

## Communicational and linguistic competences in initial teacher training

### La competencia comunicativa y lingüística oral en la formación inicial de maestros

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#### Abstract

The teaching by competences in the university supposes new challenges. This study shows results of a study in which a teaching innovation is implemented in the initial training of teachers in relation to the development of communicative competence and oral language. The main objective is to identify the changes in the abilities of the students of two groups of the teacher's degree, one of the second year and another of the fourth year, when introducing a teaching innovation with the purpose of contributing to improve their oral communicative and linguistic competence. The evaluation instruments used are the Assessment scale of oral language in school context (EVALOE) (Gràcia et al., 2015) and a rubric related to the argumentative text, which includes 6 dimensions (interaction management, multimodality, prosody, coherence, textual cohesion, argumentation, lexicon). The results show the adequacy of these instruments as well as teaching innovation resources for the improvement of the oral competence of the students, as well as their evaluation. The students of the two class groups improve their communicative and argumentative competence in most dimensions, although there are differences between the groups, due, among other aspects, to the characteristics of the subjects and to the way each teacher implements the innovation.

**Keywords:** communicative and linguistic competence, teaching innovation, initial teacher training

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## Resumen

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La enseñanza por competencias en la universidad supone nuevos retos. Este estudio presenta resultados de un estudio en el que se implementa una innovación docente en la formación inicial de maestros con relación al desarrollo de la competencia comunicativa y la lengua oral. El objetivo principal es identificar los cambios en las habilidades de los estudiantes de dos grupos del grado de maestro, uno de segundo curso y otro de cuarto curso, al introducirse una innovación docente con el propósito de contribuir a mejorar su competencia comunicativa y lingüística oral. Los instrumentos de evaluación utilizados son la Escala de valoración de la lengua oral en contexto escolar (EVALOE) (Gràcia et al., 2015) y una rúbrica relativa al texto argumentativo, que recoge 6 dimensiones (gestión de la interacción, multimodalidad, prosodia, coherencia, cohesión textual, argumentación, léxico). Los resultados ponen de manifiesto la adecuación de estos instrumentos tanto como recursos de innovación docente para la mejora de la competencia oral de los estudiantes, como de su evaluación. Los estudiantes de los dos grupos clase mejoran su competencia comunicativa y argumentativa en la mayoría de las dimensiones, aunque se aprecian diferencias entre los grupos, debidas, entre otros aspectos, a las características de las asignaturas y a la manera como cada docente implementa la innovación.

**Palabras clave:** competencia comunicativa y lingüística, innovación docente, formación inicial de maestros

The role of teachers has changed as a consequence of the creation of the European Higher Education Area (EHEA), as well as social changes and the widespread use of technologies and their incorporation into educational contexts. This implies the need to review the way of approaching the university training of teaching staff in order to adapt to the new paradigm that promotes new competences in future professionals, including communicational skills (Pagés et al., 2016).

In the last few years the focus on skills has gained ground in all fields and at all levels of formal education. As Coll (2009) states, competence-based approaches imply progress with respect to previous approaches and proposals, but also have significant limitations as well as involving risks and dangers when they are put into practice. According to the author, an essential ingredient of these approaches implies that being competent in a field of activity or practice means being able to activate and use relevant knowledge to deal with certain situations and problems related to that field. Thus, for example, being competent in communication in the mother language means having the ability to "express and interpret concepts, thoughts, feelings, facts and opinions in both oral and written form (listening, speaking, reading and writing), and to interact linguistically in an appropriate and creative way in a full range of societal and cultural contexts; in education and training, work, home and leisure," (European Parliament, 2006). A second valuable contribution of these approaches is related to the necessary integration of different types of knowledge (practical and cognitive skills, factual and conceptual knowledge, motivation, values, attitudes, emotions, etc.). Thirdly, it is important to underline the importance of the context in which the competences are acquired and in which they will subsequently be applied. Finally, one of the key elements is the priority given in the primary stages of education to the acquisition of a special type of competences: those that convert the learner into a competent learner, those that are at the foundation of the ability to continue learning throughout life, those that allow development of the metacognitive capacities that allow autonomous and self-directed learning, learning to learn, which implies the regulation of learning.

At present, one of the most necessary transversal competences in any university graduate is communicative competence. Initial teacher training is not excluded from this process and, on the contrary, this skill implies a challenge as it is considered even more essential for these professionals (Cano, 2010; Cinici, 2016; Ruíz-Muñoz, 2012; Sá Ibrahim & Justi, 2016).

The communicative competence of nursery and primary school teachers is crucial for the creation of stimulating environments that help students learn the contents of the curriculum in a constructive manner

and develop their language (Justice & Ezell, 1999; Marinac Woodyatt, & Ozanne, 2008; Mercer, 2010; 2013; Gràcia). Through the active participation of students, they are expected to complete the primary stage of education having achieved pragmatic competence in various languages, which allows them to ask questions, request explanations, demand information, question, raise doubts, argue, debate, and reflect on language in diverse situations that are more or less formal or academic in relation to content, interlocutors, contexts, and different objectives (Generalitat de Catalunya, 2013; Ishihara & Cohen, 2014; Gràcia, Vega, & Galván-Bovaira, 2015; Gràcia, Galván-Bovaira, & Sánchez-Cano, 2017).

Learners should be able to put into practice and develop all of these communicative functions and abilities by constructing oral texts appropriate to the context, which are rich and complex from the semantic-pragmatic and formal perspective. This objective can only be achieved if the school facilitates their use of language to interact in a dialogical manner (Mercer, 2010; Kathard, Pillay, & Pillay, 2015). The school must be able to create situations in which the students feel safe, in which they can request help, in which their classmates, the teacher, and other professionals can be role models, in which strategies that contribute to the development of these skills and communicative competences, and in which reflection on language and its use is promoted (Hoffman, 2011; Swain & Lapkin, 2013).

In order to ensure that students at the stages of early childhood and primary education develop the aforementioned competences, it is essential for their teachers to be aware of this requirement and to be competent to accompany their students in the process of learning this content.

Inclusion of authentic activities at university, related to the construction of oral texts, is important since this is a powerful instrument to generate and transform knowledge, improve the quality of learning, develop critical thinking among students, and make them participants in their education processes (Peña, 2008). In addition to its contribution to academic achievement, the ability to orally communicate ideas in a clear and convincing way is indispensable for the professional performance of students preparing to work as teachers, since they will have to help their own students develop this skill.

Ruíz-Muñoz (2012) highlights the lack of publications describing experiences centered on the oral and written competence of university students within the framework of the EHEA, and points to the need to commit to the implementation of research and innovation initiatives on the use of strategies linked to the creation of oral texts in the classroom, aimed at professional development.

Along the same lines, other authors argue for the need to encourage the participation of university students in classes as an element of building critical thinking, which entails a series of concepts about the construction of didactic discourse (Acosta, 2012; Monarca, 2013), construction of knowledge as a shared social product, and construction of knowledge as a subjective process and a process of student learning; therefore, an idea about how to learn and how to teach. This participation, understood mainly as participation based on oral interventions in classes (Mercer, 2013), means understanding that this is a practice and a competence that is learned, the acquisition of which is part of the learner's history and which, therefore, must be considered by the teacher, which requires that it is part of the didactic proposal.

Ogienko and Rolyak (2009) state that, in the last 20 years, this skill has been one of the most important contents of initial teacher training. However, in a recent study, Zlatić, Zlatića, Bjekić Marinković, and Bojović (2014) conclude that there are few differences in terms of communicative competence between teachers and non-teachers, or between student teachers who have participated in communication skills training and those that have not, with certain exceptions. We agree with the authors that, as has already been pointed out, it is necessary to design specific programs to improve the communicative competence of university students in general (Doherty, Kettle, May, & Caukill, 2011) and those studying a teaching degree in particular (Cebrián-Robles, Franco-Mariscal, & Blanco-López, 2018), as well as for active teachers (McNeill & Knight, 2013).

As regards the perceptions of students who are undergoing the training process and their professors and lecturers, Domingo, García, Gallego, and Rodríguez (2010) find that the university students who are trained as teachers have a very low opinion of the efficacy of their communications skills as speakers, communicators in class, or to participate in meetings and tutorials, although they do improve as they progress through the year.

The same is true of their teachers regarding themselves, which can be interpreted as evidence that one of the problems lies in the fact that university teachers do not feel sufficiently well prepared or competent to train future teachers in the area of communicative competence.

Regarding the types of texts that must be promoted in university lecture rooms, the literature highlights that argumentative discourse in the classroom encourages critical analysis and decision-making, since they emerge in group reflection activities in which different contents are analyzed (Felton, García-Milà, Villarroel, & Gilabert, 2015; Leitão, 2000). The studies underline that generating argumentative discourse during interactions with others, collecting diverse perspectives, and questioning a specific position contribute to the construction of complex knowledge, since they produce views that are not initially considered. These studies confirm the need to train future teachers to be able to promote argumentative discourse in the classroom.

In the same vein, some studies show that when arguments are constructed collectively in an oral argumentation activity, group members generate more proposals and tend to evaluate them and consider alternatives to their own individual creations (Correa, Ceballos, Correa, & Batista, 2003). All of this confirms that discussions in the classroom can become highly appropriate teaching situations to improve students' ability to produce high-quality argumentative texts (García-Milà, Gilabert, Erduran, & Felton, 2013; Kuhn & Udell, 2007; Kuhn, Hemberger, & Khait, 2016), that is, to improve their oral language skills.

The studies reviewed highlight that students on initial teacher training degree courses need to be aware of the ability to intervene in class, arguing and counter-arguing (Larson, 2000; Li, Zheng, Tang, & Sang, 2015; Parker & Hess, 2001). This is essential to make sense of the content and to learn it with a high degree of meaning (Cano & Castelló, 2016; Coll, 2013; Mercer, Hennessy, & Warwick, 2017; Pozo, 2016), and this includes reflecting on their skills in order to manage a conversation, generate coherent and cohesive texts, argue their opinions, and counter-argue or refute the views of their peers or the teacher, among others.

As future teachers who are going to conduct their teaching work in a context which increasingly supports individualized teaching where the learner is the protagonist (OECD, 2017), where oral language has a fundamental role, it will be useful for them to turn classes into communicative, creative environments, in which students participate, ask, negotiate, argue, and reflect on the knowledge they are acquiring and on language in order to improve their communicative competence and give meaning to learning all of the content. They can also actively make use of these strategies way in school meetings, staff meetings, and when meeting specialists (psycho-pedagogues, counselors, speech therapists, etc.). Meetings with families, which are increasingly presented as a key element in teacher training (Willemse, Thompson, Vanderlinde, & Mutton, 2018), in all their diversity, will also undoubtedly also be enhanced if teachers have incorporated this set of skills.

In addition to issues specifically related to oral communicative competence, one of the main topics that are currently being proposed in terms of teaching innovation in universities is to guarantee its sustainability. Sustainable changes require approaches that encompass both the individual development of teachers and the organizational development of university structures and culture (Pagés et al., 2016). As Zabalza (2013) underlines, discussing the quality of university education implies promoting the quality of learning and personal resources proposed by the institution, such as training and innovation projects, which are key elements of institutional quality (Rodríguez, Olmos, Ortega, Torrijos, & Hernández, 2014). To do this requires institutional support for innovation projects and teacher training, as well as actions that influence the development of the competence of educational innovation. One of these supports is the call for funding made in 2014 by the Generalitat de Catalunya for research projects, which was aimed at improving the quality of initial teacher training at Catalan universities (ARMIF-2014 and ARMIF-2015). These are projects that attempt in some way to respond to one of the challenges that attract most interest in this type of proposal, according to Parcerisa, Bascos, Calafell, Comas, and Noguera (2011), which is related to methodological innovation in teaching aimed at involving the students, organizing space and time, assessing learning, and addressing diversity in the classroom.

All of these considerations are linked to the objectives proposed by an inter-university team of researchers within the framework of two projects related to the public funding calls mentioned above, in which they initially studied the teaching competences associated with the communicative field in the current social and

professional context, identifying the degree to which they were included in teaching plans and incorporated into university lecture rooms, from the perspective of in-service teachers, and teaching staff and students at two Catalan universities (Gràcia, Jarque, Vega, Bitencourt, Vinyoles, & Santa Olalla, 2016). A pilot study was subsequently carried out in which a teaching innovation was implemented (Gràcia, Jarque, Astals, Rouaz, & Tovar, 2017; Gràcia, Jarque, Astals, & Rouaz, pending publication), which was designed based on the results obtained in the first study, which in turn served as the basis for the research presented in this paper.

The primary objective is to identify the changes in the skills of university students studying teaching degrees when a teaching innovation is introduced with the purpose of contributing to improvements in their communicative competence and linguistic skill.

### Method

The study has the characteristics of action-research (Latorre, 2003; Riba, 2007), in which the researcher is directly involved in training the participants in order to implement teaching innovation in their subjects. At the same time, it is a study of cases (Yin, 2009) that are analyzed in some depth, understanding each case to be the group of students and their respective teachers.

#### *Participants*

Two teachers from the Universitat de Barcelona and their respective student groups took part in the research; specifically, one teacher of a compulsory subject in the second year of the teaching degree in early childhood education and their group of 49 students, and one teacher of a fourth-year subject in the specialization of attention to diversity on the teaching degree in early childhood and primary school education and their group of 26 students. The former is a core subject that involves two sessions per week each lasting two hours and the latter is an elective subject involving a single weekly session lasting two hours. One researcher participated in the training process of the participating teachers.

#### *Instruments*

Data collection, intervention, and analysis instruments were used.

a) *Guidelines to implement the Conversational Methodology*. This is a 10-page document that includes the main characteristics of the Conversational Methodology (Gràcia, Galván-Bovaira, & Sánchez-Cano, 2017), which is a methodological proposal in which oral discourse is the object and mediator in the teaching and learning process and includes various resources and strategies. Likewise, the instrument includes specific guidelines for implementing this methodology in university classes.

b) *Section for Follow-up, Recording, and Assessment of Argumentative Conversation*. This is a section that was created ad hoc for the pilot study carried out prior to this research, to observe, record, and assess communicative and linguistic competence during an argumentative conversation in a cooperative group and in a class group. Table 1 shows the section, which includes six dimensions, indicators, and descriptors.

Table 1.

#### *Dimensions and Indicators of Section*

Dimensions	Indicators
Interaction Management	Interactive markers Turn taking Politeness strategies
Coherence and argumentative strategies	Argumentative validity and thesis Retort and rebuttals Organization and selection of information Evidential constructions
Vocabulary and Terminology	Common Jargon and terminology
Textual Cohesion: connection	Connection between fragments and sentences Processing of information
Multimodality	Facial and manual expressions Body language and gestures
Prosody	Intonation Locution



c) *Construction of Argumentative Texts*. This document outlines the theoretical foundations at the base of the section. The aim of this instrument is to provide students with tools for reflection on the argumentative activity and to construct their own texts. A perspective is adopted that combines concepts and theories about argument using different approaches: logic, rhetoric, pragma-dialectics, and the construction of knowledge.

d) *EVALOE*. This is a scale formed by 30 items grouped into three subscales, which can be scored from 1 to 3. It is a scale that is validated in the context of early childhood and primary education (Gràcia, Galván-Bovaira, Sánchez-Cano, Vega, Vilaseca, & Rivero, 2015) (see Table 2), which has been used for the first time in a university context to assess the way in which participating teachers teach oral language in class, introducing the necessary adjustments (see Table 3).

Table 2.

*Subscales, Number of Items and Total Score on the Original EVALOE (Gràcia, Galván-Bovaira, Sánchez-Cano, Vega, Vilaseca, & Rivero, 2015)*

Subscales	Description	Score
Context and communication management (7 items)	Assesses in a global scale the organization of the context of the classroom and the communication in a physical and normative context	-/ 24
Instructional design (8 items)	Assesses the objectives, activities and evaluations in relation to the spoken language, to see if the information is incorporated and made explicit in the programs	-/ 21
Communicative functions and strategies (15 items)	Assesses how teachers instructs the use of resources of spoken language in specific social situations (to inform, to ask, amongst others), as well as the use of communicative strategies to promote the expression of the students	-/ 45
TOTAL		-/ 90

Table 3.

*Subscales, Number of Items and Total Score on the EVALOE Adapted to a University Context (Gràcia, Adam, Carbó, Rouaz, & Astals, 2018)*

Subscales	Description	Score
Context and communication management (7 items)	Assesses in a global scale the organization of the context of the classroom and the communication in a physical and normative context	-/ 14
Instructional design (6 items)	Assesses the objectives, activities and evaluations in relation to the spoken language, to see if the information is incorporated and made explicit in the programs	-/ 12
Communicative functions and strategies (8 items)	Assesses how teachers instructs the use of resources of spoken language in specific social situations (to inform, to ask, amongst others), as well as the use of communicative strategies to promote the expression of the students	-/ 16
TOTAL		-/ 42

The differences between the two versions lie specifically in the reduction of the number of items that make up the three subscales, based on the characteristics of the university educational space, the reformulation of the statement of certain items, and the inclusion of items in some cases.

Specifically, regarding the subscale on context and management of communication, item 7, *the teacher moderates the management of turns so that the participation of the whole group is balanced*, was eliminated, given that the reformulation of item 4, *the teacher facilitates the intervention of the students while constructing the oral text*, includes the role of the teacher as the moderator of the interaction. In addition, the statements of items 2, 3, 4, and 8 of the original version were reduced to link the two instruments: the EVALOE scale and section. For example, the initial statement of item 3, *the teacher and the students explicitly refer to the communication norms that regulate the oral intervention of the students*, was revised in the following terms: *the teacher and the students refer explicitly to the dimensions of the section*.

As regards the instructional design subscale, items 3 and 4 were included under the statement *the teacher and students take an active role during the discussions*. The statement was thus reformulated in such a way that it would reflect elements of the section and the concretization of the type of discursive and conversational methodology.

Regarding the subscale of communicative functions and strategies, the following items were included: *the teacher teaches to give information, the students give information, the teacher teaches to obtain information and, the students obtain information*, to end up creating two, summarizing the content and incorporating elements of the section: *the teacher models the construction of conversational texts* and *the students construct conversational texts*. Items 5, 6, 7, and 8 are related to the regulation of social action and interaction, with which two new items were formulated combining the four already mentioned: *the teacher explicitly uses the formulas of social interaction* and *the students use formulas of social interaction*. Finally, items 11, 12, 13, 14, and 15 were revised, producing two items: *the teacher reformulates and/or clarifies the statements of the students* and *the students review their intervention based on the reformulation and/or clarification of the teacher*.

### **Procedure**

The data collection process was carried out following a series of phases. First, permission was sought from the study directors of the early childhood education and primary education degrees. Second, the researcher met the two participating teachers to present the general scope of the teaching innovation project and joint decisions were made on their collaboration. Taking into account the results of the pilot study conducted the previous year using the same instruments (Gràcia, Jarque, Astals, Rouaz, pending publication), as well as the characteristics of the two participating teachers, the necessary adjustments were made to the initial teaching innovation proposal, specifying the strategies and resources that would be introduced in each of the thematic blocks, the assessment, the information provided to the students, the consent document to be able to record video of some class sessions, etc.

During the period of data collection (February-May 2018), we carried out innovative work on the thematic blocks included in the teaching plan following the guidelines included in the document to which we have already referred and in line with the decisions that were taken at meetings between the researcher and the two teachers. In the first class the project was explained to the students in detail and their consent was requested. After the second class, the introduction of innovations began. In the class group for Case 1 (second year), five video records were made throughout the four-month period, each lasting two hours. In the class group for Case 2 (fourth year), three sessions were recorded during the semester. In addition, 10-minute videos were recorded of the assessment activities that the teachers proposed to the students as part of the ongoing assessment of the subject. Audio recordings were also made of small group conversations in class regarding tasks that were proposed to the students. These last two sets of recordings were made by the students themselves and then sent to the teacher via e-mail.

The researcher and the two teachers met once a week after the beginning of the data collection to talk about the teaching innovation process, discuss doubts and difficulties, assess the changes, and make adjustments.

### **Data analysis**

In this paper we only present the results of video recordings made in class. These were analyzed by the researcher and two psychology degree students who had previously participated in the pilot study and were familiar with the analysis instruments. In order to agree on the criteria for the analysis of the activities carried out by the teachers and students with the EVALOE adapted to the university context, the same procedure was used as in the pilot study regarding the section. After analyzing a class session independently, the scores of the researcher and the two students were put together and the criteria followed were discussed, and then the next analysis of another session of the other teacher was carried out. This was done until the criteria were agreed through a process of discussion and agreement. Once agreement was reached, one of the psychology degree students analyzed the five sessions of the class group for Case 1, and the other student analyzed the three sessions of the class group for Case 2, with both using the two aforementioned instruments and the criteria for the assessment general of the class session as a basis.

## Results

### *Analysis of the class sessions with the section*

Figure 1 shows the results from the analysis of the class sessions for Case 1 and Case 2 in terms of each of the dimensions of the section.

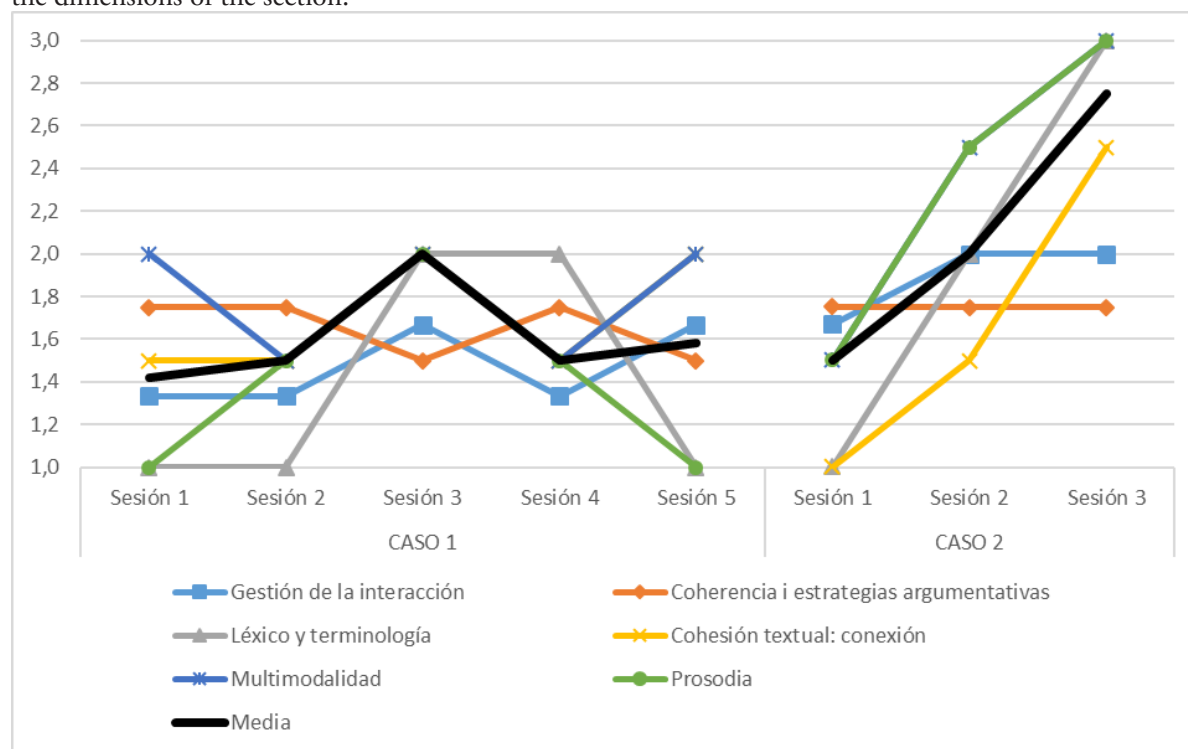


Figure 1. Results of assessment of the class sessions with the section in the groups for Case 1 and Case 2. The score by dimension and the total of the different sessions is included (score 1-4 according to the qualitative description included in the section).

Regarding Case 1, there is an increase in the scores linked to the dimensions of *management of interaction* and *textual cohesion*. On the other hand, the scores are maintained in the dimensions of *multimodality*, *lexicon and terminology*, and *prosody*, as well as a decrease in *coherence* and *argumentative strategies*.

With regard to the dimension of *management of interaction*, it should be noted that in the first session the score was 1.3, since the students do not use courtesy strategies and not all group members participate during the class group discussion. In general, some students intervene as spontaneous spokespersons of the small work group, expressing the ideas discussed during the small group discussions, so one cannot speak about network interaction. In the third session, the score was 1.7, due to an increase in participation and some well-organized individual interventions. However, students show few communication skills and participation is still dominated by spokespersons of small groups. In the fourth session, the scores generally decrease, since many students had to leave the class for different reasons, which influences the development of joint discussion. In the fifth session the score was 1.7, since the teacher proposed discussing the communicative competence of a group of students who had presented a video recording of their activity. It was thus possible to generate fluid discussion, in which the elements to be improved and appropriately developed stand out.

With respect to the dimension of *coherence and argumentative strategies*, it should be noted that the initial score was 1.8, but that declined to 1.5 in the final session. Throughout the sessions, students do not go into greater depth in their interventions and only express ideas without contributing sufficient arguments to develop a coherent oral text. Nor were they able to mention sources of information to support their interventions and, on very few occasions, they pose counterarguments in response to interventions by other students or the teacher.



In terms of the dimension of *lexicon and terminology*, the score is maintained throughout the different sessions, which is a reflection that the students only rarely use the specific terminology on which they are working in class in their interventions.

As regards *textual cohesion*, a score of 2 is attained, which displays a certain organization of the interventions, as well as the presence of some references to interventions by their peers.

Neither in the dimension of *multimodality* nor in that of *prosody* were there any great changes throughout the sessions, which means that the students do not improve their skills related to intonation, on the one hand, nor the skills to incorporate gesticulation and expressiveness, having, in some cases, continued making gestures of initial discomfort or nervousness during their interventions.

In Case 2, we observed an increase in the scores throughout the three sessions assessed. As can be seen in Figure 1, the average of the dimensions obtained in session 1 was 1.5, while the average obtained in the last session was almost 2.8. With regard to the dimensions, we see a progressive improvement in *prosody*, *lexicon and terminology*, *multimodality*, and *textual cohesion*; whereas in the dimensions of *management of interaction*, and *coherence and argumentative strategies*, we observe no clear improvement.

Regarding the dimension of *management of interaction*, a score of 1.7 was obtained in the first session, since the students do not show the ability to promote and manage interaction in the network. They do not generally use interactive markers to favor participation in the network, since those who intervene only look at the teacher; the length of the turns was sometimes asymmetric and approximately half of the students participated; and we only observed intermittent use of courtesy strategies that favor participation. In the second session, the score was 2, with some use of interactive markers that favor participation in the network. And in the third session there were no changes in this dimension, because the score remains at 2 points.

With respect to the dimension of *coherence and argumentative strategies*, an initial score of 1.8 was observed, which is maintained in the three sessions. Throughout the semester the students did not improve in the competence of arguing or counter-arguing in a reasoned manner with the aim of reaching a consensus, nor in the skill of selecting or organizing the information. In addition, they did not include the sources of information on which the arguments for their interventions were based in any of the sessions.

In the dimension of *lexicon and terminology*, we observed a very pronounced improvement throughout the different sessions. In the first one, a score of 1 was obtained, which reflects the use of common vocabulary to inaccurately refer to specific concepts in the area and which makes it difficult to understand the content. In the second session they achieved a score of 2, which means that specific terms in the area are being used, but with some conceptual errors. And in the third session, the score was 3, since the students used specific terms in the area accurately.

In *textual cohesion* the students obtained a score of 1 in the first session, which reveals a lack of organization in their interventions, since the different parts of the discourse are not indicated, nor do they make use of logical-semantic connectors. They also fail to use modal operators (perhaps, obviously, etc.) in an exemplary or inferential manner, etc. In the second session, the situation improved and they obtained a score of 1.5. And in the last session, they achieved a score of 2.5, since they use connectors correctly to indicate the different parts of the discourse, in addition to using specific operator markers to distinguish facts from opinions, concepts and examples, desires, and hypotheses, etc.

In the dimensions of *multimodality* and *prosody*, we observe the same improvement curve. In the first session a score of 1.5 was obtained in both dimensions, in the second 2.5 points, and in the third 3 points. This increase shows that students are improving skills related to non-verbal aspects, such as manual gestures, and facial and body expressions, and their abilities related to the ability to speak clearly to express content and transmit emotions (intonation and locution).

#### ***Analysis of class sessions: EVALOE adapted to the university context***

Figure 2 shows the results associated with the progress of students and teachers in terms of management, instructional design, and communicative functions and strategies measured using the EVALOE adapted to the university context (Gràcia, Adam, Carbó, Rouaz, & Astals, 2018).

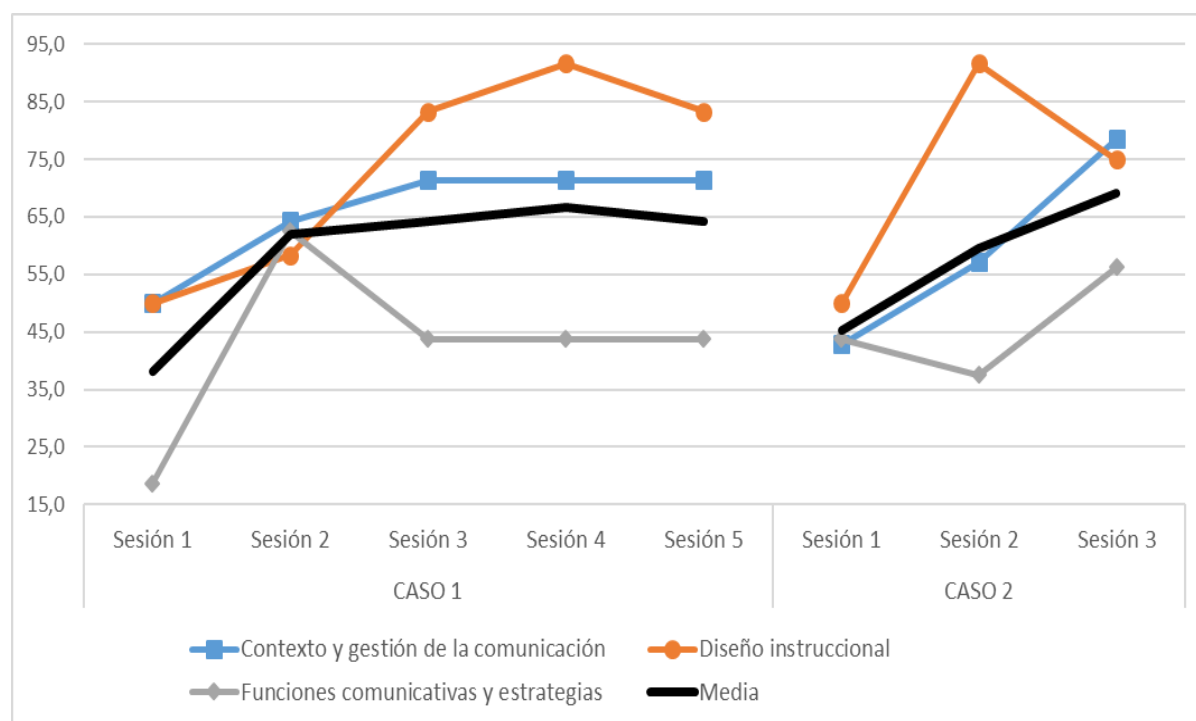


Figure 2. Total results of the assessment of the class sessions using EVALOE in the groups for Case 1 and Case 2. The percentage achieved in each session is shown.

In Case 1 we see an evolution in all the subscales throughout the five sessions. In the subscale of *context and management of communication* the students obtained an initial score of 50% and a final score of 71.4%, which is a reflection of the fact that the teacher sets out the dimensions in the section as learning objectives related to communicative competence with the purpose of integrating the instrument as such in the construction of knowledge, facilitating the students to elaborate their interventions a little more, since it incorporates them by reformulating them, general changing them into questions. For example, we highlight the following interventions by the teacher: "look at your classmates", "let's not forget our manners", "what do you think broadly speaking?" The first two are examples of the item *the teacher and the students refer explicitly to the dimensions of the section* of the subscale. These examples also allow us to demonstrate that the item assessed links the section indicators referring to *interactive markers and courtesy strategies*, which form part of the dimension on *management of interaction*.

In the subscale of *instructional design*, the scores increased from 50% to 83.3%, which is explained by the fact that the teacher assesses the students' oral texts based on the dimensions of the section, thus facilitating work toward the objectives linked to the improvement of communicative competence. The difference in the scores between the fourth and fifth sessions is due to the fact that the students adopted a more active role in the discussion and a network interaction was created for a few minutes, which allowed the construction of a joint oral text. As an example, the following intervention should be highlighted: "As she said, I think one strategy could be..." This intervention implies that some students re-reformulate their statements to better convey their ideas in relation to the definition of strategies to overcome possible learning barriers. Therefore, the item *the teacher and students take an active role during the discussions* is reflected by the attempt to argue the ideas in a network.

And lastly, the score also increased on the subscale of *communicative functions and strategies*, rising from 18.8% to 43.8%, although it was lower compared to the rest of the subscales due to the fact that the students did not carry out interventions by way of a summary, despite the modeling of the teacher, nor did we observe reformulations of their statements. The results indicate that the students generally limit themselves to

responding in a gestural manner, without establishing a conversation using formulas of social interaction. As an example of this, it should be noted that students did not achieve the maximum scores in the following items: *the teacher models the construction of conversational texts* and *the students construct conversational texts*. Despite the reformulations by the teacher, the students intervene for a short time and a maximum of 10 students participate. In addition, when reaching the final session, the students had yet developed the skill to argue with correct reference to information sources, so their oral texts continue to be opinions that are not based on theoretical aspects on which work has been done previously.

In Case 2 there is an evident improvement in the average of the subscales throughout the three sessions assessed. In the *context and management of communication* subscale, the students obtain an initial score of 42.9% and a final score of 78.6%, which reflects a significant improvement in the items: *the students manage their participation in the conversation; during the discussion activities, a format of network interaction is adopted;* and, *the teacher incorporates the communicative interventions initiated by the students into the oral text*. We can observe that the students learn to intervene by creating an argumentative text without the need for the teacher to manage their participation; this uses the interventions made by the students to complete their oral text ("As X has said, the EVALOE will be useful for us to..."); and finally it creates a network interaction in the discussion activities, because when it is time for the students to make interventions, the teacher joins the circle formed by the students and thus facilitates them to look at each other and talk amongst themselves.

In the subscale of *instructional design*, the scores increased from 50% to 75%, rising as high as 91.7% in the second session. These results were achieved because the teacher tried to set out the objectives that were proposed in relation to the dimensions of the section, so the teacher and the students end up adopting a more active role during class discussions, meaning that there are no longer three students plus the teacher who intervene, but practically the whole class group participates in the last class. A higher score is obtained in the second session than in the final session, since the teacher more clearly explains the objectives that are proposed in relation to the dimensions of the section and also because they explain previous knowledge related to the dimensions of the section in a clearer manner. This high score in the second session is due to the fact that the teacher devoted much of the session to clarifying issues about the section, the objective, and its dimensions, as well as organizational matters.

Lastly, in the subscale *communicative functions and strategies* the students obtained a score of 43.8% in the first session, which increased to 56.3% in the final session. This was the subscale in which the lowest score was achieved in the respective sessions because students found it difficult to build conversational texts, they did not use formulas of social interaction when they did intervene, and they found it difficult to summarize and/or draw conclusions from their interventions or those of others. As regards the teacher, the maximum score was attained on the item *the teacher reformulates and/or clarifies the statements of the students* and average scores for the following items: *the teacher models the construction of conversational texts*, *the teacher uses explicit formulas of social interaction*, and *the teacher models the resource to summarize or draw conclusions after discussions in class*.

The lowest score in this subscale was obtained during the second session, and the differences were primarily identified in the following items: *the students construct conversational texts*, *the students use formulas of social interaction*, and *the teacher models the resource to summarize or draw conclusions after discussions in class*.

### Discussion

The general objective that we proposed at the beginning of the research was to identify the changes in the skills of university students studying a degree in teaching when introducing a teaching intervention with the aim of contributing to the improvement of their oral communicative and linguistic competence.

The results of two class groups with different characteristics are presented. Although the objective of the research was not to compare the two groups, the results highlight certain differences between them, which are probably related to the specificities of each of the subjects (type, weekly teaching hours, course, objectives, and content), the number and characteristics of the students, the teaching strategies and style, and the theoretical and practical knowledge linked to the teaching innovation proposal, among others.

The results of the analysis of the class sessions show that the instruments used simultaneously as a tool for

teaching innovation and analysis enable us to identify certain improvements throughout the implementation of the teaching intervention.

The instrument developed to help teachers and students incorporate strategies associated with argumentative discussion enabled us to identify changes in both teachers and their groups of students throughout the semester, similar to those in the pilot study (Gràcia, et al., pending publication). Although the overall scores for the two groups for the section for the first session, in Case 1 there were significant fluctuations from the second session, although without an evident increase in the scores, while in Case 2 there was a general increase in the overall score and for the different dimensions.

These results seem to indicate that the instrument is sensitive to changes in the dimensions associated with interaction management strategies, lexicon and terminology, multimodality, coherence and argumentative strategies, textual cohesion, and prosody. Indeed, with the differences between one group class and the other, we observe greater use of interactive markers throughout the semester, although not in a systematic manner, as well as increased use of courtesy strategies, although not to a conspicuous degree. As regards coherence and argumentative strategies, the results show that, in general, few arguments and counterarguments are initially provided, they are incorporated very discreetly, and the pattern of organization of the information is initially inconsistent, while references to the source of information on which the arguments are based is increased, although also only slightly. Regarding the lexicon, the results seem to indicate that it is highly dependent on the session and that conceptual errors are very often made by the students when the specific terminology of the subject or theme that they are addressing is used, or they simply make little use of the specific lexicon on which they are working. On the other hand, the use of multimodal elements and prosody seems to improve throughout the sessions. Overall, the results obtained from the analysis of the section appear to indicate that students initially have little competence in the type of measures taken, in line with the findings of other authors (Peña, 2008, Ruíz-Muñoz, 2012), in spite of the fact that most of the curricula for the subjects in the teaching degree at this university include these skills (Ogienko & Rolyak, 2009). However, a specific intervention introduces improvements, which are very subtle in some cases, which seem to depend on other factors, such as the specific activity that is being conducted or the number of students in the class. Although the number of hours of a class may have been a relevant factor, in this case this does not seem to be true, since, we generally observe a greater improvement in Case 2, which involves two hours of classes per week, than in Case 1. On the other hand, another factor to take into account is the course which the students are studying and in which the subject is included. In this case, the results are as expected. Although the initial scores are similar, those for group in Case 2 improve more clearly throughout the semester than those in Case 1. This is the final course and the students tend to be more aware of their limitations and of the skills they need to develop because very soon they will have to face a series of challenges.

In terms of the EVALOE adapted to the university context, the results highlight more evident changes throughout the semester in the direction expected. The teachers incorporate conversation management strategies, try to make their students aware of the inclusion of content related to oral language in classes and their assessments, and use certain communicative strategies in their classes, such as clarifications or summaries of what has been said during a discussion or debate activity. These findings suggest that the adjustment in the instrument as a consequence of the results obtained in the previous study in the university context (Gràcia et al., pending publication) contributed to an increase in its utility, not only for analyzing the interactions that take place in a university context, but also to improve it, since it was one of the elements that helped teachers incorporate changes into their classes. In other words, the results generally underline that the strategies introduced by the teachers in their classes imply an awareness on the part of the future teachers of the importance of the content related to oral language, which is one of the challenges that this study proposes for university education (Doherty et al., 2011), and specifically that of future teachers (Cebrián-Robles, Franco-Mariscal, & Blanco-López, 2018), as well as active teachers (McNeill & Knight, 2013).

Future research along these lines could probably make contributions that allow us to introduce elements into classes that are linked to reflection and self-regulation by students that help incorporate communicative and linguistic competences in the same way, but in a manner that is more evident. This could well be possible with the introduction of this type of competences in a more systematic way in a greater number of subjects based on collaborative work between teachers in different subjects.

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