

# Quality Factors in Bilingual Education at the University Level

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DANIEL MADRID

*University of Granada, Spain*

STEVEN M. JULIUS

*University of St. Thomas, USA*

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**ABSTRACT:** This article seeks to investigate which factors exercise the greatest influence on the quality of university bilingual/CLIL programs and their positive results. With this aim, a questionnaire was designed with 62 variables (Appendix 1) and it was applied to a sample of 164 students and 57 TEFL/CLIL professors. The results demonstrate a considerable agreement among the participants of this study, who coincided in assigning salient ratings to the professors' linguistic competence and commitment to the program, in addition to student motivation and interest. Significant statistical differences were also found between the professors and students, who had diverging views in reference to the tested quality factors. Students were found to assign more importance to the motivating effect of their professors, the need for language exchanges with native speakers, the necessity of speaking clearly in class, and the presence of native teachers. However, the professors more highly valued their personal motivation and commitment to the program, their didactic training in CLIL, the incorporation of measures of improvement in class, and the integrated planning of linguistic and non-linguistic contents.

**Keywords:** quality factors, quality education, bilingual university education, and teaching.

## Los factores de calidad en la educación bilingüe a nivel universitario

**RESUMEN:** Este artículo se propone investigar cuáles son los factores de calidad que ejercen mayor influencia en la calidad de los programas bilingües universitarios y en sus buenos resultados. Para ello, se diseñó un cuestionario con 62 variables (Appendix 1) y se aplicó a una muestra de 164 alumnos del grado de Maestro y 57 profesores especialistas en AICLE. Los resultados nos demuestran que hay fuertes coincidencias entre las valoraciones de los informantes, que coinciden al situar en primer lugar la importancia del nivel de idioma del profesor y su compromiso con el programa, y la motivación e interés de los alumnos. Hemos encontrado diferencias significativas, a favor de los estudiantes, en el efecto motivador del profesorado, los intercambios lingüísticos con nativos, hablar con claridad en clase y el hecho de tener profesores nativos. Sin embargo, los profesores le dan más importancia que los alumnos a su compromiso con el programa, a su preparación didáctica en AICLE, la incorporación de acciones de mejora en clase y a la programación integrada de contenidos y lengua.

**Palabras clave:** factores de calidad, enseñanza bilingüe universitaria, calidad y enseñanza.

## 1. INTRODUCTION

For many years, governments have proposed improvements to the education systems in their respective countries and have successively implemented legislation to that end. Amongst these policy initiatives, it is necessary to emphasize the concern for quality in education. The preoccupation with quality education has increasingly grown in importance to become the prevailing term used in the enactment of education laws in Spain. In 2002, the organic law for quality education was born with the primary objective of improving the quality of the education system (LOCE, 2002). Years later, quality is still the main objective in the more recent education legislation (LOMCE, 2013), which also sets out quality as a critical aim and stresses the fact that only a high quality education system can guarantee the equality of opportunity and progress in the merits of democracy. This is to say, that equity and quality go hand in hand. Furthermore, in the more recent law, quality education is considered a constituent element in the right to education.

In the specific field of bilingual education, the presence of bilingual/CLIL programs in primary and secondary education has increased considerably (Marsh, Mehisto, Wolff, Aliaga, Asikainen, Frigols-Martin, Hughes and Langé, 2009; Madrid and Hughes, 2011; Perez Cañado, 2012; Martínez Agudo, 2012; Marsh, Perez Cañado and Ráez Padilla, 2015). Bilingual/CLIL programs have also been extended to the university level in recent years (Ramos García, 2013; Madrid Manrique and Madrid, 2014). While from a quantitative viewpoint bilingual education is vigorously and energetically being promoted, it is prudent to evaluate whether the quality of the programs is satisfactory (Bruton, 2012 and 2013). With regard to the quality factors that the specialists in the field have identified, it is also necessary to better understand which are of primary importance to both the professors and students respectively. As will be discussed herein, there are many studies on quality indicators in bilingual/CLIL programs from primary and secondary education (Baker, 1993; Hughes, 2007; Lorenzo, Casal, Moore, and Afonso 2009). However, there is little research in bilingual education at the university level.

## 2. QUALITY AND EDUCATION

Promoting quality in education has been the priority in the vast majority of countries worldwide and it has been conceived as a philosophical and instrumental vehicle that intervenes in social transformation on a global level. In the case of Europe, the improvement is associated with accountability as enhancing quality in education has become one of the objectives of the European Commission (2001), along with the improvement of teacher training and education. The aid provided by the European Commission has been given in the form of subsidies, which have financed various projects with the aim of supporting accountability and teacher training. These grants have identified quality indicators which contribute to improving the operations of the education system with special attention being paid to teacher training (Kelly *et al.*, 2004) and language teaching (CEF, 2001).

Outside of Europe, quality indicators in education have also been established and above all in the field of language teaching (Nunan, 2002). In schools and education departments, these indicators have concentrated on two specific areas referred to as quality assurance and quality management (Hughes, 2007).

The concept of quality has been understood in various ways and there is no lack of definitions of the construct. For example, Juran and Gryna (1993) define it as a group of characteristics that satisfy the needs of clients and result in a satisfactory product. Fuentes (1994) defines the term as a control system, which is based on client-oriented principles and which is in a state of constant development through the collaborative participation of working groups. However, as recorded in UNESCO (2005), there is a certain degree of confusion in reference to the concept of quality and it is rarely interpreted as a uniform concept.

In Europe, the evolution of the quality in education movement has manifested itself through different agencies like the International Standards Organization (ISO) and the European Foundation for Quality Management (EFQM), which have accredited the quality of education initiatives and research. Quality control is intimately linked to the concept of quality assurance. As its name implies, quality assurance involves awarding a certificate which guarantees that there were certain processes employed and that the results obtained meet acceptable standards. Both aspects, quality control and quality assurance, form the basis of the quality control certificate known as ISO 9000.

The model developed by Scheerens (2004: 121) to analyze quality control factors in education, which has been adopted by the Education Quality and Accountability Office (EQAQO, 2005), is based on four central concepts: *context* (school category and size, student body, etc.), *inputs* (teacher experience, parental support, etc.), *outputs* (student achievement, intelligence, etc.), and *process* at the school level (achievement-oriented processes, quality of school curricula, etc.) and classroom level (time on task, degree of evaluation, reinforcement, etc.).

Ofsted (2001) has specified the categories that have formed the basis by which British inspectors evaluate the teaching efficacy of modern language teachers. These quality indicators can be summarized in nine points (Hughes, 2007: 100): teacher knowledge and understanding, management of pupils, effectiveness of teacher planning, effectiveness of teaching methods, use of time and available resources, teacher expectations, teaching of basic skills, use of homework, and the quality and use of engaging assessment.

As we shall see below, the categories proposed by the aforementioned authors have served as a model for other studies on quality in education and language teaching.

### 3. QUALITY INDICATORS IN LANGUAGE TEACHING

While the topic of quality has been the subject of great interest in the field of education in general, its application to the specific field of languages has been rather limited. One of the most interesting studies in foreign language education is that of Sanderson (1982: 10), which identifies a number of best practices observed in language teachers. Amongst them, the following are mentioned:

- uses the foreign language (FL) predominantly
- is vigilant about pronunciation, intonation, and stress
- uses the FL for classroom instruction
- praises correct response
- is sympathetic/positive about wrong responses
- conveys warmth in delivery of the message
- conveys warmth through facial expressions
- engages in intensive oral exploitation of material
- promotes understanding by non-verbal clues
- relates the foreign language to target culture
- explains tasks clearly
- is varied with regard to materials
- is flexible with regard to objectives
- builds on pupil error
- provides a variety of language activity
- involves the whole group
- is skilled in handling equipment
- promotes use of foreign language by pupils

Additionally, Hughes (2007) investigated the most important quality indicators in teaching a second language (L2) in the context of secondary education. The results obtained demonstrate that the most relevant indicators, which are evidenced by the highest ratings on a scale of 1 to 5 with an average higher than 4, were the following (2007: 309-322):

#### CONTEXT

- Existence of specialist subject teachers
- Existence of adequate material resources (audiovisual materials, etc.)

#### TEACHERS

- Teaching experience
- Mastery of English in all skills
- Teacher motivation
- In-service methodological training (in courses, Workgroups, etc.) and pedagogical skill for teaching English
- In-service language training

#### DEPARTMENT

- Positive communicative climate between department members
- Cooperative curriculum planning
- Departmental self-evaluation
- Assessment from the department

#### CLASSROOM PROCESSES

- Appropriate planning
- Quality of selected and prepared materials
- Level of demand on students
- Order and discipline in class
- Communication of objectives to students
- Plans to address diversity
- Socio-affective climate in class
- Student participation in activities
- Ludic use of the language (games, songs, stories, etc.)
- Level of student interest and motivation
- Communicative teacher-student relationship
- Meaningful learning and use of realistic and relevant tasks
- Use of diverse materials apart from the textbook in the teaching process
- Use of new information and communication technologies
- Autonomous work of students
- Presence of the communicative approach in English teaching
- Predominant use of the English language in class

#### ASSESSMENT PROCESSES

- Monitoring of student progress (formative assessment)
- Control of homework
- Systematic feedback provided to students
- Results obtained in external examinations
- Student ability to use English in real communication situations

#### 4. QUALITY FACTORS IN BILINGUAL TEACHING

The quality indicators that have been identified for language teaching are an appropriate starting point for the exploration of what occurs in specific bilingual teaching contexts. Many authors have studied the factors which have an effect on the success of these programs and they have come to similar conclusions.

The studies of effectiveness in bilingual teaching have examined the subject from various perspectives and they have been developed around various groups of variables (Baker, 1993): students, communities, schools, teaching and learning procedures in class, type of program applied, social contexts, political contexts, cultural contexts, and the results obtained. The success of bilingual programs depends on the integration and standardization of many factors that need to interact properly.

For Brisk (2000), the success of bilingual programs depends on the program's characteristics: teacher training, curriculum, materials used, instruction provided, and methodology used in the evaluation of results. Moreover, success is measured by means of student performance (linguistic competence, academic progress, and sociocultural integration) and it is influenced by a student's characteristics and the family's role.

Lucas, Henze, and Donato (1990) have identified eight quality indicators that give rise to an effective bilingual education for students from a minority language: giving value and status to the minority language and culture, setting high expectations for the student body, reinforcing instruction with suitable material and human resources, well-prepared teachers, support and reinforcement activities, adequate orientation programs for students, encouraging parental involvement in the program, and advancing the students' education by way of extracurricular activities.

Villareal and Solís (1998) have also conducted a study of the factors that contribute to success and best practices in bilingual/CLIL programs, by means of which they identified the following characteristics:

- Clear objectives
- Coordinators who have knowledge of bilingual education and who are committed to the program
- Governing legislative authority exercises its leadership and supports the program
- Program is well-articulated over the entirety of its duration
- Adequate student evaluation exists and is managed properly

- Program shows respect for cultural diversity and instructional languages are given the same prestige
- Sufficient books, materials, and resources are available for bilingual education
- Instruction is interactive, collaborative, meaningful, and responds to the different cognitive styles of students
- Appropriate recruitment of personnel that encourages innovation and professional development in the domains of instructional languages and action research
- Good relationships with parents so that they collaborate with the school
- Transparency and control are present in the functioning of the program and its results

Other studies (Madrid and Hughes, 2011; Lorenzo, Trujillo, and Vez, 2011) have identified the following as quality factors: the appropriateness of input to the student, use of compensation strategies, promotion of training and professional development for teachers, involvement of teachers in tasks outside of school in collaboration with other schools, and successful planning and implementation.

By using the aforementioned studies, we have conducted a research project by means of a questionnaire that includes a number of quality indicators taken from Hughes (2007), Madrid and Hughes (2011), Lorenzo, Trujillo, and Vez (2011) (see Appendix 1). This allows us to gain insight into the perceptions of TEFL (Teaching English as a Foreign Language) and CLIL (Content and Language Integrated Learning) university professors and their students as to the quality factors that exert the greatest influence on the quality of university bilingual programs and their positive results. The study was conducted while the students were involved in the bilingual degree course in primary education offered by the Faculty of Education at the University of Granada (Spain) in 2015, 2016 and 2017.

## **5. CHARACTERISTICS OF THE STUDY**

In this section, we will present a practical and descriptive research study which analyzes the importance of 62 factors or independent variables in the quality of bilingual university programs and their results.

### **5.1. Research questions to be addressed**

This study attempts to answer the following research questions:

1. What quality indicators must be accounted for in order to evaluate the quality of bilingual/CLIL programs in higher education according to the input from relevant specialists in the field?
2. What are the quality factors that exert the greatest influence on quality and positive results in university bilingual/CLIL programs in accordance with the perceptions of students who have participated in such programs throughout their university degree?

3. What quality indicators exert the greatest influence on the quality of university bilingual/CLIL programs in education from the point of view of TEFL/CLIL professors?
4. Do the ratings from specialized TEFL/CLIL professors and their students coincide when it comes to the factors that exert the greatest influence on the quality of university bilingual/CLIL programs?
5. What variables exert the greatest influence on the quality of bilingual/CLIL programs when considering both the opinions of university students and their TEFL/CLIL professors?

## **5.2. Participants**

In order to answer the research questions, the questionnaire in Appendix 1 was applied to a sample of 57 TEFL/CLIL professors and 164 student teachers. All the students were studying the bilingual degree in primary education at the Granada Faculty of Education, where the native language (L1) is Spanish, in 2015, 2016 and 2017. The sample of 57 TEFL/CLIL professors included 12 CLIL professors who taught education courses at the faculty where the study was carried out and 45 professors who imparted TEFL and/or CLIL courses in other Spanish universities.

## **5.3. Context**

The Faculty of Education at the University of Granada has offered the bilingual degree in primary education since the academic year of 2011-12. Although the degree is a CLIL program, in reality the professors that impart the subjects in English place greater emphasis on the subject content than on the linguistic aspects. The Faculty of Education's main objective, under this bilingual initiative, is to offer graduates an education that responds to the social demand for knowledge of foreign languages. This in turn allows for greater competitiveness in the ever more globalized world, where foreign language knowledge is a vital prerequisite. In addition, the degree seeks to prepare future teachers for potential integration in bilingual programs and contribute towards mobility in Europe, where multilingualism, with various degrees of competence, is increasingly more sophisticated. This bilingual effort also provides continuity to the many bilingual students who come to the University of Granada after having studied in bilingual primary and secondary schools. The degree offers approximately half of the subjects in English: exactly 116 credits of the 240 total (see: Madrid and Madrid Manrique, 2015).

## **5.4. Techniques and instruments employed in data collection**

The data in this study was obtained by means of the application of the questionnaire in Appendix 1. As we already know, the questionnaire or survey is perhaps the most widely used tool in educational research. In our case, we have designed a closed questionnaire,

where the respondents are able to express their perceptions by using a Likert-style scale with ratings of 1 to 5. This enables the quantification of the resulting data.

We have also included an open item at the end of the questionnaire so that participants might qualify their ratings of the variables if they so desire. In this way, we have also incorporated some of the advantages of the qualitative methodology into the research design as well.

In order to improve the validity and reliability of the questionnaire and obtain a more precise understanding of the appropriateness and relevance of the included variables or quality factors, we have taken into consideration the perspectives of 12 specialists (expert opinion) who judged the items' a) unambiguity, b) pertinence, c) coherence and c) adequacy in relation to the research topic (quality factors in CLIL programs). In addition, the resulting questionnaire was piloted with one group of students from the bilingual degree and, after that, its validity was improved taking into account the experts' and the trainees' opinion about the previous four categories. The final version of the questionnaire is presented in Appendix 1.

### **5.5. Techniques used in data analysis**

The data analysis and statistical calculations that have been carried out in this study have been completed using the software package IBM SPSS Statistics version 20.0. We have calculated the basic descriptive statistics (mean and standard deviation) and then we applied the Mann-Whitney U-test also known as the Wilcoxon Rank-Sum Test in those cases where the distribution of ratings was non-parametric to check whether the differences found between student and professor groups were statistically significant ( $p \leq 0.05$ ). Additionally, we have calculated the reliability of the questionnaire in Appendix 1 by means of Cronbach's alpha.

## **6. RESULTS**

### **6.1. Reliability of questionnaire**

The reliability of the ratings obtained with the questionnaire in Appendix 1 indicate high internal consistency according to the calculations of Cronbach's alpha: values of .91 and .94 for the student and professor data respectively.

### **6.2. Similarities between professors and students**

As we can observe in Appendix 2, both the professors and student teachers coincide in assigning a high rating (mean values of 4.3 or higher) to the following variables, which ranks them among the factors with the greatest effect on the quality of bilingual programs: Professor L2 level (v11), Student motivation (v7), Professors' personal commitment to the program and motivation (v9), Feedback from students to ensure comprehension (v36), Language exchanges with native speakers (v61), Emphasis on interactive activities and oral communication (v23), Motivating students in class (v33) and Achieving B2 level or higher (v62).

### 6.3. Differences between professors and students

Although there is a high degree of coincidence in the ratings given by respondent professors and students, we have found statistically significant differences, by using the Mann-Whitney U-test, in fourteen variables (table 1 and 2). The factors to which the professors gave a significant higher rating than the students are shown in table 1:

*Table 1. Variables that professors rate higher than student teachers for quality bilingual programs.*

<i>Variables</i>	<i>Mean</i>	<i>S.D.</i>	<i>Z</i>	<i>Sig.</i>
Personal commitment to the program and motivation (v9)	4,78	,459	-2.150	,03
Didactic training in CLIL (v12)	4,53	,742	-1.970	,04
Incorporation of measures of improvement in the subjects lesson plan to improve results (v46)	4,43	,742	-2.190	,02
Integrated planning of linguistic and non-linguistic contents (v17)	4,32	,754	-2.307	,02
Contextualization of learning activities to facilitate comprehension (v30)	4,27	,757	-2.243	,02

However, statistically significant differences between students and professors have been found in the following nine variables, to which the students gave a higher rating:

*Table 2. Variables that student teachers rate higher than professors for quality bilingual programs.*

<i>Variables</i>	<i>Mean</i>	<i>S.D.</i>	<i>Z</i>	<i>Sig.</i>
Motivating students in class (v33)	4,57	,653	-2.929	,00
Speaking clearly to students in class (v39)	4,53	,735	-2.034	,00
Involvement of native teachers in the program (v15)	4,28	,962	-3.757	,00
Professor personal qualities for teaching (v10)	4,27	,808	-3.530	,00
Effective tutorial system (v48)	4,18	,874	-2.192	,02
Students cognitive styles (v6)	4,06	,803	-3.651	,00
Emphasis on the linguistic components (v27)	3,99	,883	-2.368	,01
Use of L1 to clarify concepts in class (v43)	3,93	,968	-4.596	,00
Application of student self-evaluation (v53)	3,86	,950	-2.114	,03

Obviously, if a learner-centered approach is followed in class, the students' perception on the importance of these variables on a quality bilingual program must influence the professors' classroom teaching behaviour. Consequently, a special attention should be giving to motivating students, speaking clearly in class, adopting effective tutorial systems, the students' cognitive styles, etc.

## 7. CONCLUSIONS

In this study, we have sought to analyze the perceptions of a sample set of 164 students following a bilingual curriculum at the university level as well as those from a sample of 57 TEFL and/or CLIL professors. The project utilized a questionnaire to measure those perceptions, which consisted of 62 potential indicators of a quality bilingual program. The general objective has been to identify those factors which are indicative of a well-functioning bilingual program in the opinion of the study's participants. The results allow us to conclude the following:

### *Indicators to evaluate the quality of bilingual programs in higher education*

By basing this study on the quality indicators proposed by the authors covered in the review of bilingual programs, especially Madrid and Hughes, (2011), Lorenzo, Trujillo, and Vez, (2011) and Madrid and Madrid Manrique (2015), we have concluded that among the most relevant factors are those included in the questionnaire of Appendix 1.

### *Students' perceptions of the most relevant quality factors*

As the table in Appendix 2 shows, the quality factors that exert the most influence on the success of bilingual programs at the university level, according to the students' opinions, are the following: student motivation, professor L2 level, motivating students in class, feedback from students to ensure comprehension, professor commitment and motivation, language exchanges with native speakers, speaking clearly to students in class, emphasis on interactive activities and oral communication, achieving B2 level or higher, and individual work.

### *TEFL/CLIL professors' view*

The professors gave priority to their personal commitment to the program, a high L2 level, student motivation and interest in the program, availability of academic materials and human resources, performing tasks and projects related to everyday life in class, professors' educational background in non-linguistic subject contents, and language exchanges with native speakers for students.

The qualitative data obtained with the final open item in the questionnaire allows us to conclude that in order to further facilitate operational efficiency in bilingual programs and professor satisfaction, it would be beneficial for participating professors to have access to examples of best practices from their peers. Some professors also reported their conviction that the university should facilitate their ongoing linguistic training. In the same way, professors feel it would also be advantageous to investigate the effects of bilingual education

on the learning of subject contents so that educational decisions are based on valid and reliable data. Lastly, professors think it should be necessary to insist on a minimum level of foreign language competence (B2) for students in order to study degrees with instruction in a FL and similarly a minimum level (C1) for professors to teach in a FL (Ortega, 2015).

*Do TEFL/CLIL professors and students coincide?*

As previously shown in Section 6.3, there is a high degree of concurrence between professors and students. However, the greatest discrepancies found have been in relation to the use of L1 in class for clarification, the need for native teachers in the program, the importance of the students' cognitive styles, the relevance of professors' personal qualities and personality traits, contextualization of learning activities, the need for professors to speak clearly in class, the importance of an integrated curriculum, and the relevance of the linguistic components (grammar, vocabulary, etc.) (see all the specific significant differences between students and professors in Tables 1 and 2).

*Most relevant quality indicators for all participants*

If we consider the students' and professors' perceptions of the quality factors that exert the greatest influence on the success of university bilingual programs, we can conclude that the most relevant factors (mean values of 4.3 or higher) are the following:

1. Teacher/professor linguistic preparation and L2 level (v11)
2. Students' personal motivation and interest in the program (v7)
3. Teacher/professor motivation and personal commitment to the program (v9)
4. Consistent feedback from the students to ensure content comprehension and detect confusion or false impressions (v36)
5. Language exchanges with native speakers (v61)
6. Emphasis on interactive activities and oral communication (v23)
7. Motivating students in class by highlighting successes and downplaying mistakes (v33)
8. Achieving a B2 level or higher in English (v62)
9. Speaking clearly to students in class at an intelligible volume (v39)
10. Working with tasks and projects related to everyday life (v58)
11. Individual work (v54)
12. Variety of exercises and activities (v22)
13. Proper Pronunciation and Oral Expression in Class (v38)
14. Professional Development and Continuing Education (v14)
15. Availability of Materials and Human Resources(v47)
16. Didactic Preparation in CLIL (v12)
17. Content Preparation (v13)
18. Living in in English-Speaking Countries (v60)
19. Cooperative Work (v55)
20. Implementation of Integrated Content and Language Projects (v16)
21. Audiovisual materials (v34)

We expect that the identification of the quality factors that exert the greatest influence on the quality of bilingual programs in higher education, which we have presented in this paper, help the people involved in bilingual education to improve the quality of their teaching and results. Teachers can also use the items in the questionnaire of Appendix 1 as an instrument of self-evaluation of their bilingual programs with the aim of understanding exactly how well a program complies with the most relevant quality criteria represented by order of importance in Appendix 2.

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**PPENDIX 1**  
**(QUESTIONNAIRE)**  
**WHAT FACTORS EXERT THE GREATEST INFLUENCE ON THE QUALITY**  
**OF BILINGUAL UNIVERSITY DEGREE PROGRAMS AND THEIR POSITIVE**  
**RESULTS?**

Tick or complete the following as they correspond to you:

Student: \_\_\_\_ Course: \_\_\_\_ Year: \_\_\_\_ Gender: Female \_\_\_\_ Male \_\_\_\_

Professor: \_\_\_\_

Rate the influence of the following quality factors on the positive results in bilingual programs at the university level by using a scale from 1 to 5 with the following characteristics:

1 = No Importance to 5 = Very Important.

**CONTEXT VARIABLES**

1. Type of institution (public, private, etc.) and the social setting (.....)
2. Family environment of the student: social and cultural (.....)
3. Family support and involvement in the bilingual program (.....)
4. Support from the responsible institution and administration for the bilingual program (.....)

**PERSONAL CHARACTERISTICS OF STUDENTS AND PROFESSORS**

**STUDENTS**

5. General capacity, intelligence, y abilities (.....)
6. Cognitive styles, ways of learning, and multiple intelligences (.....)
7. Personal motivation and interest in the program (.....)
8. Personality traits: extroversion, sociability, risk-taking, perseverance, etc. (.....)

**PROFESSORS**

9. Personal commitment to the program and motivation (.....)
10. Personal qualities and personality traits (.....)
11. Linguistic preparation and second language level (.....)
12. Didactic training in CLIL (.....)
13. Educational background in non-linguistic subject contents to be taught (.....)
14. Professional development and continuing education (.....)
15. Involvement of native teachers in the program (.....)

## TEACHING AND LEARNING PROCESSES

### PROFESSORS

16. Implementation of integrated content units and language projects (.....)
17. Integrated academic planning of linguistic and non-linguistic content (.....)
18. Coordinating efforts from program coordinator and the teamwork by professors (.....)
19. Balanced integration of subject contents and linguistic aspects of language in class (.....)
20. Adaptation of input for comprehension in class and attention to diversity (.....)
21. Employing a variety of teaching methods (.....)
22. Variety of exercises, activities, and learning tasks (.....)
23. Emphasis on interactive activities and oral communication (.....)
24. Emphasis on reading activities and the types of texts to be read (.....)
25. Emphasis on written expression and the types of texts to be written (.....)
26. Attention to cultural and intercultural aspects (.....)
27. Emphasis on linguistic components: grammar, vocabulary, etc. (.....)
28. Emphasis on and attention paid to subject contents (.....)
29. Attention dedicated to practical activities of both linguistic and non-linguistic content (.....)
30. Contextual support and contextualization of learning activities to facilitate comprehension of course content (.....)
31. Systematic repetition of instructions and reiterating directions during in class activities to facilitate learning (.....)
32. Applying the recommendations of constructivism to facilitate the incorporation of teaching contents in cognitive function (.....)
33. Motivating students in class constructively by highlighting successes and down-playing mistakes (.....)
34. Variety of audiovisual material and realia (.....)
35. Use of information and communication technology to facilitate learning activities (.....)
36. Consistent feedback from students to ensure content comprehension and detect confusion or false impressions (.....)
37. Use of outlines, graphics, charts, concept maps, and similar techniques to synthesize information, clarify, and make connections (.....)
38. Proper pronunciation and oral expression in class (.....)
39. Speaking clearly to students in class at an intelligible volume (....)
40. Use of gestures and non-verbal communication to facilitate content comprehension (.....)
41. Appropriate treatment of mistakes made in class in a constructive way (.....)
42. Rapport between professors and students (.....)
43. Use of L1 to clarify concepts and teaching points when unclear in L2 (.....)
44. Use of L2 by professors in at least 50% of the subjects (.....)
45. Use of L2 by students for communication in class and outside of class (.....)
46. Incorporation of measures of improvement in the subjects' lesson plan to improve results (.....)

- 47. Availability of academic materials and human resources (.....)
- 48. Effective tutorial system for bilingual subjects (.....)
- 49. Giving the same status to L1 and L2 to maintain equal linguistic prestige and social recognition (.....)
- 50. Periodic evaluation and control by tests (.....)
- 51. Use of a portfolio as an evaluation tool (.....)
- 52. Application of ongoing evaluation system (.....)
- 53. Application of student self-evaluation and its consideration in student marks (.....)

STUDENTS

- 54. Individual work (.....)
- 55. Cooperative and group work (.....)
- 56. Homework (.....)
- 57. Project work (.....)
- 58. Performing tasks and projects related to everyday life (.....)
- 59. Participation in suitable extracurricular activities (.....)
- 60. Living in English-speaking countries (.....)
- 61. Language exchanges with native speakers (.....)
- 62. Achieving a B2 level or higher in English (.....)

Please comment on any other contributing factors not previously mentioned and/or give your reactions to those mentioned above:

**APPENDIX 2**

Quality indicators in order of importance from most to least according to the perception of student teachers' and professors':

	Trainees and Professors (N= 221)		Trainees (N=164)		TEFL/CLIL professors (N=57)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Professor L2 level (v11)	4,68	,616	4,69	,618	4,65	,615
Student motivation and interest (v7)	4,67	,554	4,71	,521	4,56	,631
Professor commitment to the program (v9)	4,62	,632	4,56	,674	4,78	,459
Feedback from students to ensure comprehension (v36)	4,53	,650	4,57	,635	4,42	,686
Language exchanges with native speakers (v61)	4,51	,814	4,54	,816	4,44	,811
Interactive activities and oral Communication in class (v23)	4,49	,706	4,52	,705	4,42	,712

Motivating students in class (v33)	4,49	,688	4,57	,653	4,26	,738
Achieving B2 level or higher (v62)	4,47	,803	4,49	,810	4,42	,786
Speaking clearly to students (v39)	4,43	,781	4,53	,735	4,17	,849
Performing tasks related to everyday life (v58)	4,43	,823	4,42	,852	4,45	,741
Individual Work (v54)	4,42	,683	4,47	,658	4,28	,738
Variety of activities and learning tasks (v22)	4,41	,753	4,43	,804	4,36	,589
Pronunciation and oral expression in class (v38)	4,40	,784	4,45	,749	4,27	,870
Professional development and continuing education (v14)	4,37	,760	4,39	,783	4,33	,695
Availability of materials and human resources (v47)	4,37	,668	4,34	,659	4,46	,693
Didactic preparation in CLIL (v12)	4,36	,803	4,30	,818	4,53	,742
Preparation in non-linguistic subjects contents (v13)	4,36	,672	4,34	,686	4,44	,631
Living in English speaking countries (v60)	4,33	,962	4,35	,978	4,30	,924
Cooperative work (v55)	4,32	,825	4,29	,868	4,41	,687
Implementation of integrated content and language projects (v16)	4,31	,782	4,27	,808	4,36	,704
Variety of audio-visual material (v34)	4,30	,762	4,32	,796	4,20	,655
Employing a variety of teaching methods (v21)	4,28	,778	4,30	,774	4,24	,793
Application of continuous evaluation (v52)	4,28	,860	4,34	,824	4,13	,944
Incorporation of measures of improvement in the subjects' lesson plan to improve results (v46)	4,27	,710	4,21	,693	4,43	,742
Family environment (v2)	4,26	,892	4,28	,931	4,18	,772
Support from Department and Administration (v4)	4,25	,913	4,22	,924	4,35	,886
Input adaptation for comprehension (v20)	4,25	,809	4,20	,838	4,40	,710
Use of L2 by professors in at least 50% of subjects (v44)	4,25	,935	4,20	,901	4,38	1,023
Coordination and team work by professors (v18)	4,23	,878	4,21	,924	4,29	,737
Practical Activities of linguistic and non-linguistic content (v29)	4,21	,811	4,17	,828	4,31	,755
Gestures and non-verbal communication for comprehension (v40)	4,21	,813	4,27	,735	4,04	,990
Balanced integration of content and language (v19)	4,19	,837	4,18	,846	4,24	,816
Error treatment (v41)	4,19	,781	4,24	,707	4,05	,951
Establishing rapport between professors and students (v42)	4,19	,852	4,17	,876	4,22	,786

Teacher personal qualities (v10)	4,16	,830	4,27	,808	3,84	,811
Use of TICs (v35)	4,15	,826	4,14	,830	4,18	,819
Project work (v57)	4,15	,892	4,11	,923	4,25	,799
Integrated planning of linguistic and non-linguistic content (v17)	4,14	,714	4,08	,693	4,32	,754
Native teachers (v15)	4,13	1,032	4,28	,962	3,69	1,103
Summaries Graphs (v37)	4,13	,885	4,09	,921	4,24	,769
Effective tutorial system (v48)	4,11	,875	4,18	,874	3,91	,853
Student personality traits (v8)	4,07	,850	4,12	,792	3,91	,986
Contextualization of learning activities to facilitate comprehension (v30)	4,06	,816	3,98	,825	4,27	,757
Emphasis on and attention paid to subject contents (v28)	4,04	,784	3,99	,781	4,19	,779
Emphasis on reading activities (v24)	4,02	,864	4,00	,880	4,09	,823
Use of L2 by students for communication (v45)	4,00	,998	3,95	,982	4,13	1,037
Emphasis on written expression (v25)	3,98	,820	3,98	,818	3,98	,835
Student capacity and intelligence (v5)	3,94	,772	3,97	,757	3,87	,818
Applying constructivism to cognitively incorporate contents (v32)	3,94	,797	3,89	,826	4,07	,696
Student cognitive styles (v6)	3,92	,872	4,06	,803	3,53	,940
Participation in suitable extracurricular activities (v59)	3,92	,913	3,97	,896	3,77	,954
Emphasis on linguistic components (v27)	3,90	,906	3,99	,883	3,65	,935
Giving the same status to L1 and L2 (v49)	3,90	1,033	3,99	,970	3,65	1,168
Family support (v3)	3,87	1,091	3,77	1,146	4,15	,870
Application of student self-evaluation (v53)	3,77	,999	3,86	,950	3,49	1,086
Attention to cultural aspects (v26)	3,76	,952	3,78	,968	3,73	,912
Use of the L1 to clarify concepts (v43)	3,73	1,038	3,93	,968	3,18	1,038
Homework (v56)	3,68	,974	3,74	,987	3,52	,926
Institution type and its social context (v1)	3,57	1,106	3,54	1,135	3,65	1,022
Systematic repetition of contents in class (v31)	3,51	1,032	3,51	1,002	3,53	1,120
Use of portfolio as an evaluation tool (v51)	3,37	1,087	3,30	1,097	3,60	1,034
Periodic evaluation by tests (v50)	3,25	1,074	3,28	1,042	3,17	1,167