

TEACHING ENGLISH FOR SPECIFIC PURPOSES: CREATING AN ONLINE TASK IN LIGHT OF THE COMPLEXITY THEORY

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Abstract

This paper shares the experience lived by three teachers/researchers who faced the challenge of designing a task to prepare high school students to face job interviews in English. The task, designed in light of the complexity theory, considered a hybrid environment, using free tools available on the Internet: wiki and forums. The theory of complexity (Morin, 2004, 2005, 2008), methodology of projects (Behrens, 2006), instructional design (Driscoll, 1998; Berge, Collins, & Dougherty, 2000; Abbey, 2000, among others) and English for specific purposes (Hutchinson & Waters, 1987; Brindley, 1989) support the task and this study.

Introduction

Due to the fact that Brazil will host important international events in the next few years, it is necessary for its population to learn English and be prepared to face experiences in which the foreign language will be required. Therefore, there is the growing need to design courses and/or tasks that would suit the needs of language students in the near future.

Considering this context and taking into account that technology is part of our everyday lives, this paper has the objective of sharing the experience of three teachers/researchers who faced the challenge of designing a task to prepare High School students to take part in job interviews, in English. The task was designed using free tools available on the Internet, in light of the complexity theory, considering a hybrid environment. It aimed at: (1) developing some of the skills necessary for students to participate in job interviews in English; (2) accessing sources of information using technological resources; (3) promoting online and face to face interaction among students, and (4) knowledge construction using free tools available on the Internet: wiki and forums.

Thus, the objective of this paper is to describe and reflect on the design experience lived by the teachers/researchers that aim at contemplating the

aspects mentioned. In order to achieve our objectives, we will firstly present and articulate the constructs considered for the task design. Then, we will focus on the design process, mentioning its phases and the task itself.

Theoretical Constructs

As this work aims at sharing the experience and challenge lived by the teachers/researchers, when designing a complex and hybrid task in order to prepare High School students to face job interviews, in English, it is important to mention the main constructs that support it. Therefore, in this section, we present and articulate aspects related to the complexity theory, English for specific purposes and instructional design.

Complexity Theory and The Methodology of Projects

According to D'Esposito (2012), complexity is seen as a theory that articulates the integrative thought, uniting and allowing a weave once complex means, "in the original sense of the term *complexus*: what is weaved together"¹ (Morin, 2005, p. 89). It is the result of new conceptions, visions, discoveries and reflections (Morin, 2006, p. 77), in which the physical world is seen as a net of relations or inter-related events and not isolated parts. All the events, actions and life interactions are considered, not only using our reason but also considering our sensations, emotions, feelings and intuitions (Morin, 2006, p. 63-105; Moraes, 2006, p. 71-73; Behrens & Oliari, 2007, p. 63; Mariotti, 2007, p. 139).

Under this perspective, the experiences of the teachers and students are considered in the learning/teaching process (priority is given to the process and not only to the product) and it aims at offering non linear, non fragmentized or detached curricula valuing the dialogue, the interactions and the individuals (Morin, 2005, p. 11; 2006, p. 7, Behrens & Oliari, 2007, p. 59-61; Moraes, 2006, p. 43). Knowledge is perceived and co-produced through the dialogue with the world (Morin, 2005, p. 24, 2008, p. 204-205; Moraes, 2006, p. 88) by non-linear or pre-determined enrichments, and created, little by little, when exploring connections, relations, integrations and living the process (Morin, 2005, p. 24).

To help us think about complexity, Morin (2005, p. 95-96; 2006, p. 74-77) proposes three principles: the *recursive circuit*, the *hologrammatic* and the *dialogical*. The *recursive circuit* calls our attention to the fact that products and effects are, themselves, producers and the cause of what is produced. The *hologrammatic* points out that the part is inscribed in the whole as well as the whole is in the part. The *dialogical* conceives a dialogue and association of terms that seem contradictory such as order and disorder.

Although Morin (2005, 2006) presents us the complexity principles, the author does not provide examples on how to design or implement complex activities or courses. Therefore, we searched for this information and we had contact with a proposal by Behrens (2006, p. 60) entitled The Methodology of Projects. Its objective is to promote and develop an educational activity with autonomy and critical spirit, having a problem as a starting point that would allow the search for answers with commitment, critical and ethical view, by

doing individual and/or group work. By doing this, Behrens (2006) believes it is possible to create bonds to themes from our reality, surpassing the certainties, reflecting and arguing. Thus, this methodology helps us articulate the principles proposed by Morin (2005, 2006).

Working on the Methodology of Projects involves some steps: (1) project discussion: it consists of talking about the topic and listening to the students' opinions and suggestions; (2) problem statement: aims at getting students' attention; (3) contextualization of the object of study; (4) dialogical classes: helps to limit the theme and clarify the ways to be followed; (5) individual research; (6) individual production: allows students to express their opinions and share findings; (7) critical and reflexive production: leads students to express their ideas based on what they have found; (8) group production: relates what was found individually; (9) final production: shares knowledge and discusses how it interferes in our reality; (10) evaluation of students' progress (done throughout the process), and (11) project evaluation: when students talk about their experiences (Behrens, 2006, p. 60). The author highlights that the intention is not to consider the phases as a fixed sequence, but steps that can be adapted according to the reality.

Our objective as teachers/researchers was, then, to design and implement a task designed in light of the complexity theory to High School English students, considering the aspects mentioned. Besides that, aware that technology is part of our everyday lives, we planned at providing an activity that could allow students to have contact, use and explore some technological resources, experiencing a complex hybrid task. Therefore, we relied on the theory in relation to instructional design.

Instructional Design

When thinking about distance education, we agree with Palloff and Pratt (1999) when they mention that learning is an active process in which knowledge construction and learning occur by experimentation, manipulation and gain of abilities. Another important aspect would be to identify the needs of the participants because they would help us define the objectives, the phases and the tools (Driscoll, 1998; Berge, Collins, & Dougherty, 2000; Abbey, 2000; Fullmer-Umari, 2000; Horton, 2000). As Driscoll (1998, p.9) mentions, a "good design" needs: (1) to meet the identified needs, (2) be interactive, non linear, (3) use easy interfaces, (4) have structured lessons, (5) make effective use of the multimedia, (6) pay attention to technological and educational details and, (7) be an environment that valued participants as individuals. Therefore, as Driscoll (1998), Palloff and Pratt (1999), Berge et al. (2000), Abbey (2000), Fullmer-Umari (2000) and Horton (2000) contend, when designing an online course or task, we should consider: the public; the duration and number of participants; the sequencing and structuring of the objectives; the environment (hybrid or totally online); the equipments; how the teacher and the students deal with the resources; the implicit learning theories, methods and materials; the content and validity of the instructions; the implementation, management; follow up that permeates the process, and the evaluation of the phases.

Recalling that our aim and challenge as teachers/researchers was to design a hybrid task in order to prepare High School English students for job interviews considering the complexity theory, it was also necessary for us to rely on the theory in relation to the teaching of English for Specific Purposes as follows.

English for Specific Purposes

Jordan (1997) considers that the needs analysis is the starting point for designing a course, once it helps us define the course content, materials, and the kind of teaching and learning that would happen in that specific context. Therefore, when designing a task to meet the needs of High School students, we decided to follow the principles of the teaching of English for Specific Purposes (ESP), which are stated by Hutchinson and Waters (1987) as the relation between what a person needs English for and the language this person needs. As they mention: "Tell me what you need English for and I will tell you the English that you need" (Hutchinson & Waters, 1987, p. 8). Although there are various aspects related to needs analysis², in this work, we focus on the definition provided by Hutchinson and Waters (1987, p. 55) who consider that target needs³ comprehend three different aspects: *necessities*, *lacks* and *wants*. The *necessities* relate to what the learner needs to perform in a specific situation. The *lacks* consider what the learner already knows and the demands of the target situation, and the *wants*, to how the learner understands his/her own needs. Therefore, in order for us to guarantee that we would address the students' *necessities*, *lacks* and *wants* it is essential to collect some information about their previous knowledge of the language, their learning preferences and expectations about the course they will engage into.

According to Brindley (1989, p. 63), the language teaching that considers the students as the centre of the process has, as one of its principles, the adequacy of the program to students' needs. Thus, in order for us to address the students' *necessities*, *lacks* and *wants* it is important to collect information about their previous knowledge of the language, their learning preferences and expectations about the course they will engage into.

As our challenge was to design a task that would consider our students' needs, the available resources, allowing them to engage into activities that would promote knowledge construction by interacting among themselves, doing individual and group research and reflecting on the topic and experience they engaged into, using free online interfaces (wiki and forums), the theory of complexity, ESP and instructional design have been the constructs considered. The theoretical support on the Teaching of English for Special purposes, would contribute to the design once our students have the specific need to join job interviews, the theory of complexity would help and allow us to propose a task that provides our students with opportunities to interact, build and rebuild knowledge, consider that the whole and the parts are connected and interact, knowledge shouldn't be isolated, and the Methodology of Projects would help to motivate students by proposing a problem to be solved, working individually and in groups and evaluating their performance throughout the process.

Presented the constructs that guide this study, in the next section we detail the context in which the task would be implemented and present.

The Context

As ESP mentions, when designing any task, it is important to be familiar with the needs of the students. However, this is not enough. Besides knowing the students' needs the teachers it is very important to consider the context, conditions, possibilities and constraints in order to create tasks that not only suit their needs but also have a feasible and viable implementation.

Considering High School⁴ classes, in state schools in Brazil, it is important to highlight that we would be dealing with around 40 students per class - ages varying from seventeen on - with heterogeneous knowledge of the English Language. Even though they have been exposed to the language for about six years, their proficiency level would be a ALTE 2 level⁵ and they would have been much more exposed to isolated vocabulary and grammar items, some reading and listening, and very little or no speaking at all.

In relation to the infrastructure, most schools would have a laboratory equipped with computers connected to the Internet to be used during classes. Some schools would have resources such as a multimedia projector and a very limited number would have Internet connection in the classrooms.

Students might have computers at home and a few of them have Internet access. Some of them visit regularly public spaces in which they would have access to computers and Internet for free for a certain amount of time and others go to shops that offer this kind of service for reasonable prices and pay to use the equipment and Internet connection.

Taking into account this context information and our objective of designing and promoting a hybrid task in light of the complexity theory that would attend the needs of these High School students to better prepare them to face job interviews, in English, in the future, we designed the task, as presented here

The Task

Having in mind the context described with its limitations and possibilities our challenge was to design a complex hybrid task that would prepare High School students to face a specific future need, which is to participate in job interviews, in English. Aware that we could not count with financial support from the institution in relation to licenses to have access to programmes, the objective was to use free tools available on the Internet: wiki and forum. Defining the topic of the task was one of the first decisions taken. The objective was to design not a fictitious task but something relevant to the students, that would also attend their needs and that would inter-relate their English classes to their lives. By considering an experience they would face in the future we decided on job interviews, in English.

After defining the general topic, it was time for us to consider inter-related topics that to be explored such as curriculum, clothing, behaviour and possible interview questions. As we also wished them to develop new skills, deal with technology, explore this new environment, which requires, for example, new patterns of interaction and rules, and a different form to access information, we focused on the selection of the appropriate and free interfaces available on the Internet that would suit the objectives of our proposal. To choose the interfaces we took into account not only their characteristics, constraints and possibilities of use, but also the kind of interaction they would provide. Our main concern was to offer students tools that could promote shared knowledge construction, considering the context, their age, the number of participants, their previous knowledge, the duration of the task and the activities that could be asked. Considering the aspects mentioned, wiki and forum seemed appropriate interfaces as the forum would allow students to interact and post information, discuss and articulate their ideas while the wiki would permit and encourage them to write in a collaborative way. This way, the two interfaces could complement each other allowing students to develop the task. It would also be an extension of the classroom, creating a bridge between the two environments.

The task was organized in inter-connected parts⁶: a face to face experience would be the starting point, leading the students to an online experience and a series of interactions in this new environment that, afterwards, would be followed by another face to face moment.

The first part would be face to face and its objectives would be to: (1) present and discuss the topic with the students, its relevance to their context and lives; (2) set the task objectives; (3) organize the groups that would work together to develop the task proposed; (4) define the aspects related to job interviews that the groups would be responsible for, such as possible interview questions; appropriate clothing, behaviour and language use.

In this first part we would also provide students with the necessary tools to use the interfaces. This should include working with our students on how to create, register and use wiki and forums so that they could use them efficiently. In order for it to happen, we would need to have a properly equipped laboratory or a classroom with resources such as a multimedia projector with Internet connection, that would allow them to access the interfaces, explore, get familiar and feel safe about how to use them by interacting with the teacher, the classmates, the computer, and the interfaces.

After this, a new part of the task would begin. Each group would be responsible for writing a wiki about the chosen topic, looking for information, discussing it on the forum while writing and rewriting their wiki. The number of online interactions would not be limited, and some time would be set for students to discuss the selected topic on the forum and create their wikis. The amount of time designated to the development of the activities could, along the process, be negotiated and re-negotiated with the teacher, due to students' progress and needs. The need or not for some more time would be felt by living the experience.

The third part would be dedicated to the presentation of the wikis. It would be carried out in the classroom so that students could present their wikis. It would allow students to compare, contrast, relate and add new aspects and contributions to their colleagues' work, as well as exchanging information about their tasks and discoveries. The objective would be at the end for them to inter-relate the parts that would comprehend the job interview, sharing and construction knowledge together.

Final Considerations: Articulating the Task and the Theoretical Constructs

While designing the task we knew it was essential to analyse the learning opportunities it could provide. This way, our main concerns were related to the learning opportunities the activities provide. Some points to consider were the possibility of individual and shared knowledge construction and the interaction among the parts and the whole, which can be explained and explored based on the Methodology of Projects (Behrens, 2006) and the Complexity theory (Morin, 2004, 2005, 2006, 2008) and Instructional Design (Driscoll, 1998; Palloff & Pratt, 1999; Berge et al., 2000; Abbey, 2000; Fullmer-Umari, 2000 and Horton, 2000). Considering the activity proposed and the theoretical support presented, we identified relevant aspects.

The *Hologrammatic Principle*, which considers the articulation between the parts and the whole, can be identified in all activities proposed, once several aspects, such as the contact among the students, the teacher, and their previous knowledge about the topic and the language are in frequent interaction. Both interfaces - wiki and forums - offer individual and group interaction, making it possible for them to share the knowledge under construction. It can also be pointed out that the job related topics, that is, curriculum vitae, interview questions, clothing and behaviour, are directly connected with each other, and are parts of a whole, which is the *job interview* and would be connected when students present their wikis.

The *Principle of the recursive circuit* refers to knowledge construction that is strongly influenced by the dynamic and recursive movements we make during the learning process, also helping us realize the interconnections among the various subjects and topics. The participants, for example, could access the forum, at any day and/or time, making it possible for them to access all the messages exchanged. The teacher, on the other hand, would have the chance to contrast his/her students' ideas and production at different moments of the course. In both situations, there was a possibility of knowledge reconstruction. The same movement could be found on the wiki as well because during the process of text construction (individual and/or group), students could write and (re) write their texts as many times as they needed and/or wanted. For the final task, students also made a recursive movement as they could use their knowledge constructed during the several moments of the course to conclude the wiki they were going to produce and present at the end.

The *Dialogical Principle*, which is based on the concept that opposite ideas are intrinsic parts of our world, brings out the necessity for us to deal with

points of view that may diverge from ours. While working on the designed task diverging ideas may appear, considering the fact that students come from various backgrounds, have different previous knowledge and unique experiences in life. Even though this diversity could be seen as a constraint, it, on the contrary, enriches the interaction among students who can share experiences, exchange knowledge and learn how to respect differences, negotiate meaning and interests.

Besides these aspects, we believe that the task has its parts weaved together, considering the original meaning of the term complexity, as presented by Morin (2005) and discussed previously. All the aspects and interactions it promotes are inter-related and are able to create a net between students, teacher, the topic chosen by each group, the job interview, technology, students' needs and interests, previous and new knowledge among others.

Considering the Methodology of Projects (Behrens, 2006), there would be a moment in which students would have been exposed to a problem that would motivate them to research for information. Besides that, the task would allow them to research and select information individually, share their findings in the forum, and in groups, discuss the information found, its relevance, negotiating meanings and working on their wikis. It would promote individual and group work, commitment, critical and ethical views as stated by the Methodology of Projects (Behrens, 2006).

This was our attempt to design a task in our teaching routines in light of the complexity theory. Although for the moment we are pleased with our discoveries and achievements, we believe that once we have the opportunity to perform this task with our students we will be able to add more contributions to this study, by connecting theory and practice. We believe that more attempts and studies should be done in this area, always having in mind the contexts, their limitations and possibilities as well as our students' needs.

Notes

1. We have translated all in-text citations.
2. As we mentioned, many authors present their considerations about the aspects related to needs analysis. Dudley-Evans and St John (1998, p. 125), for example, mention eight topics concerning this concept: (1) target situation analysis and objective needs; (2) wants, means and subjective needs; (3) present situation analysis (information on the students' language competence); (4) learner's lacks; (5) learning needs; (6) linguistic analysis, discourse analysis and genre analysis (how the language is used in the target situation; (7) what the student expects from the course, and (8) means analysis (information about the environment, the course context).
3. Hutchinson and Waters (1987), when discussing needs and needs analysis, make a distinction between target needs and learning needs. The authors explain this by stating that learning needs refer to "what the learner needs to do in order to learn" (p. 54) and target needs refer to "what the learner needs to do in the target situation" (p. 54).

4. At the age of six, Brazilian children join school (for most of them this is the first formal contact with the school context, once they did not attend a nursery school). The Educational Brazilian system is organized as follows: 5 years of *Ensino Fundamental – ciclo 1*; 4 years of *Ensino Fundamental – ciclo 2*, what constitutes the 9 years of compulsory Primary Education. It is followed, then, by 3 years of *Ensino Médio* (High School). If students want to continue their studies, they may attend a State or Private College or University. To join a private institution they need to go through the institution's specific entrance tests and for state institutions they should do a national exam entitled *Exame Nacional do Ensino Médio - ENEM* (High School National Exam).
5. ALTE - The Association of Language Testers in Europe. For more information visit <http://www.alte.org>
6. It is necessary to point out that the job interview task presented here has been designed but not implemented yet. So, it should be considered as an activity proposed by three teachers/researchers, when designing a task in light of the complexity theory.

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