Chapter 200

Project-based learning – A significant learning at Júlia Kubitschek state college

Fabiana Ferreira Braga Madeira
Federal Fluminense University,
LATTES: http://lattes.cnpq.br/0030967841281047
E-mail: fabifbraga@gmail.com

Gerlinde Agate Platais Brasil Teixeira
Federal Fluminense University,
LATTES: http://lattes.cnpq.br/./6220755242684276
E-mail: gerlinde.teixeira@gmail.com

ABSTRACT

The project entitled Project-based learning was developed at Colégio Estadual Júlia Kubitscheck and was inspired by the period of the COVID-19 pandemic in a hybrid teaching format. The classes taught had a remote profile, sometimes they were carried out by video call communication service, sometimes by recorded classes, and made available on the SEEDUC/RJ platform. Faced with this reality, active methodologies enable the construction of collaborative classes based on more lively and meaningful learning experiences for students. The objective of the project was to highlight the themes of inclusive education - deafness, physical disability, autism spectrum disorder, intellectual disability, blindness, high abilities, and giftedness through an active methodology that awakens youth protagonism related to the programmatic contents of Portuguese Language, when possible and that the contents of the Portuguese Language curricular component were discussed in the projects. As a theoretical basis for the development of the project, it was based on Bacich (2017) who designs models of active methodologies for innovative practices in the classroom. The work methodology used was TBL Team-based learning – learning in teams that offer a participatory teaching model, as students can do it together, share ideas, and collaborate (AMARAL, 2017). The results indicate that it is possible in a public education system to offer innovative educational models to students, according to the national curriculum base, and that integrate them into the new literacies resulting from a contemporary society that consumes new technologies. The students resignified their knowledge, and their learning, they felt part of the teaching process.

Keywords: Teaching, Active methodologies, Inclusion.

1 INTRODUCTION

The project entitled Project-Based Learning – significant learning at Colégio Estadual Júlia Kubitscheck was inspired by the knowledge acquired in the classes of the discipline Active Methodologies of the Doctorate in Sciences, Technologies, and Inclusion at Universidade Federal Fluminense. This was a time when we were experiencing the COVID-19 pandemic, and it was a great challenge to teach by offering quality public education in schools in the state network of Rio de Janeiro, including for students targeted for inclusion. It was necessary to think of a teaching strategy that would activate the students' interests and offer knowledge in the face of the use of technologies and innovations typical of the period in which we lived.

The project was developed in a Teacher Training Institution of the Public Network of the State of Rio de Janeiro, in the Portuguese Language curricular component, and applied in class 1007 - corresponding

to the first grade of normal education during the school year of 2021. the project was to highlight the themes of inclusive education - deafness, physical disability, autism spectrum disorder, intellectual disability, blindness, high skills, and giftedness through an active methodology that would awaken youth protagonism related to the programmatic contents of the Portuguese language, whenever possible, and that the contents of the Portuguese Language curricular component were discussed in the projects.

As a theoretical foundation for the development of the project, Bacich (2018) was the theoretical framework, which designs models of active methodologies for innovative practices in the classroom. The work is a combination of theory and practice, supporting the structural basis of the project carried out in class 1007. The chosen model theorizes the use of teaching practices arising from the use of digital information and training technologies (TDIC) making use of mobile devices connected to the internet or applied to digital teaching platforms and used in different spaces and contexts of a hybrid teaching model.

The developed project is qualitative descriptive research applied in the field by developing projects in teams. These provide a dialogue with digital culture and new forms of literacy arising from digital information technologies. In this way, they provide openness and flexibility for coexistence with diversified flows of information and knowledge based on the multiplicity of literacies (ROJO, 2010).

1.1 ACTIVE METHODOLOGIES IN ACTION

Blended learning, as a formal education program, allows the student to carry out proposed activities both through online and face-to-face teaching to integrate them. Blended learning enables students to "learn anytime, anywhere, on any path, at any pace" (HORN; STAKER, 2015, p. 10). In the first moment, of the world lockdown, classes were offered in a 100% online format and later, flexibility began with the face-to-face model.

In addition to the theoretical references of the hybrid teaching model, the references of the use of active methodologies guided by William James, John Dewey, and Édouard Claparède, who defended a teaching proposal centered on learning through lived experiences and the development of students, were used. John Dewey represents Escola Nova based on learning by doing (learning by doing in English) always betting on educational strategies that dialogue with the use of new technologies each time. Such an education model organizes the learner's experience and guides the principles of initiative and originality to awaken students' potential. (DEWEY, 1959)

Among the various active learning strategies, Team-Based Learning (TBL) was chosen for the execution of the project reported here. TBL was initially developed in the 1970s in business courses by Larry Michaelsen for large classes (BOLELLA et al., 2014). Even so, a single teacher could conduct an active learning strategy different from that proposed for Problem-based learning or PBL whose dynamics were developed to be carried out with groups of up to a maximum of 10 students for each teacher or tutor. The PBL process was started by Barrows and Tamblyn in the McMaster University Medical School program in Hamilton in the 1960s as an alternative to traditional healthcare curricula that disenchanted

students until they reached internship. PBL uses as a tool for the selection of problems that have applications in the real world, which allows students to perceive the relevance and application of knowledge in their roles in the health system in the future. When they realize the relevance, they are motivated to learn. (BARROWS, 1996)

With the successful use of TBL in several institutions of higher education, in 2001, the US government decided to finance educators in the health sciences to incorporate such teaching strategies. In this movement, professors from medical schools in different areas of the country underwent continuous training in the use of TBL (PARMELEE et al., 2012).

Khogali (2013) emphasizes that in this learning technique, the student is responsible both for his performance and also for the performance of the team. The technique stimulates to increase in the critical thinking, reasoning, and emotional intelligence of all teammates and the entire group when allowed to present their projects.

1.1.1 Team-based learning in Action – meaningful learning

The project started in early 2021 and ran until December 2021 on the last day of school activities. At first, remote classes are held via video call communication service. Classes were made available on Google Classroom. We started with a pre-test questionnaire to gain insight into the biggest challenges facing students with disabilities during the COVID-19 pandemic. Students were challenged and motivated to identify problems and propose solutions for issues that generate inclusion within our society. Propositions should be relevant and meaningful to their own lives and to the service of others.

The active methodology provides greater interaction between the Professor and the Students, in which the Professor is the mediator of knowledge. The choice of projects of interest to the students overcame the difficulties of the pandemic, as the interest, the place of speech, and the protagonism belonged to the students. They narrated their stories, investigated, deepened the themes, and created the projects. TBL offers a participatory teaching model, as students can do things together, share ideas, and collaborate (AMARAL, 2017). Then, the students had theoretical classes with invited specialists in the themes of inclusion: deafness, physical disability, autism spectrum disorder, intellectual disability, blindness, high abilities, and giftedness.

Soon after, the class was divided into work teams in which the students had the challenge of creating projects with the theme of including common social and obligatory self-interest in the teacher training course. The students formulated their hypotheses, discussed the solutions, and proposed their materials and proposals for solving the problems they identified. Please see below the stages of development of the project:

Table 1. Stages of the Team-Based Methodology

1- Theme identification
2- Identification of the problem
3- Identification of the research methodology
4- Research: Identification of the barriers that people with the investigated type of disability face: at school, in the community, and society as a whole.
5- Research on concepts: identity, medical, historical, and social of the chosen group.
6- Elaboration of the final report of the project with an explanation of the theme, identification of the problem, and its resolution.

Source: own authorship.

After completing the stages, the students presented their projects to each other in a culmination format and had the opportunity to learn from the exchanges, to know and deepen about different themes of inclusion. The culmination had a collective snack and an atmosphere of great harmony and learning of new knowledge.

Students presented new thematic projects linked to the use of new technologies such as the creation of tick talks as a publicity campaign for the eradication of capacities, to reduce linguistic prejudice about deaf people, valuing the Brazilian Sign Language (LIBRAS) and its diffusion at the national level. They made use of LIBRAS, created the digital folder proposing a more inclusive city with the use of ramps for wheelchair users, and adapted bathrooms in public spaces. They also proposed an education space for more inclusive schools with classes in Braille, LIBRAS, and the implementation of ramps and elevators.

2 RESULTS AND DISCUSSION OF THE ACTIVE TBL METHODOLOGY

The TBL methodology can provide greater comfort for learning in the pandemic period, arouse the interest of students, and motivate them to think and create proposals for scientific dissemination that could quickly and in a youthful language reach more young people with the use of tik tok. Our observations are in line with Khogali (2013) who states that in this teaching technique, the student is responsible not only for his performance but also for the team. It was possible to verify that the TBL stimulated the teams' critical thinking, reasoning, and emotional intelligence, especially because of the opportunity to present their projects to other colleagues.

3 FINAL CONSIDERATIONS

Significant learning at Colégio Estadual Júlia Kubitscheck helped us to realize that it is possible in a public education system to offer students, innovative educational models, under the National Curricular Base, which integrates them into the new literacies of a contemporary society that consumes more and more. more digital technologies. The students re-signified their knowledge, and their learning, they felt part of the learning process. These were able to integrate their knowledge in the technological domain into the contents, of the learning proposal and they were the protagonists. They presented a means of disseminating such important and relevant themes to their course and society with the inclusion of people with disabilities. The classes featured emotional testimonials from people with disabilities who were part of the lives of

many of our students and were excluded. The students completed the project with a commitment to promote inclusive accessibility so that such realities no longer occur. It was indeed a very significant learning experience.

REFERENCES

Amaral, l. A. Aprendizagem baseada em equipes em contextos formativos (team-based learning - tbl). In: veiga, i. P. A (org). Metodologia participativa e as técnicas de ensino-aprendizagem. Curitiba: crv, 2017. P. 119-136.

Bacich, l.; moran, j. Metodologias ativas para uma educação inovadora: uma abordagem téorico-prática [recurso eletrônico] / 2018.

Barrows, howard s. (1996). "problem-based learning in medicine and beyond: a brief overview". New directions for teaching and learning. 1996 (68):3–12.

Bolella, v. R.; senger, m. H.; tourinho, f. S. V.; amaral, e. Aprendizagem baseada em equipes: da teoria à prática. Revista medicina, são paulo, v. 47, n. 3, p. 293-300, nov. 2014.

Dewey, j. Democracia e educação. 3. Ed. São paulo: companhia editora nacional, 1959.

Horn, m. B.; staker, h. Blended: usando a inovação disruptiva para aprimorar a educação . Porto alegre: penso, 2015.

Khogali, s. E. Team-based learning: a pratical guide: guide supplement 65.1 – viewpoint. Medical teacher, v. 32, n. 2, p. 163-165, 2013.

Parmelee, d. X.; michaelsen, l.k.; cook, s.; hudes, p.d. team-based learning: a practical guide: amee guide no. 65. Medical teacher, v. 34, n. 5, 2012.

Rojo, r. Multiletramentos: práticas de leitura e escrita na contemporaneidade.
2010. Disponível em: <http://public.me.com/rrojo>. Acesso em: 5 set. 2017.