New Perspectives in Science Education
International Conference
NEW PERSPECTIVES in SCIENCE EDUCATION


Active learning in higher education: students and multiple skills in the spotlight

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Abstract

The active learning which presupposes an active and deep student learning rather than a passive and shallow student stance aligns with the Bologna process assumptions that place higher education students at the center of learning in order to develop skills of different natures. In opposition to the traditional teaching model, the protagonists of this new and necessary learning process are no longer the teachers who debit material that students memorize to reproduce mechanically and without critical judgment at the moment of assessment. Nowadays, students are in the spotlight, they should be the focus of all attention, always bearing in mind that they learn better the more opportunities they are given to be the protagonists of building their knowledge, according to their interests and needs. We intend to review the literature on some motivating and enhancing pedagogical strategies for the development of skills for the 21st century, as they are proven to be useful for the success of individuals not only in the academic context but also in the professional environment. We will highlight role-play, as it's a strategy that we consider to be less pedagogically explored but very suitable for teaching in which we want students to learn better, with more pleasure, recognizing usefulness in their learning and obtaining better results. We will complete the investigation with the report of a pedagogical experience implemented with Portuguese polytechnic higher education students that fit the theme under study and which we consider beneficial.

Keywords: *Active learning; role-play; students; 21st century skills; pedagogical changes*

Active Learning (AL) is an instructional method aligned with Bologna philosophy, which is student-centred, engaging students in the learning process, and that fits in with the constructivist philosophy.
According to constructivism definition, knowledge is not absolute because it's continually changing, since the individual interprets the world around him from a certain historical, social and cultural perspective, which implies different views of the world. Regarding Piaget and Vygotsky's constructivism, in learning there are intra and interpsychological aspects, the referred learning being a process carried out by the individual who learns, interacting with the context [1] and for these two authors the answer to the question "What is learning?" is equal, rejecting any passivity: "Active discovery and construction of knowledge" [2].
In contrast to the passive and traditional teaching, teacher-centred, constructivism presupposes an active posture of the student, being themselves the fundamental piece in the construction of his knowledge, adding and synthesizing new information with the existing one.
In a reference article from the 1990s, according to a literature review about AL, Bonwell and Eison highlight that students cannot simply listen to teachers but should do other activities - reading, writing, debate and being involved in problem solving. AL strategies should engage students "in doing things and thinking about what they are doing" [3] and the authors underline AL advantages over traditional lectures - student preference for AL and greater development of thinking and writing skills. Some features consensually related to strategies promoting AL - student engagement beyond just listening, students' skills development that overlaps passive information transmission, guidance for students to develop higher order thinking (analysis, synthesis, evaluation), involvement in different activities such as reading, debate and writing and a greater exploration of students' attitudes and values are also mentioned.

Many reflections on this “new” pedagogical approach although published almost thirty years ago remain quite current. Because change creates resistance in the people and institutions where they occur, it’s convenient to know some obstacles to overcome them.

Thus, AL requires more pre-class preparation, appropriate materials/equipment and a different teacher’s behaviour because they feel uncomfortable and anxious about the "new" and not encouraged to change as rewards are scarce [3]. More recently, suitability, resource and risk are also mentioned by [4].

Among several activities promoting AL, [3] refer, among others, writing in class, problem solving, cooperative learning, case studies, cooperative learning, debates, drama, role-playing, simulations, and games. We agree with that and, like other authors, we defend the adoption of several strategies.

In this paper, our focus is on role-playing which, in our opinion, promotes the development of several 21st century skills, such students' communicative skills, problem solving, critical thinking in order to provide solutions to problems and cooperative learning that enhances skills such as decision making and conflict management. Additionally, AL creates motivation and pleasure in students who use autonomy and creativity, drawing on previous knowledge and experience gained in in/formal teaching contexts.

The boundary between role-playing, simulations and games is sometimes not clear and there may be some overlap between them. According to [3], an objective difference is that role-play duration is less than one hour, while simulations and games are longer. Simulations are better defined than role-plays which can be spontaneous and don’t need special equipment/materials. This pedagogical strategy leads to a students' reflection about their attitudes in the interrelationship they establish with others. Even if role-plays are usually spontaneous and short, they can be long and require in-depth preparation by students before the presentation. The teacher acts as an advisor, framing the situation, giving information about the roles to play and serving as a mediator in the presentation and its evaluation.

Defining role-play and simulation, [5] present a third pedagogical strategy – role-play simulations - and they state that while role-play is transitory and intends to solve different issues or problems, role-play simulations presents a permanent characteristic (during a semester) and has an elaborated goal.

In 2012, from different experiments, a prospective typology of role-play emerges, including three categories – Role-Switch (student learn from an interiorization, embodying the role of other people to understand them), Acting (the development of students’ practical skills through "acting" in a scenario with few players) and Almost Real Life (as close as possible to reality) [6].

The effectiveness of role-playing is mentioned in several studies and we cite a case of Psychology students. In this case, having applied a pre-test and post-test to compare the differences in the results of the evaluation, the investigator found an effective improvement after the role-playing activity [7]. Another example is with Jordanian students attending the tenth grade English as a foreign language. Significant statistical differences in the results of oral assessment between a control and an experimental group prove that students submitted to the role-playing experience were more successful than the others who learned through the Teacher's book instructions. [8]

AL is used in multiple areas, at different levels of education and has several proven advantages. As reported by [9] the use of this methodology is beneficial in classroom teaching but also in distance learning, obtaining better students’ results and promoting students' emotions and self-efficacy beliefs.

In our career in higher education, we have adopted the role-playing practice in several courses, the most relevant experience being carried out during six academic years (from 2011 to 2017) in a course of Organizational Communication of Human Resources. The main objective was to evaluate communication skills, with these specific objectives: i) Enhance the application of communication techniques; ii) adequately produce texts of different typologies, according to organizational needs.

The program contents are related to communication techniques, argumentation and persuasion, preparation and conduct of meetings, the call and the minutes. Since the beginning of the semester, students were informed that the final group work would have a written and oral component (role-play). Thus, learners would represent roles of characters invented by them in an organizational context that could be created or adapted of their professional experiences (some classes have student workers).

The role-play situation was a professional meeting where internal and/or external organizational communication should take place. Students should invent and describe a real organizational “situation/problem” related to their professional field, expose and solve it. At that meeting, the meeting’s chair, his secretary and other participants should act in accordance with the good practices of a meeting. The students knew that they were being evaluated in terms of their verbal and nonverbal communication performance, that simulations revealing creativity and as close possible to professional reality (use of props) would be valued. Initially, role-plays were presented in person, later on, the presentation scheme has changed and the students were exempted from doing the live presentation if they had recorded a video to be seen in class. Students wouldn’t be evaluated about technical

questions concerning the video and the only requirements were good sound and image to allow viewing and listening in good conditions. At the end of each oral presentation, there was hetero-evaluation, self-assessment and, as a synthesis, the qualitative assessment, by the teacher, in a pedagogical way, encouraging to improve.
Earlier, during classes, feedback about communicative exercises and oral guidance were given by the teacher. In addition, students could ask him for support and a specific class to follow up the work in progress was scheduled.
The evaluation of this role-play activity was very positive, although students have never had a similar experience before. They understood the objectives, joined the initiative, carried out it with enthusiasm and motivation, learning better because they put theory into practice and thought about the way they should do it and actually did it. The video was another stimulus once the students liked to do this task that required more work before the presentation but simultaneously allowed them to be more relaxed in the final presentation.
Several groups invested in greater realism in the meeting, with a welcoming atmosphere, introducing typical objects, such as computers, sheets, pens, water bottles and, in some cases, even sweets. Many presented themselves dressed differently than usual, as executives, and there were some few groups that made the video in their own workplaces. Self and hetero-assessment, after the presentations, made according to some previously announced criteria, was adequate and useful, giving immediate qualitative feedback to students on their performance. As for the final results of the written component and role-play, they were positive, mostly with good and very good results.
In this process, in addition to the syllabus contents, successfully learned, we highlight the way how to do it, through the development of crucial skills such as communication skills, autonomy, critical thinking, problem solving, teamwork, conflict management, leadership and creativity.
Concluding, with this activity, students were protagonists of their own learning, they were on a stage, in the spotlight, performing in the most appropriate way for the challenges of professional reality. This is an example of how 21st century skills that are increasingly valued by the job market and can be developed in academia to prepare better students, more critical, autonomous and responsible workers and citizens.

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