

## DISTANCE EDUCATION AND MULTICULTURAL TRAINING: BRAZIL-JAPAN EXPERIENCES

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#### **ABSTRACT**

This paper aims to report an experience of multicultural training in an extension project of the Federal University of Mato Grosso, entitled Public Management and Education in a Perspective of Multicultural Training, linked to the National Program of Public Administration (PNAP), carried out in partnership with the University of Tokai, Japan. The results make it possible to analyze aspects related to the technical customization of a multicultural VLE, the experience of management teams, the challenges and positive points of the interactions that occur between people from different countries and cultures. These results show that the Digital Technologies of Communication and Communication facilitated the study processes, as well as the practices of interaction and communication between Brazilian and Japanese students and teachers.

**Keywords:** Virtual Learning Environment. AVA Multilingual. Brazil-Japan Course.

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#### INTRODUCTION

Recognizing, valuing and respecting cultural diversity is a premise of education, and it was the intention through a partnership signed between the Federal University of Mato Grosso (UFMT) and the University of Tokai, in Japan, the project entitled Public Management and Education in a Multicultural Training Perspective of the National Public Administration Program (PNAP) was consolidated in 2018. Within the scope of UFMT, the Faculty of Administration, together with the Center for Open and Distance Education (NEAD) and the Secretariat of Educational Technology (SETEC), developed actions for the concreteness of the project that had as its general objective to develop improvement studies and research, applied to the field of public management and education, with the purpose of knowing the needs of the Brazil-Japan sociocultural contexts and subsidizing the elaboration of a proposal for multicultural training between Brazilian and Japanese public institutions.

In this scenario, this work aims to report a multicultural training project based on an experience carried out between a Brazilian university and a Japanese university.

The proposal was developed through a multicultural extension project, offered through the distance modality, with the target audience being undergraduate and graduate students from the PNAP project, undergraduate students from Tokai University and graduates of the Pedagogy course Brazil-Japan agreement. The offer comprised 65 vacancies and had a workload of 240 hours.

The production of the teaching materials was prepared in partnership by Brazilian and Japanese teachers. The material was conceived through texts, in the format of articles and video lessons, through 4 thematic units, namely: Unit I: Formation of the state (Brazil and Japan); Unit II: Organization of the Brazilian and Japanese educational system; Unit III: Organization and management of Brazilian and Japanese institutions and Unit IV: Diagnosis and proposal of multicultural training (Transversal).

After the production of each module, all the material produced went through a translation process, being made available on the virtual platform in the languages:

Portuguese, Japanese and English, as it was understood that the English language would be an intermediary in the course of communication.

As it is eminently a distance learning course, a large part of the participation and interaction took place through the Virtual Learning Environment (VLE), thus, it was necessary studies and research to customize the VLE, in order to provide students,



regardless of their cultural origin, with a successful study experience, due to access to materials, navigability in the environment and development of the proposed activities.

The results of the experience highlight challenges and opportunities for multicultural training that occur through pedagogical and technological mediation in Distance Education (DE) courses. Among the challenges observed, it is possible to highlight communication and cultural aspects. On the other hand, among the positive aspects, it is observed that distance education is a promising path for multicultural education, capable of enabling the exchange of cultures and knowledge between Japanese and Brazilian students and teachers, geographically distant, but connected virtually thanks to VLE technology.

# MULTILINGUAL VAS – EDUCATIONAL DESIGN AND THE TECHNOLOGICAL INFRASTRUCTURE USED

THE EDUCATIONAL DESIGN PROCESS

The formative experience began with the elaboration of an instructional design or educational design project – equivalent terminology used by the project's pedagogical teams within the UFMT. Educational design is understood, in the Brazilian context, as:

"[...] the intentional and systematic action of teaching that involves the planning, development and application of methods, techniques, activities, materials, events and educational products in specific didactic situations, in order to promote, based on the known principles of learning and instruction, human learning" (FILATRO, 2008, p. 14).

In this sense, the use of educational design, as a systematized method, allowed the teams to better understand the conceptions that guided the development of a multicultural educational solution and, based on this, to define procedures, methods and techniques for carrying out the educational design process.

In the first step of the design process, dialogue with the teams of experts made it possible to better understand the educational approach required to implement the educational solution. At this point, the team of instructional designers gave up the possibility of using more structured training approaches, starting from educational solutions similar to those used in the production of massive online courses (MOOCs). Less structured educational approaches were chosen, based on a dialogical and constructivist perspective that could consider more authentic learning contexts that occur with human intervention in mediation processes.



Considering the aspects of multicultural education and the need to monitor students, the teams opted for the creation of a continuing education course guided by the Distance Education (DE) modality. The course was attended by tutors (mediators) and teachers (specialists), together with professionals responsible for technological support.

In this sense, the distance education training had the participation of bilingual tutors in Portuguese and Japanese, in order to intensify the mediation processes, regardless of the origin of the participants involved in the course.

#### INFRASTRUCTURE AND EDUCATIONAL RESOURCES USED

The use of VLE in courses offered by the distance modality is a habitual and frequent practice, especially in the current situation, in which information and communication technologies permeate many of the educational processes and practices, facilitating and enabling education mediated by technologies. To advance in this perspective, UFMT has developed research and studies on the customization of VLEs for use in various teaching-learning contexts, involving cognitive, affective and sensory-motor skills dimensions. It is possible to mention as one of the results of these studies the customization of a multilingual VLE, which will be presented in this work, as well as the creation of methods to assess the acquisition of sensory and motor skills in three-dimensional environments published in the works of Anjos (2024).

Virtual learning environments are electronic systems, but they reflect the concept of 'online classroom', and are established as the place where educational actions are carried out, allow the publication, storage and distribution of didactic materials, as well as communication between students and other actors in the educational process (FILATRO, 2008, p. 120).

In the context of the Brazil-Japan multicultural course, the challenge was to provide a space for multilingual convergence, as a way to overcome communication and interaction barriers between students and teachers, belonging to different countries and languages. For this, it was necessary to use a virtual platform that would allow its full customization, aiming to adapt to the reality of the course, with characteristics of free, free software and open source.

For the technological infrastructure project, the Moodle (*Modular Object-Oriented Dynamic Learning Environment*) system was adopted, commonly used for distance education courses, as it is free of licensing fee and has flexibility for adaptations and



modifications, as well as having constant updates through its virtual collaborative community, accessible on moodle.org. In view of this, the version of Moodle used for the Brazil-Japan multicultural course was 3.1.10+ (Build: 20180209), which is capable of supporting multilingual technologies.

To ensure better support and accessibility, it was decided to use the default Moodle theme, so the technical team that worked on the project provided the necessary adaptations to the platform through the installation of the *Filter Multi-language Content v2* (https://moodle.org/plugins/filter\_multilang2) module, which enabled the prerogative to list and choose the desired language. There was also a need to activate and enable the languages Portuguese - Brazil (pt\_br), English (en) and Japanese (ja) in the Moodle settings. Once enabled, the languages became available on the LMS home screen in a checkbox.

In this way, all course modeling in relation to the insertion of content, labels, descriptions, among others, occurred conjunctively by edits in three languages and with the use of the *Multi-Language Content* plugin, as shown in Figure 1.

Figure 1- Language Customization Interface

Source: www.setec.ufmt.br/jp

In the construction process, it was essential to take care of the graphic design and visual identity area of the Brazil-Japan Multicultural course. The communication team worked on the creation of a graphic interface that could converge cultural elements of Brazil, such as the hyacinth macaw and the yellow Ipê flower; and from Japan, such as Sakura (cherry tree) and Tsuru (origami art), with the intention of bringing the community of students and teachers closer together. This semiotics was applied both in the VLE interface



and was present in all didactic materials produced in the three languages, as illustrated in Figure 2.

Figure 2- Visual identity - teaching materials







Source: www.setec.ufmt.br/jp

In the process of modeling the course in the VLE, the videos were produced by Brazilian and Japanese teachers, being duly subtitled in the three languages, striving for the accessibility of the content available in the virtual environment. For example, once the student selected the Japanese language, the entire VLE interface was presented in that language, including the videos, if he chose to switch to the English language, the same logic was employed.

All the features used in the platform made it possible for the interface to be customized, allowing participants to access the content in their native language. In order to support navigation in three languages, the labels of the multilingual VLE navigation areas and materials were designed in English, Portuguese, and Japanese, as shown in Figure 2 and 3.



Figure 3- VLE interface with the prospection of 3 languages.







Source: www.setec.ufmt.br/jp

The initial design proposal had modules with specific information from the multicultural reality of Japan and Brazil. From the discussion with the Educational Design teams and specialists in the areas of knowledge, it was decided to configure areas always containing the presence of professors from UFMT – representing Brazil and professors from Tokai University, representing specialists from Japan.

Participants used various electronic tools available in the multilingual VLE, with emphasis on activities illustrated in the form of a forum. This resource was made available as a space for collective communication, allowing students to interact asynchronously, that is, in their own times.

Asynchronicity was essential to enable communication at different times, especially considering the time zone between Brazil and Japan, making it one of the most used tools in the context of the experience.

In addition, the exchange of messages carried out in different languages made it possible not only to analyze linguistic aspects, but also to share information and diverse cultural perspectives, further enriching the learning process.

The ease of language switching in the Multilingual VLE, as well as the use of other translation resources existing in the digital network, provided students and tutors with an educational and technological mediation process, which resulted in the fulfillment of the activities requested during the course.

In addition, the exchange of information between Brazilians, Japanese and people from other countries made it possible to broaden the understanding of multiculturalism, not



only because of the theme of the materials studied, but also because of the experience experienced within the VLE.

#### THE EXTENSION PROJECT - CHALLENGES AND POSITIVE POINTS

The project was estimated to last six months, starting on April 21, 2018, at 8 am (Brasília time) and April 22, 2018, at 8 am (Tokyo time). In addition to the training activities, the project opened the prospect of exchanging experiences between specialists from Brazil and Japan, which made it possible to collect data and information, which could in the future support future offers similar to this one.

At the end of the project, the teams carried out a survey to categorize the main challenges and positive points. These aspects will be described in the following paragraphs.

The platform used and customized was the Moodle Virtual Learning Environment (VLE), widely used in the context of distance higher education in Brazil. During the training processes, Brazilian students residing in Japan – mostly graduates of distance education courses at UFMT – showed greater familiarity with the use of the platform.

The insertion of bilingual mediators (tutors) facilitated communication between the participants. However, especially in synchronous activities, difficulties arose related to the equivalence of times, due to the time zone of the two countries. From the point of view of mediation, there was greater engagement among Brazilian students living in Japan, compared to the number of interactions of students from other locations.

The educational design process allowed for the creation of a multilingual VLE, integrating identity issues between participants from Brazil and Japan. However, the conception stage was complex, due to the language barrier between Brazilian and Japanese teachers, who mostly did not share a common language. This difficulty required constant translations during the development of educational materials to ensure that they were designed from a multicultural perspective.

Multiculturalism was visible not only in the experiences carried out in the teaching-learning strategies. From data present on the course platform, it is observed that the participants mastered several languages, with the Portuguese language predominating, when considering part of students who graduated from a pedagogy course offered by UFMT in Japan.



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Outro 1.26% Português, Espanhol, Inglês e Japonês 2,21% Português, Inglês e Espanhol 3,79% Português , Inglês e Japonês 4,42% Português e Espanhol 7,26% Português e Inglês 8,52% Português 58.36% Português e Japonês 9,78%

Figure 4 - Languages identified by the participants in the project

Source: www.setec.ufmt.br/jp

In addition to the mediation process provided by the use of the VLE, face-to-face meetings were held in two stages: 1) at the time of the project's elaboration - in which professors and specialists from UFMT were together with Japanese professors on a technical visit to the University of Japan and 2) in a face-to-face moment, in which there was a visit by specialist professors from Japan at UFMT - in Brazil.

The face-to-face meetings allowed the definition of important strategies for the educational design project, as well as the elaboration of the thematic content that would be present in the material.

In the end, satisfactory results are observed in the execution of the project, when the online training experience itself is already an aspect that adds value among the participants. From the data collected in the institutional VLE, it is observed that 24.44% had not completed any type of online training. 72.56% answered affirmatively that they had taken online training.

In addition to the collaborative experience in the preparation of the materials, the cultural, technical and scientific exchange in several dimensions stands out, among which the following stand out: i) the exchange of technical and scientific experiences between Brazilian and Japanese professors, with the participation of 12 Brazilian professors and 11 Japanese professors; ii) the collaboration of 2 bilingual tutors (Japanese and Portuguese);



and, finally, iii) the involvement of 26 Brazilian and Japanese students who completed the training, the main beneficiaries of the training proposal.

Notwithstanding the data presented above, there was an expectation of those involved to continue the training actions, designing a multicultural training project to be carried out in the following year. However, with the advent of the pandemic context in 2019, the experiences of multicultural training were interrupted.

### **FINAL CONSIDERATIONS**

The experience in the course with the multicultural theme was positive, according to an evaluative research carried out, where students and researchers identified challenges and possibilities for the implementation of training projects between Brazil and Japan.

The extension activities, which integrated training and research, also revealed the interest in new distance learning courses and experiences of a similar nature or at different levels of training. These courses aim to unite people from different cultures, but with converging training objectives.

The use of less structured educational approaches, which allow the monitoring of students by bilingual specialists (tutors), was another extremely important factor, as it allows working on mediation processes, sensitizing to cultural issues and divergences that exist between people from different countries and cultures.

The technical implementation and customization of the multilingual VLE, together with the use of asynchronous tools during the course, combined with synchronous meetings (face-to-face and virtual), were identified as practices that should occur more frequently to promote more effective engagement between students, specialists and tutors. These factors constituted one of the challenges for the next experiments, since, unlike the asynchronous format (which can be supported by translation tools), synchronous meetings require a greater translation effort, due to the need for real-time understanding between speakers of different languages.

The multicultural richness was manifested not only in the development of activities carried out in different languages, but also in the debates that emerged during moments of convergence and divergence. These dialogues allowed us to explore cultural roots and challenges common to Brazilian and Japanese societies, expanding mutual understanding.



Although the training process has presented difficulties, including cultural and communication barriers, positive results are observed, demonstrating that experiences like this should be encouraged and expanded.

In this context, Distance Education (DE) is configured as a strategic tool, not only to provide training, but also to promote the approximation between people who live in different contexts, cultures and societies.

It is believed that, through training, combined with research and the engagement of individuals from different cultures, it is possible to build a process of collective intelligence, capable of contributing to the resolution of global problems, such as those aligned with the Sustainable Development Goals (SDGs) of the 2030 Global Agenda.



#### REFERENCES

- 1. Anjos, A. M. dos, Anjos, R. A. V. dos, & Nunes, E. P. dos S. (2016). Métodos de avaliação em ambientes virtuais tridimensionais: Aspectos cognitivos e habilidades sensóriomotoras. Revista de Educação Pública. 25(59/1), 277-293. https://doi.org/10.29286/rep.v25i59/1.3675. Acesso em 25 nov. 2024. https://periodicoscientificos.ufmt.br/ojs/index.php/educacaopublica/article/view/3675
- 2. Anjos, A. M. dos, & Marques, D. da S. (2022). Educação física a distância: Propostas de mediação pedagógica em contextos de aquisição de habilidades sensório-motoras. Revista de Educação Pública, 31, 1–20. https://doi.org/10.29286/rep.v31ijan/dez.13366. Acesso em 25 nov. 2024, de https://periodicoscientificos.ufmt.br/ojs/index.php/educacaopublica/article/view/13366
- 3. Filatro, A. (2008). Design instrucional na prática (1. ed.). Pearson. E-book. Acesso em 20 nov. 2024, de https://plataforma.bvirtual.com.br
- 4. Moodle. (2019). Comunidade Moodle. Acesso em 30 jul. 2019, de https://moodle.org
- Universidade Federal de Mato Grosso. (2018). Projeto pedagógico de curso Gestão pública e educação em uma perspectiva de formação multicultural do Programa Nacional de Administração Pública (PNAP). Cuiabá.