



Collaborative teaching and learning of interactive multimodal spoken academic genres for doctoral students

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ABSTRACT

The last teaching-learning stage in the education system is the doctoral programmes, which turn graduate students into researchers. This evolution involves writing a dissertation, but also being able to discuss research. However, training on spoken genres has not received much attention, and the interest has been mainly on monologic prepared speeches. This paper focuses on a genre of interactive speech, the discussion session (DS) that follows the paper presentation, which is particularly challenging for novice researchers. We present a learner-led pedagogy for the teaching-learning of this genre that fosters thinking-based learning and multimodal awareness. It was implemented in a course of academic discourse for doctoral students in order to prove its effectiveness. We propose a process of active and collaborative deconstruction and construction of DSs to identify verbal and non-verbal resources and their interpersonal functions, so that novel researchers reflect on and integrate them in their repertoire.

KEYWORDS: Novice researchers, Discussion sessions, Genre-based pedagogy, Collaborative learning, Critical thinking, Multimodal awareness.

1. INTRODUCTION

Teaching doctoral students to become fully recognized researchers is a challenge for most university lecturers, and not much research has been conducted on it yet (Araiza, Kutugata & Pérez, 2015). PhD training courses need to share certain principles, such as critical thinking (Laal & Ghodsi, 2012) and collaboration (Araiza et al., 2015). Moreover, collaborative learning requires the acquisition of cognitive and social skills (Le, Janssen & Wubbles, 2018).

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One of the priorities for doctoral students is learning the right use of academic and disciplinary discourse, a task even more difficult when they need to use a foreign language such as English. Writing has been the focus of most research attention at this level of studies (Ädel, 2010; Cheng, 2008; Flowerdew, 2015), but no research to our knowledge has focused on the teaching and learning of academic spoken discourse, even less on spontaneous spoken communicative events. Conference discourse is always a great challenge for novice researchers, especially the discussion session (DS), in which, by means of generally unpredictable dialogic encounters, presenters have to convince the audience of the value of their findings and conclusions (Querol-Julián, 2011). The conference colony of spoken genres (Bhatia, 2004; Koester & Handford, 2012) needs to be effective, not only for being understood, but also for persuading the audience of the relevance of the results presented. Discourse analysis can serve as a basis for the teaching and learning of genres such as discussion sessions following conference presentations (Davies & Lester, 2016), where it is common to find an ensemble of “linguistic, visual, audio, gestural and spatial modes of meaning” (Cope & Kalantzis, 2009: 166). Although verbal expression is often considered the most significant mode of communication, multimodality shows that all modes have the potential to contribute to meaning in the same way (Jewitt, 2013). Nonetheless, only a few studies have focused on the multimodal nature of conference presentations. Morell (2015) shows that effective speakers use modes that often overlap and combine to convey meaning. In the interviews held in her study, speakers recognize the need for greater awareness of the affordances of the modes available for communication, which can lead to improved performance. As Archer (2010) claims, students need to learn the several semiotic resources that make meaning, they need “to engage in the critical analysis of multimodal texts and videos, which in turn requires a detailed understanding of how such texts function to begin with” (O’Halloran, Tan & Smith, 2015: 260). One of these functions is to persuade the audience about the relevance of one’s research, considering that conference presentations are discipline and context dependent (Valeiras-Jurado, 2015). In general, the speakers aim at convincing the audience about the originality and value of their research, according to disciplinary rules, while they assume the responsibility for the decisions taken and the interpretations of their findings. In the same line, Wulff, Swales and Keller (2009) identified the evaluative nature of the discourse used in the DS. Evaluation refers to the aspects of the discourse that signal participants’ attitude and engage the audience. It is used to show an appropriate professional persona and it is an important aspect of persuasive discourse. All these characteristics of conference presentations DSs are common to other spoken research genres such as research seminars and theses defences DS, in which speakers also need to persuade the audience about the value of their research.

On the other hand, Clennell (1999) and Lam and Wong (2000) suggest the need for explicit teaching of conversation strategies and pragmatic awareness. However, this is not an

easy task, since there are few materials that include them, and those that do are not based on authentic events. Moreover, Reese and Wells (2007) propose adopting an experiential method to teach discussion skills, using authentic materials and creating real-like learning situations. This experiential learning approach is in line with teaching pedagogies of spoken discourse (Cameron, 2001; McCarthy & Carter, 2014). Though it is an interesting approach, it does not take into account the multimodal nature of spoken academic discourse. That is the reason why we claim the importance of teaching discussion skills from a multimodal perspective. This may promote awareness of how the different semiotic resources employed to express meaning contribute to the development of interpersonal relations and the construction of the genre. In this regard, much research has been conducted on “multimodal literacy” since the concept of “multiliteracies” was introduced by the New London Group (1996), as a pedagogy that “focuses on modes of representation much broader than language alone” (Cope & Kalantzis, 2000: 2). However, the bulk of its development targets multimodal and digital texts to engage learners -generally in lower educational levels- in meaningful multimodal inquiry (Serafini, 2014; Walsh, 2010), rather than face to face interaction, as is the case in the research we have developed.

Regarding the approaches to teach genres, the Sydney school, based on Systemic Functional Linguistics (SFL) and the model of language development (Rose & Martin, 2012), elaborated scaffolding into an explicit methodological model that has largely been called the teaching-learning cycle. Gibbons (2002: 16) defines scaffolding as “a special kind of help that assists learners in moving toward new skills, concepts, or levels of understanding”. Most of the models following this approach (see Martin (1999, 2009) for a review of the different models) are mainly designed for primary and secondary education, and literacy teaching. It was not until the latest generation, with the Scaffolding Literacy in Academic and Tertiary Environments project (SLATE) (Dreyfus, Humphrey, Mahboob & Martin, 2015), that higher education has come into focus. The SLATE project has been one of the sources of inspiration for the present research, though it was designed to meet a different aim, teaching and learning writing skills using web-based materials. It provided online genre-based embedded language and literacy support for undergraduate linguistics and biology students at the City University of Hong Kong. In the present study, we take as a basis genre-based pedagogy to adapt the Sydney perspective (and especially their teaching-learning cycle) in order to teach an oral interactive discourse to doctoral students. This pedagogy serves the development of our conception of learning-focused teaching (Light, Calkins & Cox, 2009). From this perspective, learning is seen as conceptual development of student relationship with subject content, and as active-reflective construction, while the focus of teaching is “developing ways to help students improve and change their conceptual understanding” (Light et al., 2009: 29).

The objective of this research is to prove the effectiveness of an adaptation of the teaching-learning cycle pedagogical model in a course on conference academic discourse for a group of PhD students. In order to meet this objective, we pose two research questions:

Q1. Are doctoral students aware of the multimodal characteristics of the DS genre and their influence on interpersonal relations?

Q2. Can a scaffolded critical thinking approach help them in their learning and use of this genre?

The remainder of the paper is structured as follows. First, we present the pedagogical model we have designed; then, we introduce in the Method section the context and participants in the implementation (section 3.1), as well as the resources and data collection tools (section 3.2). In section 4, the procedure we have followed is explained as well as the findings. This section is divided into subsections presenting each of the 4 sessions used for the implementation, and a follow-up analysis we have conducted. The findings and conclusions are discussed in section 5.

2. PEDAGOGICAL MODEL: THE TEACHING-LEARNING CYCLE OF DISCUSSION SESSIONS

In this section we present the justification and principles of the model. The teaching-learning cycle “allows a learner to move towards increasing independence in using a particular genre as the teacher gradually removes support” (Hyland, 2007: 161). Taking into account the models presented by Dreyfus et al. (2015), Feez (1998), and Rothery (1996), we similarly propose a three-stage teaching-learning cycle of DSs:

1. Modelling and joint deconstruction:
 - 1a. from previous experience and/ or predictions
 - 1b. from data analysis.
2. Joint construction.
3. Independent construction.

However, the substantial difference with earlier versions of the model in terms of structure lies in the way we design ours as a learning-oriented model from the outset. We distance ourselves from earlier models by making learners responsible for its deconstruction, rather than the teacher. Learners develop critical thinking skills while they are engaged in a “joint” deconstruction of the genre. This part of the learning process raises genre awareness and increases students’ responsibilities. Furthermore, we propose this joint deconstruction of the genre to be done from two perspectives: students’ previous experience and/ or predictions about the genre, and the analysis of real examples.

The flexibility of the model allows teachers and learners to move from one stage to another when there is a need. Figure 1 illustrates the model. The core of the figure represents its aim. By means of a critical orientation, the novice researchers are expected to gain control of the genre of DSs, as well as of the verbal and non-verbal resources of the discourse. We pay attention to the macro level of the discourse, the rhetoric structure; and to the micro level: lexico-grammar distinctive features, paralinguistic and non-verbal features. In a second and third layer, students are made aware of the objective of the discussion session to persuade the audience about the value of their research and in this way to contribute to the development of the field of research; as well as to start building, or to develop, social and professional relations between the speaker and the audience, and also among the members of the audience, which is often the ultimate purpose of attending conferences.

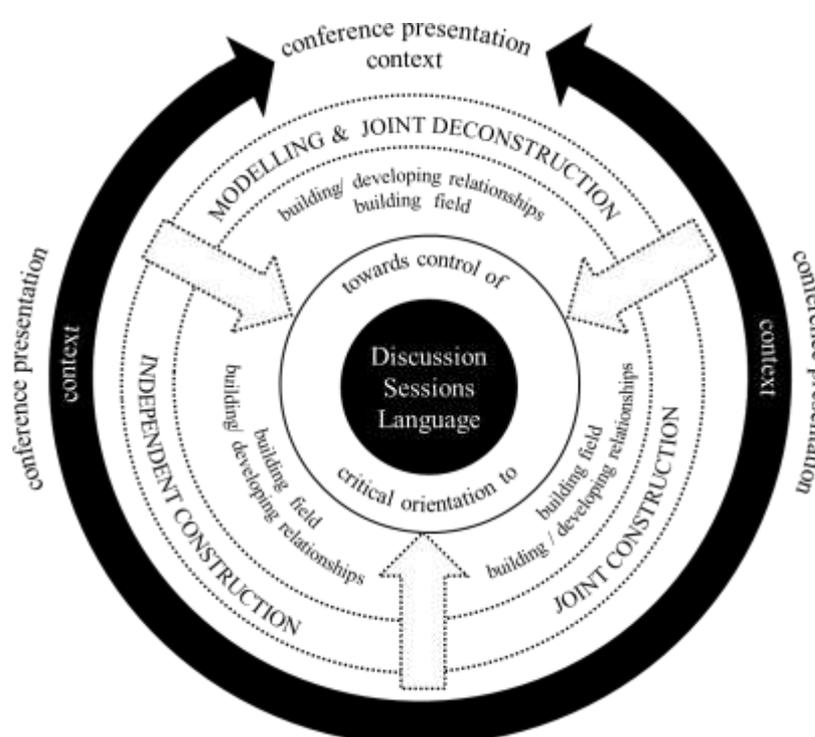


Figure 1. The teaching-learning cycle of Discussion Sessions.

Before proceeding with the three stages of the pedagogical model, students will be made familiar with the relevant elements of the conference presentation context (setting context) and especially those that affect the DS. In previously proposed genre-based models (designed to instruct writing, as mentioned), context was a central part as it is present during the entire cycle (Hyland, 2004; Rothery & Stenglin, 1994), and it is also very important in speech events. As stated by Valeiras-Jurado (2015), social context determines to a great extent the possibilities of persuading the audience about the benefits of one's research. In conference presentations, social context determines relations between speakers; time context may affect relations between different speech events; and space context establishes the

position of the speaker and audience (proxemics), as well as the visual elements that can be used as a support for the presentation.

As this proposal is addressed to students who may already have some experience attending conferences in their field, a critical review of the context of conferences is proposed. Discussion, which is central in the model, aims at provoking students' awareness of what they may need to feel integrated in the conference context so that they can ask questions, or reply to discussants' questions when they are presenters. In the present proposal, we adopt Bloom's revised taxonomy of educational objectives (Krathwohl, 2002) to foster meaning construction, moving learners from the development of LOTS (low order thinking skills) to HOTS (high order thinking skills); from the retention (remember) to the transformation of information (understand, apply, analyse, evaluate, and create). The use of discussion to engage learners in the joint construction and deconstruction of the genre is a common thread in the model. Learners need to think from different perspectives in an organized way to solve a problem. In general terms, we try to engage them in an individual, social and active learning process.

3. METHOD

3.1. Context and participants

The model was applied in a course on English for Research for doctoral students at Universitat Jaume I where English is a foreign language. The course was opened to the students enrolled in any doctoral programme at the university. It took place from March to May 2016. It consisted of 30 hours of teaching sessions, structured in 3 modules of 10 hours each, on how to write research papers (module 1) and how to present research (modules 2 and 3). The third module introduced learners to the genre of conference presentations and the DSs that follow them. In this module, students learned how to present their papers in international conferences where English is the vehicular language, as well as how to ask and respond to questions or make and reply to comments during the discussion session. In the present study, we focus on the 4 sessions, approximately 5 hours, where the teaching-learning cycle of discussion sessions was implemented.

There were 15 Spanish doctoral students attending the course from the fields of Linguistics, Economy, Psychology, Education and Industrial Materials. They were in their first or second year in the doctoral programme. None of them had previous training in how to participate in international conferences. Regarding their experience, 60% of them had never presented in a conference, 20% had never attended one, 50% had attended from 1 to 3, and

30% more than 5. They were motivated to take the course by the urgent need to internationally disseminate their research.

3.2. Resources and data collection tools

To measure the effectiveness of the model, we followed a naturalistic and qualitative research paradigm, based on the concepts of validity and reliability adopted in qualitative research (Golafshani, 2003). We align with Lincoln and Guba (1985) who reveal the congruence of validity and reliability in this type of research. They state, "[s]ince there can be no validity without reliability, a demonstration of the former is sufficient to establish the latter" (316). In the next section, we demonstrate that the research truly measures what it was intended to measure, and therefore how truthful the research results are. Table 1 presents the resources used to promote learners' engagement in the three stages of the model, and the tools employed to collect data.

Table 1. Engagement resources and data collection tools.

Session	Stage	Engagement resources	Data collection tools
1	Joint deconstruction	Previous experience and/ or predictions	Online questionnaire Audio recording of group discussion
	Modelling	Teacher's oral presentation Repertoire of linguistic and non-linguistic resources and discourse structure	-
2	Modelling & Joint deconstruction	Authentic video recordings	Audio recording of group discussion
3	Joint construction	Thinking technique	Online document created by learners: Guidelines for effective discussion sessions
4	Independent construction	Simulation task	Video recording of paper presentations and discussion sessions Online assessment form

The pedagogy focuses on learners' engagement, where the teacher plays a secondary role facilitating the learning process and being central only during the modelling. The joint deconstruction and construction and the independent construction of the genre are based on learners' previous experience and/ or predictions, the analysis of video recordings of discussion sessions, a well-structured thinking process, and a simulation task. Data was collected by the teacher during the sessions, through audio recording group discussions and

video recording the simulation task, and by means of different online tools, such as a questionnaire, a document created by learners, and an assessment form. With the aim of capturing natural class interaction, learners were not informed about being audio recorded during the discussion sessions. We therefore present data in a way that avoids their identification. Regarding the video recording of the simulation task, we asked the participants for consent. In addition to the analysis done during the implementation of the model, two years after it we enquired the participants about its effectiveness with an on-line form.

As follows, we explain the procedure followed to implement the model and some of the most significant findings.

4. PROCEDURE AND FINDINGS

4.1. Modelling and joint deconstruction from previous experience and/ or predictions (session 01)

The starting point for the deconstruction of the genre of DSs was based on the learners' previous experience and/ or their predictions. This information was gathered with an online questionnaire that the learners responded in class during the first session of the course. The use of this virtual tool allowed the teacher to retrieve the answers and to share them with the group immediately after they completed the task.

The questionnaire was structured in four dimensions and several sub-dimensions, that is, the areas of interest we wanted the learners to reflect on: i) Aim (of the presentation of the research and of the DS), ii) Difficulty (in general and in the use of the foreign language), iii) Structure of the dialogic exchange, and iv) Multimodal nature of the discourse (linguistic and non-linguistic resources). Regarding the latter, as mentioned above, the DS is characterised by its persuasive nature, thus we considered some embodied semiotic resources that may help the speaker and the active listener to express this interpersonal meaning (Querol-Julián & Fortanet-Gómez, 2012); that is, facial expression (e.g. smile, raise eyebrows, frown), gaze (e.g. keep or avoid eye contact), head movement (e.g. nod, shake), and gesture, which is also a valuable communicative tool to express meaning, particularly for non-native speakers who can use gestures with compensatory functions. As regards paralinguage, phonetic stress and duration of syllables were selected as they have been proven to serve an intensification function (Aylett & Turk, 2004). Finally, silence, which structures talk, is a powerful resource to save face after unexpected questions and criticisms, and thinking time has to be wisely managed (Querol-Julián, 2011).

Moreover, we wanted to promote self-awareness of the role of the participants in the DS: asking questions or making comments, and responding to those questions and comments, while they focused their attention on the presenter, the discussant, and the audience. Thinking

based-learning was provoked with open questions, and simple choice or scale questions followed by statements such as: “Justify your answer”, “If so, why?”, or “If not, name others.”

While completing the questionnaire, we gave students time for individual thinking, to self-reflect on what they had previously experienced (as presenters and/or discussants, or as part of the audience that is not openly involved in the discussion), or on their beliefs (in the case that they did not have any conference experience). We asked all the learners to think about DSs in the context of conference presentations. This was the preparation for the joint deconstruction of the genre in a whole group discussion. Group discussion gave the participants opportunities to reinforce thoughts and beliefs, and to confirm or reject assumptions.

During the whole process the teacher acted as a facilitator, helping learners to be more independent, more resilient and more reflective. She asked thought provoking questions and challenged learners, was an active listener and a feedback provider. The type of open questions used to stimulate discussion were: “what would you do?,” “what would you say?,” “what do you think?,” etc. Besides, group discussion allowed also a more profound reflection on some issues related to the topics covered in the questionnaire, particularly on the dimensions of Aim and Difficulty. The discussion was audio recorded and analysed together with the data from the questionnaire. For example, to the question “Say how demanding you think discussion sessions that follow the presentation of the research are”, learners rated it 3.6 (in a scale from 1 to 4, meaning 4 “high demanding”), described it as an uncontrolled situation (both in the questionnaire and during the discussion), stressed the importance of “the others”, and recognised possible unexpected/ tricky questions and negative comments. In light of these responses, more questions were formulated to the whole group about their fears.

The two major fears they acknowledged to have during the DSs were: “you are asked something you don’t know”, and “you don’t understand the question” because of the content or the language. The first answer given to “what you would do or say when you do not know what to answer” was an open recognition of their many doubts. The teacher called their attention towards the image of themselves that they want to project as members of the academia. Eventually, the group came up with the agreement that the answer should praise the comment and show interest in considering it for further research. They also agreed on asking for repetition and checking understanding, if they had not understood the question. On the other hand, in the questionnaire they mentioned the possibility of receiving negative comments; however, during the discussion they did not contemplate criticisms, not even as one of their fears. The teacher promoted awareness and group-reflection on this important issue, asking “what happens if you have a critical comment?, what would you do?” The discussion showed three main positions: acceptance, defence, and the idea that the response

would depend on how the criticism was expressed (with a special emphasis on non-verbal semiotic resources), the speaker's intentions and if it was a constructive comment or not. This reflects the importance given to the relation with the others and their position as novice researchers in front of a more experienced audience.

In the same session we continued promoting self-reflection and self and group awareness of the genre through two teacher-guided activities. Special focus was placed first on the interactional patterns of the genre and then on the linguistic and non-linguistic resources used by the participants. We aimed at contributing to the development of a critical orientation in the learners. The final goal was that novice researchers gained control of the DSs language to create and/or maintain interpersonal relations. In the first step towards the modelling and joint deconstruction of the genre, guided by the teacher and based on their previous experience and/or predictions, they already showed evidence of their awareness of the importance of interpersonal relations. Next, they were provided with some tools to deconstruct the genre in this respect. First, the teacher made a presentation of the flow of the discussion, the different participants and their roles, the types of turns, the sequence of the dialogue, and the dialogic exchange patterns. Then, modelling was focused on examples of the different linguistic and non-linguistic resources commonly used, and their functions. A repertoire of these resources, as well as of the discourse structure of DSs, was shared with the learners (Appendix A). As explained in the introduction, to our knowledge the study of the genre of DSs, and of research spoken genres in general, from a multimodal-in-context approach is remarkably limited. Hence the design of the repertoire was based on our earlier research on the Multimodal Discourse Analysis (MDA) of DSs (Querol-Julián, 2011; Querol-Julián & Fortanet-Gómez, 2012, 2014).

4.2. Modelling and joint deconstruction from data analysis (session 02)

During the second session, the learners were engaged in the analysis of the multimodal discourse of a dialogic exchange between the presenter and the discussant: a comment plus a question followed by a response. Due to the fact that learners come from different disciplines, we carefully chose an example whose topic was understandable by the whole group and of general interest for them. The video belongs to a dataset of video recordings of conference presentations and their subsequent discussion sessions from The Conference in Honor of John Swales¹. During the deconstruction of the dialogic exchange, we promoted interaction among the students to foster critical thinking about the interpersonal relations. The analysis was structured into two steps (Figure 2). In each step, students worked in pairs and then they shared and discussed their findings with the whole group.

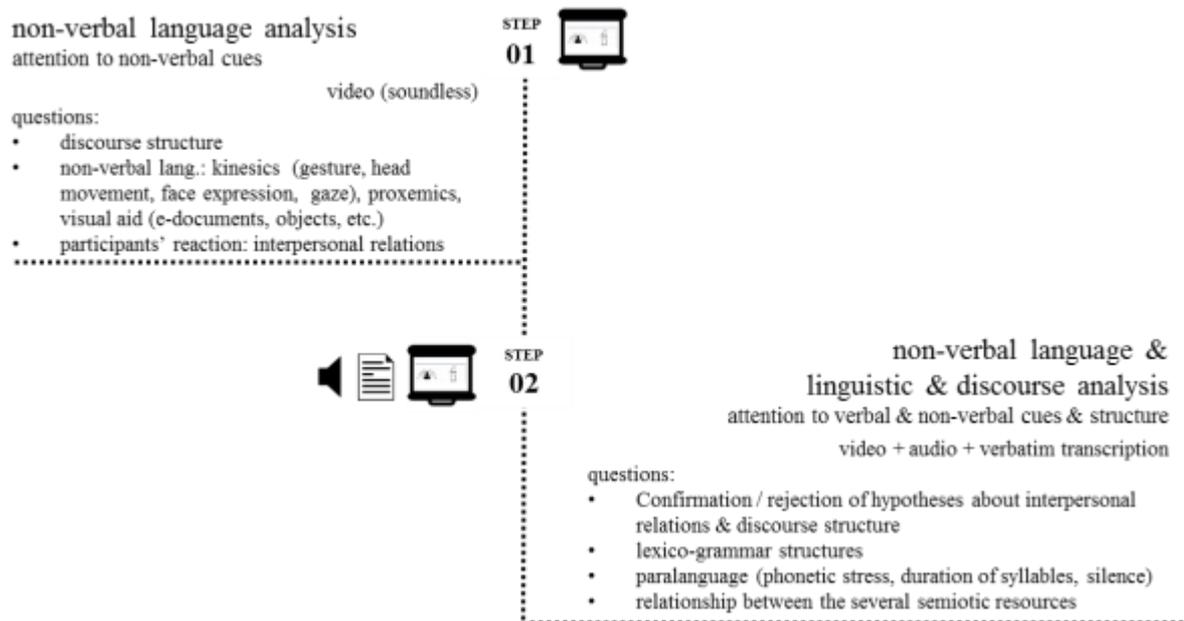


Figure 2. Modelling and joint deconstruction from data analysis.

First, participants had to focus on the non-verbal cues, watching the muted video of a dialogic exchange and responding to simple questions related to: the discourse structure, the non-verbal language, and the participants' reaction. The example below shows an excerpt from the group discussion about the presenter's reaction to a comment. They were engaged in the description and interpretation of her gaze (lines 2, 3, 4, 7), facial expression (lines 9, 14, 16), and gestures (lines 11, 12, 17). There was not a general agreement and this made the discussion even more enriching with witty and descriptive arguments. The teacher did not show her interpretation yet, as she had more information than the learners at this stage of the analysis, but just repeated or reformulated what they said, and stimulated discussion.

T: what do you think is happening here?, what do you think may be happening?

L1: she looks down a couple of times

T: she looks down

L2: I think she was looking for something because I think she was (...)

Ls: turning pages maybe

T: turning pages <Ls: yes> she was arranging pages she has used for the presentation that is why she is looking down

L1: but it seems she is avoiding something, well you said that when someone looks down perhaps is avoiding the confrontation because there is a criticism

T: uh, okay

L3: she is like [imitating facial expression]

T: more things, she is like doing this [imitating the presenter] let see if this is because of avoiding eye contact or because of another reason, and then

L4: I don't know if that's something that I just do or what, but when I'm sort of (unintelligible word) turn to a question I do this [fixing glasses on] <Ls: Ah> and she does too, and that is that is something I do unconsciously, like okay, it's a way to be ready. I don't know if this makes sense or what

L1: maybe <T: what do you think?>It's a difficult question. What we all are saying is that she is doing all these things because she was nervous or she was thinking about how to <Unknown L: answer> answer

T: any other thing?

L3: smile

T: smile

L3: she gets the smile but it says I'm thinking [imitating facial expression] <Ls: LAUGH> she is not really like relaxed, I don't know

L2: but then she looks comfortable because she she she her gesture is like, as I can see, this part, the elbow resting on like she being confident

L5: I think she is pretending to show that, but she is not

L2: maybe

[silence]

T: something else (L2's name)? no? no more ideas?

After the discussion, students also had access to the audio and verbatim transcription of the DS sample. The focus was placed on the confirmation/ rejection of their hypotheses about the interaction and the discourse structure. Attention was paid to what was said and how, considering paralinguistic resources and lexico-grammar structures in addition to the non-verbal features already discussed. The ultimate goal of this multimodal analysis was to make students aware of how different semiotic resources (linguistic and non-linguistic)-DS language-interplay to construct discussion, to persuade and to build up relations between participants.

4.3. Joint construction (session 03)

During the third session, the joint construction of the genre was done using different techniques to promote critical and creative thinking. We problematised DSs to enhance group discussion and individual thinking from several perspectives. The teacher was in control of the discussion process, she led the thinking session. She asked questions to focus thinking (such as “How do the Presenter and the Discussant act during the DS?”, “How may they feel in different situations? Why?”, “Which are the difficulties they may encounter? Why?”, “How could they overcome those difficulties? Why?”, “Which can be the benefits for the different participants by taking part in the DS? Why”), controlled and monitored discussion, made comments, summarized, and drew conclusions in agreement with the group. We

designed a whole group discussion with equal number of learners during all the discussion, to think about facts, emotions and feelings, cautions, positive issues, and solutions (De Bono, 2017).

Afterwards, they worked in small groups to “create” some guidelines for effective DSs, the highest order thinking skill, according to Bloom’s revised taxonomy (Krathwohl, 2002). They used a shared online document to present aspects to take into account from the presenter’s and from the discussants’ perspectives. In so doing, the teacher had immediate access to the outcomes of all the groups and was able to edit and create a single document, Guidelines for Effective Discussion Sessions. Some common areas of interest were identified: attitude and personal quality, speech delivery, non-verbal language, non-linguistic resources, presenter’s responses, and discussants’ questions/ comments. This task revealed remarkable insights into the learners’ deep and broad understanding of the genre and the aspects that they considered essential for its construction. They demonstrated awareness about the importance of different semiotic resources for an effective discussion, though they suggested not to abuse of non-verbal language, and “keep it simple”. The document shows they perceived “effectiveness” of the genre as the construction of self-identity (e.g. they mentioned personal attitudes and qualities such as being polite and humble, and showing respect for their interlocutors’ turns avoiding overlapping) and the construction and protection of interpersonal relations, which are clearly influenced by participants’ identity (e.g. learners suggested building good rapport with their interlocutors, keep eye contact with them, the use of mitigation and evaluative language, and the formulation of constructive comments and questions). During the discussion, learners concluded that constant attention to the construction of identity and interpersonal relations is a breeding ground for persuasion, one of the goals of the genre. Being effective during the short discussion session that follows conference presentations also requires concision and understanding. Learners showed concern about these issues when recommending the contextualization of questions/ comments “so that everybody can understand what you’re saying” or the use of straightforward questions/ responses “if they are understandable”, the formulation of clear questions/ comments and coherent arguments, the use of roundabout responses “only when needed”, as well as a correct use of the language.

4.4. Independent construction (session 04)

During the last session we worked on the independent construction of the genre. Attending an academic conference involves different roles that novice researchers have to understand and perform to contribute to the discussion with thought provoking questions and answers. In this stage of the training process, a simulation task was performed. Two learners voluntarily made a short presentation of their ongoing research projects and others acted as the audience,

asking questions and/ or making comments. Since their fields of interest were quite diverse, they made an introduction of their research to be understandable to a layman. In this way, they adapted their discourse to the target audience, who were not experts as they would be in a real life conference situation. The oral presentations and the discussion sessions were video recorded. Two cameras were used to have the presenter and the discussants in focus.

An online form was designed based on the Guidelines for Effective Discussion Sessions created by the learners (Appendix B). This tool was used for the assessment of the performance of all the participants, presenters and discussants. A scale from 1 to 4 (being 4 the highest rating) was employed to evaluate each aspect which was organized into five areas of interest: attitude/ interaction, linguistic resources, non-linguistic resources, non-verbal resources, and persuasion. We asked learners a general evaluation of the persuasive strategies used by the speakers as persuasion, which is central in DS, is expressed through multimodal ensembles. An open section was also included for “Other comments”. We proposed assessing 19 aspects common to the presenter and discussants performance, 4 related only to the former and 8 to the latter. Peer and self-assessment were carried out. In this way, we engaged learners in an individual self-reflection process. DSs were assessed by presenters, discussants and other members of the audience, as well as by a committee formed by 2 learners.

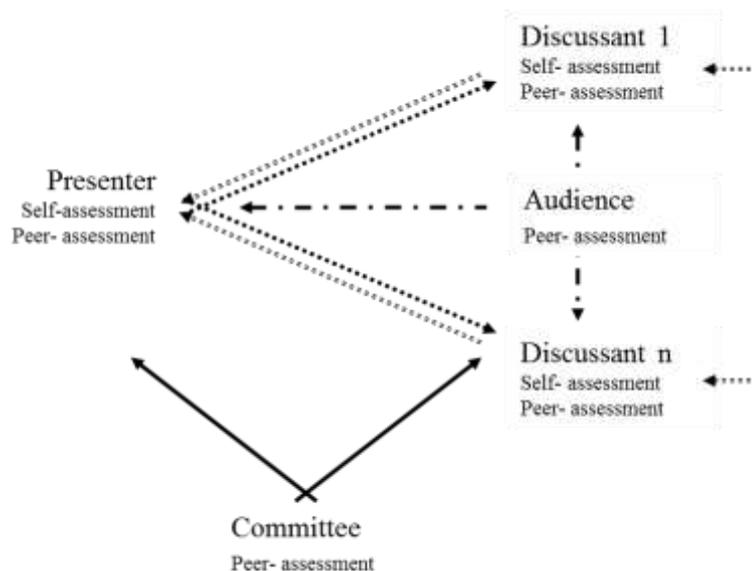


Figure 3. Classroom distribution of participants in assessment of the independent construction.

Figure 3 illustrates relations during the assessment process, who assessed who, and the arrangement of the participants. As we can see, the committee was placed in a position to have in focus the whole event, so that they could observe the non-verbal language of all the participants. Thus, we collected data from different perspectives. The presenter’s

performance was self-assessed but at the same time it was assessed by the discussant/s, the rest of the members of the audience, and the committee; and each discussant was self-assessed and assessed by the presenter, other discussant/s, the rest of the members of the audience and the committee. The online assessment form made easier the task of retrieving information from all the parties involved in the assessment of each participant, in order to share it later with them. The teacher prepared a report of the whole DS each learner was involved in. The two researchers analysed learners' performance after watching the video recordings, which reflected the participants' acquisition of the main features of the genre of DSs. Students demonstrated their command of the discourse structure, different types of comments/ questions and responses, and the appropriate use of some linguistic, non-linguistic and non-verbal resources. Their general performance was evaluated positively also by their peers and by themselves (3.7 overall mean for the presenters and 3.4 for the discussants). Regarding interpersonal features, they tried to show a good rapport with the audience using different semiotic resources. Nevertheless, we observed evaluative language and persuasive strategies were difficult to identify.

4.5. Follow-up analysis

In addition to these results, we sent a follow-up questionnaire to the participants two years after the course. Though only half of them replied, they all agreed that this course had helped them to be more self-confident during conference paper DSs, as well as when they had been in front of an assessment committee in other academic settings. They also mentioned some aspects that now they are more aware of when participating in DSs, e.g. types of questions and responses ("I am more aware that all questions correspond to a given type and have an appropriate type of answer"), roles of the participants ("I am more prepared when both asking and answering questions"), and control of the genre ("it helped me to fully understand what making a presentation implies").

5. DISCUSSION AND CONCLUSION

The objective of this paper was to prove the effectiveness of a pedagogical model to teach-learn the interactive genre of DS in a course on conference academic discourse for a group of PhD students. The pedagogical proposal we presented was based on a three-stage model: 1. Modelling and joint deconstruction, 2. Joint construction, and 3. Independent construction. The proposal made two main contributions to the well-established variants of the teaching-learning cycle (Rothery, 1996). On the one hand, we broadened the focus of analysis, our concern being teaching and learning an oral interactive genre while acknowledging the

multimodal nature of communication. On the other hand, we engaged learners in the joint deconstruction of the genre; we suggested doing it from two perspectives: previous experience and/or predictions and data analysis of video recording of real DSs.

In order to meet this objective, we posed two research questions which were answered by the information gathered during the process through several data collection tools. The first one asked about the students' awareness of the multimodal characteristics of the DS genre, as well as of the influence of the ensemble of different semiotic resources for the construction of interpersonal relations. Evidence introduced in the previous section confirms the effectiveness of the model in this respect; for example, students recognised the construction of presenter's and discussants' identity, which is central in DSs (Konzett, 2012), and of interpersonal relations, through the interplay of different semiotic resources. The learning situations designed during the three stages have engaged students in a meaningful multimodal enquiry. In light of these results, we see the need to revise the concept of "multimodal literacy" -frequently adopted in visual and/or digital genres (Walsh, 2010; Serafini, 2014), to deconstruct and construct multimodal spoken genres that embrace interpersonal communication, not limited, hence, to DSs or academic discourse. The answer to the second research question (Can a scaffolded critical thinking approach help them in their learning and use of this genre?) is also positive. First, learners were fully engaged - during the joint deconstruction and construction of the genre- in different strategies that aimed at fostering critical and creative thinking. Then, during the independent construction, the video recordings and the several types of assessment performed proved the success of the model. Moreover, the questionnaire distributed to the students two years later confirmed these sessions had helped them when performing DS in real life situations.

Nonetheless, the results of the implementation of the proposal reveal some areas of improvement that could be interesting for the design of similar courses in the future. First, it was difficult for learners to identify discipline specific persuasive strategies both in the presenter and in the discussant's contributions. Persuasion is mainly conveyed by evaluative verbal and non-verbal discourse, and appears when deep content discussions take place, as was pointed out by Valeiras-Jurado (2015). Evaluative and persuasive strategies are difficult to practise in a multidisciplinary class. Even though presenters were asked to choose topics that could be understood by the whole audience, the members of the audience did not feel authorised to raise specific questions about the content. DS in which persuasive strategies in deep content discussion can be used would require a monodisciplinary group and the participation of expert researchers in the field who could assess the effectiveness of those persuasive strategies. Secondly, learners' awareness and reflection could be enhanced regarding the relevance of visual aids-such as e-documents (PowerPoint Presentations, Prezi, etc.), objects or handouts- which are central during the presentation of the research, to support presenters' and/or discussants' speech also during the DSs, and which were not

considered in this research. Other areas of interest could be proxemics, laughter or intonation, and maybe aspects related to specific disciplinary contexts.

We believe the training of novice researchers is necessary, even more in contexts where they have to present and participate in DSs in a language which is not their L1, and when the context is highly evaluative and persuasive. This pedagogy can help novice researchers' trainers in their task of designing specific courses and programmes, in order to facilitate access and acceptance in their scientific community.

NOTES

- 1 The Linguistics conference, The Conference in Honor of John Swales, was organised in 2006, in Ann Arbor, Michigan (USA), to celebrate the official retirement of Professor John Swales. All contributions to this conference, 24 in total, dealt with the topics of genre analysis and discourse analysis. Participants were international experts in the field of applied linguistics.

REFERENCES

- Ädel, A. (2010). Using corpora to teach academic writing: challenges for the Direct Approach. In M. C. Campoy-Cubillo, B. Bellés-Fortuño & M. L. Gea-Valor (Eds.), *Corpus-based approaches to English language teaching* (pp. 39-55). London: Continuum.
- Araiza, M. J., Kutugata, A. & Pérez, A. (2015) Classroom community: a mixed method study in a doctoral educational program. *Procedia - Social and Behavioral Sciences*, 174, 2783 – 2794.
- Archer, A. (2010). Multimodal texts in higher education and the implications for writing pedagogy. *English in Education*, 44(3), 201-213.
- Aylett, M. & Turk, A. (2004). The smooth signal redundancy hypothesis: A functional explanation for relationships between redundancy, prosodic prominence, and duration in spontaneous speech. *Language and speech*, 47(1), 31-56.
- Bhatia, V.K. (2004). *Worlds of written discourse*. London: Continuum.
- Cameron, D. (2001). *Working with spoken discourse*. London: Sage.
- Cheng, A. (2008). Analyzing genre exemplars in preparation for writing: The case of an L2 graduate student in the ESP genre-based instructional framework of academic literacy. *Applied Linguistics*, 29(1), 50-71.
- Clennell, C. (1999). Promoting pragmatic awareness and spoken discourse skills with EAP classes. *ELT Journal*, 53(2), 83-91.
- Cope, B. & Kalantzis, M. (2009). Multiliteracies: New literacies, new learning. *Pedagogies: An International Journal*, 4, 164-195.
- Cope, B. & Kalantzis, M. (Eds.). (2000). *Multiliteracies: Literacy learning and the design of social futures*. London/ New York, NY: Routledge.
- Davies, C. A. & Lester, J. N. (2016). Graduate Students' Construction of Researcher Identities Explored Through Discourse Analysis. *Qualitative Research in Education*, 15(1), 49-76.

- De Bono, E. (2017). *Six Thinking Hats*. (4th ed.). London: Penguin.
- Dreyfus, S. J., Humphrey, S., Mahboob, A. & Martin, J. R. (2015). *Genre pedagogy in higher education: The SLATE project*. London: Palgrave.
- Feez, S. (1998). *Text-based syllabus design*. Sydney: McQuarie University/AMES.
- Flowerdew, L. (2015). Using computer-based research and online academic corpora to inform writing of the discussion section of a thesis. *Journal of English for Academic Purposes*, 20, 58-68.
- Gibbons, P. (2002). *Scaffolding language, scaffolding learning*. Portsmouth, NH: Heinemann.
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative report*, 8(4), 597-606.
- Hyland, K. (2004). *Genre and second language writing*. Ann Arbor, MI: University of Michigan Press.
- Hyland, K. (2007). Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of second language writing*, 16(3), 148-164.
- Jewitt, C. (2013). Multimodal methods for researching digital technologies. In S. Price, C. Jewitt & B. Brown (Eds.), *The Sage handbook of digital technology research* (pp.250-265). London: Sage.
- Koester, A. & Handford, M. (2012). Spoken professional genres. In J. P. Gee & M. Handford (Eds.), *The Routledge handbook of discourse analysis* (pp. 252-268). London/ New York, NY: Routledge.
- Konzett, C. (2012). *Any questions?: Identity construction in academic conference discussions*. Boston, MA: De Gruyter Mouton.
- Krathwohl, D. R. (2002). A revision of Bloom's taxonomy: An overview. *Theory into practice*, 41(4), 212-218.
- Laal, M. & Ghodsi, S. M. (2012). Benefits of collaborative learning. *Procedia- Social and Behavioral Sciences*, 31, 486-490.
- Lam, W. & Wong, J. (2000). The effects of strategy training on developing discussion skills in an ESL classroom. *ELT Journal*, 54(3), 245-255.
- Le, H., Janssen, J. & Wubbles, T. (2018). Collaborative learning practices: teacher and students perceived obstacles to effective student collaboration. *Cambridge Journal of Education*, 48(1), 103-122.
- Light, G., Calkins, S. & Cox, R. (2009). *Learning and teaching in higher education: The reflective professional* (2nd ed.). London: Sage.
- Lincoln, Y. S. & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Martin, J. R. (1999). Mentoring semogenesis: 'Genre-based' literacy pedagogy. In F. Christie (Ed.), *Pedagogy and the shaping of consciousness. Linguistic and social processes* (pp. 123-155). London/ New York, NY: Continuum.
- Martin, J. R. (2009). Genre and language learning: A social semiotic perspective. *Linguistics and Education*, 20, 10-21.
- McCarthy, M. & Carter, R. (2014). *Language as discourse: Perspectives for language teaching*. London/ New York, NY: Routledge.
- Morell, T. (2015). International conference paper presentations: A multimodal analysis to determine effectiveness. *English for Specific Purposes*, 37, 137-150.

- New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66(1), 60-92.
- O'Halloran, K., Tang, S. & Smith, B. A. (2015). Multimodal approaches to English for academic purposes. In K. Hyland & Ph. Shaw (Eds.), *The Routledge handbook of English for academic purposes* (pp. 256-269). London/ New York, NY: Routledge.
- Pyhältö, K., Stubb, J. & Lonka, K. (2009). Developing Scholarly Communities as Learning Environments for Doctoral Students. *International Journal for Academic Development*, 14(3), 221-232.
- Querol-Julián, M. (2011). *Evaluation in discussion sessions of conference paper presentations: a multimodal approach*. Saarbrücken: LAP Lambert Academic Publishing GmbH & Co. KG.
- Querol-Julián, M. & Fortanet-Gómez, I. (2012). Multimodal evaluation in academic discussion sessions: How do presenters act and react? *English for Specific Purposes Journal*, 31(4), 271-283.
- Querol-Julián, M. & Fortanet-Gómez, I. (2014). Evaluation in discussion sessions of conference presentations: theoretical foundations for a multimodal analysis. *Kalbotyra International Journal*, 66, 77-98.
- Reese, C. & Wells, T. (2007). *Teaching academic discussion skills with a card game*. *Simulation & Gaming*, 38(4), 546-555.
- Rose, D. & Martin, J. R. (2012). *Learning to write, reading to learn: Genre, knowledge and pedagogy in the Sydney school*. Utah Yorkshire, Bristol, CT: Equinox.
- Rothery, J. (1996). Making changes: Developing an educational linguistics. In R. Hasan & G. Williams (Eds.), *Literacy in society* (pp. 86-123). London: Longman.
- Rothery, J. & Stenglin, M. (1994). *Writing a book review. A unit of work for junior secondary English (Write it right resources for literacy and learning)*. Sydney: Metropolitan East Disadvantaged Schools Program.
- Serafini, F. (2014). *Reading the visual: An introduction to teaching multimodal literacy*. New York, NY: Teachers College Press.
- Valeiras-Jurado, J. (2015). A multimodal approach to persuasion in conference presentations. In B. Crawford-Camicciottoli & I. Fortanet-Gómez (Eds.), *Multimodal Analysis in Academic Settings. From Research to Teaching* (pp. 108-132). London/ New York, NY: Routledge.
- Walsh, M. (2010). Multimodal literacy: What does it mean for classroom practice? *Australian Journal of Language and Literacy*, 33(3), 211-239.
- Wulff, S., Swales, J.M. & Keller, K. (2009). "We have seven minutes for questions": The discussion sessions from a specialized conference. *English for Specific Purposes*, 28(2), 79-92.

APPENDIX A. REPERTOIRE OF LINGUISTIC AND NON-LINGUISTIC RESOURCES, AND DISCOURSE STRUCTURE

Linguistic resources				
Type			Example	Function
Interjections			Yeah, yes, right	Acknowledgement
Gradated utterances			Right to a certain degree	Hedging
Evaluative adjectives and nouns			Interesting, good, important, problem, default	Positive or negative evaluation
First person pronouns + introductory verbs			I think, I don't think, I mean, I guess	Mitigation of one's position
Modal verbs			Can, might, seem to, appear to	Mitigation of positive/negative judgment
Adverbial expressions			Actually, of course, certainly, indeed	Intensification of one's position
Comparatives and superlatives, very + adj.			Better, more important	
Transition markers			But, although, however	Presentation of one's position after considering the interlocutor's
Non-linguistics resources				
Type			Example	Function
Kinesics	Gestures	Iconic gestures	Bringing palms up closer to each other (very tightly) Separating palms (huge)	Pictorial description of concrete content
		Metaphoric gestures	Rotating hands (can be..., sort of) "ring" hand shape (particularly x)	Pictorial description of abstract content: vagueness, accuracy
		Beats	Palms moving forward	Mark the pragmatic content: intensification, discourse fluency
		Deictics	Pointing to the audience with the palm down	Gestures of pointing: sharing something with the audience
	Head movement	Head shakes	Head shake for negative polarity (I think it's quite different)	Intensification or reinforcement of utterance
		Head nods	Nodding (clearly, just, very)	Intensification or reinforcement of utterance
		Tilting head	Tilting head to one side (that includes good ideas)	Intensification or reinforcement of utterance
	Facial expression	Smiling		Showing acknowledgment/nervousness
		Serious		Showing expectation, concern

		Raising eyebrows	Surprise/ Intensification
		Frowning	Disagreement/ Intensification
	Gaze direction	Seek eye contact	Interactive function, making sure the interlocutor takes account of one's position
		Look away/ down	Showing embarrassment (especially after or during hard criticism)
		Look up	Thinking
Paralanguage	Phonetic stress	Loudness up	Intensification
	Longer pronunciation of syllables		
	Silence	Long pause before answering	Intensification/ hesitation
	Laughter		Express attitude
Discourse structures: question – response, comment – comment, comment + question – response			
Speaker	Moves	Function	
Discussant	Opening the turn	Announcing the question Reacting to the presentation	
	Contextualising the question / comment	Referring to previous experience Checking understanding of the research	
	Making a comment	Criticizing the research Showing alignment with the presenter	
	Formulating a question	Asking a background question Asking a forward question	
	Reformulating the question	Ensuring the question is clear	
Presenter	Opening the turn	Reacting to the question Repeating the question Announcing the comment Reacting to the discussant's comment	
	Responding to the question	Making a straightforward response Making a roundabout response Expanding the response	
	Replying to the comment	Reintroducing the response Rejecting the discussant's comment Acknowledging the discussant's comment	
	Expanding the topic of the question	Raising a question and Showing a plea of ignorance and Answering the question	
	Rationalising position	Referring to previous experience Introducing further information	
	Closing the turn	Reacting to the question	

APPENDIX B. ASSESSMENT FORM OF DSS

Liker scale: 1 minimum and 4maximum, NA: Not applicable

	Discussant #					Presenter				
	1	2	3	4	N A	1	2	3	4	N A
General evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Attitude/ Interaction										
Politeness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-

Humbleness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Respect turns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Build good rapport with the audience/ presenter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Linguistic resources										
Language competence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Mitigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Evaluative language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Question/ comment										
Clear question/ comment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	-	-	-
Constructive question/ comment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	-	-	-
Length of the question/ comment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	-	-	-
Straightforward question	<input type="checkbox"/>	-	-	-	-	-				
Contextualised question/ comment	<input type="checkbox"/>	-	-	-	-	-				
Comment/ question related to the presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	-	-	-
Response										
Straightforward responses	-	-	-	-	-	<input type="checkbox"/>				
Roundabout responses	-	-	-	-	-	<input type="checkbox"/>				
Clear and coherent arguments	-	-	-	-	-	<input type="checkbox"/>				
Non-linguistic resources										
Pauses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Stress important words/ phrases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Non-verbal language										
Body movements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Facial expression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Gestures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Head movements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Eye contact with the presenter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	-	-	-	-	-
Eye contact with the discussant	-	-	-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Alignment with the verbal message	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Persuasive strategies										
General evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
Other comments										