2011). Learners' perceptions of their experiences of learning subject content through a foreign language. *Educational Review*, 63, 365-378.



- 30. Khalid, A. & Azeem, M. (2012). Constructivist vs Traditional: effective instructional approach in teaching education. *Interantional Journal of Humanities and Social Science*, 2, 5.
- 31. Knoerr, H. (2005). TIC et motivation en apprentissage/enseignement des langues. Une perspective canadienne, *Cahiers de l'APLIUT*, (24), 2, 53-73.
- 32. Krashen, S. (1985). The input hypothesis. London: Longman.
- 33. Lakoff, G. (2017). No pienses en un elefante. Barcelona: Ediciones Península.
- 34. Lasagabaster, D. (2011). English achievement and student motivation in CLIL and EFL settings. *In Innovation in Language Learning and Teaching*, 5: 3-18.
- 35. Lasagabaster, D. & Ruiz de Zarobe, Y. (Eds.) (2010). *CLIL in Spain. Implementation, results and teacher training*. Newcastle: Cambridge Scholars Publishing.
- 36. Llinares, A. Morton, T. & Whittaker, R. (2012). *The roles of language in CLIL*. Cambridge: Cambridge University Press.
- 37. Lorenzo, F., Casal, S., Moore, P. & Afonso, M. (2009). Bilingüismo y educación. Situación de la Red de Centros bilingües en Andalucía. *Centro de estudios Andaluces*. Sevilla: Consejería de la Presidencia de la Junta de Andalucía.
- 38. López, A. & González, V. (2001). Niveles de satisfacción por la clase de Educación Física. *Efdeportes*, 32. http://efdeportes.com/efd32/satisf.htm
- 39. López Rodríguez, A. & González Maura, V. (2002). La técnica de Iadov. *Efdeportes*, 8, 47. http://efdeportes.com/efd47/iadov.htm
- 40. Malmkjaer, K. (1998). *Translation and language teaching: language teaching and translation*. Manchester: St. Jerome Publishing.
- 41. Marsh, D. (1994). Bilingual Education & Content and Language Integrated Learning.

 International Association for Cross-cultural Communication, Language Teaching.

 Member States of the European Union (Lingua). Paris: University of Sorbonne.
- 42. Mehisto, P. (2009). Managing Multilingual Education: structuring stakeholder dialogue and collaboration. *En V. Pavón, J. Ávila (eds.)*, Aplicaciones didácticas para la enseñanza



- integrada de lengua y contenidos. Consejería de Educación, Junta de Andalucía Cordoba: Universidad de Córdoba-CETA. 9- 27.
- 43. Merisuo-Storm, T. (2011). Pupil's attitudes towards foreign language learning and the development of literacy skills in bilingual education. *Teaching and teacher education*, 23, 226-235.
- 44. Mitchell, S. A., Oslin, J. L. & Griffin, L. L. (2006). *Teaching sport concepts and skills*. Champaign, IL. United States of America: Human Kinetics.
- 45. Mohan, B. A. (1986). Language and content. Reading, MA: Addison-Wesley.
- 46. Muñoz Basols, J. (2004). An error a day keeps the doctor away. Developing error awareness and error correction as learning strategies in the Spanish classroom. *In A.T.F.S. Bulletin*, 31-36.
- 47. Mussen, P. & Rosenzweig, M. (1981). Introducción a la Psicología. México: Cecsa.
- 48. Navarro, M. & García Jiménez, E. (2018). Are CLIL students more motivated? An analysis of affective factors and their relation to language attainment. *Porta Linguarum*, 29, 71-90.
- 49. Newby, P. (2010). Research methods for education. Harlow: Person Education Research.
- 50. Newmark, P. (1991). About Translation. Multilingual Matters. Cromwell: Press. Ltd.
- 51. Nuñez, J.C. (2009). Motivacion, Aprendizaje y rendimiento académico. *En actas X Congreso Internacional Galego-Portugües de Psicopedagogía*. Braga: Universidad do Miño. ISBN-978-972-8746-71-1.
- 52. Pfenninger, S. (2016). All good things come in threes: Early English learning, CLIL and motivation in Switzerland, *in Cahiers de l'ILSL*, 48, 119-147.
- 53. Piaget, J. (1966). *Comments on Vygotsky's critical remarks*. Cambridge: Cambridge Mass. MIT. Press.
- 54. Ribé, R. (2000). Introducing Negotiation Processes: an Experiment with Creative Project Work. *In Breen, M. P. and Littlejohn, A. (Eds)*. Classroom Decision-Making. Negotia tion and Process Syllabuses in Practice. Cambridge: Cambridge University Press, 63-82.
- 55. Saez-Lopez, J.M. (2010). Análisis de la aplicación efectiva de la metodología constructivista en la práctica pedagógica en general y en el uso de las TICs en particular.



- *XXI*, Revista *de Educación*, 12. Huelva: Universidad de Huelva. https://www.researchgate.net/publication/233751777_Analisis_de_la_aplicacion_efect iva_de_la_metodologia_constructivista_en_la_practica_pedagogica_en_general_y_en el_uso_de_las_TICs_en_particular
- 56. Salvador-García, C., Chiva-Bartoll, O. & Vergaz, J.J. (2018). Percepción del alumnado sobre el uso del método AICLE en Educación Física: estudio de caso. *Retos*, 33, 130-142.
- 57. Seikkula-Leino, J. (2007). CLIL learning: Achievement levels and affective factors. *In Language and Education*, 21: 328-341.
- 58. Turner, A. P., & Martinek, T. J. (1995). Teaching for understanding: a model for improving decision making during game play. *Quest*, 47(1), 44-63.
- 59. Valero Garcés, C. (1996). L1 y L2 en el aula de idiomas: la lengua maternal como comple mento metodológico en la enseñanza de segundas lenguas. *BABEL (AFIAL)*. 3/4/5, 187-197.
- 60. Vermes, A. (2010). Translation in Foreign Language Teaching: A brief overview of pros and Cons. *Eger Journal of English Studies*, 10, 83-93.
- 61. Vygotsky, L. S. (1962). Thought and language. Cambridge: Cambridge. Mas. MIT. Press.