

The Virtual Classroom: Art Education for Itinerant Students

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Abstract

In Portugal, children deprived of a permanent residence (merchants and circus performers) grew accustomed to change school countless times, lived with discrimination from colleagues, with the impossibility of setting up roots and with a difficult progression in the access to knowledge. In 2005, an innovative project would change their school paths radically, throughout the creation of a custom-designed curriculum to help meet their individual needs: the Mobile School. In this inclusive school of b-learning, these children may now have teachers and colleagues who they can relate to and really feel like "their own" and who may follow them during at least one full school year. Without discrimination. With stability. With care.

In this context, Art Education is part of a set of subjects which comprehends Visual Arts and Music, with a perspective towards learning through the implementation of projects using the ICT as a way of artistic expression. Communication between teachers and students is achieved through a virtual platform, and the artistic creations of these students are achieved mainly through specific software for drawing and image editing.

Benefiting around 100 children, what will be the future of the Mobile School in a period not only of economic crisis but also claiming social inclusion as a way of developing integrated societies?

Keywords: b-learning; distance learning; art education; itinerancy; social inclusion.

An inclusive model of education

The contemporary society is developed in close collaboration with the Information and Communication Technology (ICT), enhancing new models of communication as an alternative to the traditional ones. These models can and should serve society for the inclusion of citizens, particularly in relation to their education, with regard to special educational needs. The school, as an institution, must follow the changes in society regarding the use of ICT, requiring new teachers' skills and new relationships between students and knowledge. At the same time, the school must also create integration responses and respect for diversity of cultural environments in which students live.

These were the principles that led to the creation of the Mobile School Project, a school of distance learning for itinerant children, working in circuses and fairs, unable to attend, with stability, to regular education. It offers an alternative pathway course that serves the characteristics of these students and enhances the very specific expectations of their families, in order of a successful learning.

The Mobile School Project began in 2005/2006 with 3rd cycle students, itinerant children, and had as main

objective to support them to complete compulsory education, providing the essential learning, as well as an educational base that would allow them to pursue their studies if they so wished.

Two years later, this project was extended to other publics, also characterized by disabilities that hindered them from attending regular school. These publics were 2nd cycle students, teenage mothers also supported by a charity organization, and students over 15 who, for various reasons, found themselves unable to complete compulsory education.

In 2009/2010 the Mobile School was legally recognized by Decree No. 835/2009 of July 31, becoming a "real" *School* instead of a *Project*, which allowed increasing the number of teachers to 34 and offering two vocational training courses of secondary education.

Covering about 100 students, each one has at its disposal a laptop with internet connection to follow and to participate in school activities, according to a timetable. The classes are organized by focus groups and grade. For each student is assigned a tutor-teacher, who has the responsibility to establish communication between school and family.

Classes run on a virtual platform, *Moodle*, consisting of several virtual classrooms, one for each course and class. On the virtual classrooms several teachers can participate at the same time, according to the needs of each project and the characteristics of students in each class, as a perspective of individualized support. The use of these tools and resources facilitates the development of basic skills, through direct control of the students' learning pathways by teachers.

Four times per year the school becomes real, instead of virtual, for one week each time. On a kind of a boarding system, all the students are joined on a space with classrooms, mess room, auditorium, playgrounds and dormitories. These attendance weeks include classes, study visits and analogic practical expression, thus contributing to build a group identity. The teachers are with the students during these days, accompanying and supervising them in all their activities, including, of course, classes, but also class breaks, meals, and overnights. These are very important moments to create and to strengthen the personal relationships, a significant contribute for the motivation of these children and teenagers to like school and to work for their personal success.

Whether in presence or virtually, the learning environment is implemented by teachers in accordance with a dynamic of collaborative work in which students can develop activities together with teachers, creating mutual help, either with teachers or peers, to meet the learning goals. Denote that this system of education has the collaboration of many partners who support the activities. Those partners include a mobile communication enterprise, an institution that supports pregnant teenagers and young mothers, a science center and some schools, among others. (Government of Portugal, 2008).

Portuguese Education System and the Mobile School Curriculum

In Portugal, compulsory education is divided into four periods: (a) the 1st cycle, during four years, beginning at 6 years of age until 9/10, (b) 2nd cycle, during 2 years, from 10 to 11/12 years of age, (c) the 3rd cycle, during 3 years, from 12 to 14/15 years of age, (d) the Secondary, during 3 years, from 15 to 17/18 years of age.

Compulsory schooling totals 12 years, although this measure approved in 2009 is valid only for students that in 2009/2010 started one of the grades of the 1st or 2nd cycle or even the first grade of the 3rd cycle, whichever is established in Law No. 85/2009 of 27 August. The remaining students have a limit of compulsory schooling until 15 years of age. The school year runs from the beginning of September until the end of June, for the 2nd and 3rd cycle, and until the end of July for the secondary and for vocational training courses.

SYLLABUS COMPONENTS 2 nd Cycle	Time per week (x 90 min.)		
	5 th grade	6 th grade	Total Cycle
Portuguese	5	5,5	10,5
Foreign Language			
History and Geography of Portugal			
Mathematics	3,5	3,5	7
Natural Sciences			
Art Education and Technology	3	3	6
Visual and Technological Education			
Music Education			
Physical Education	1,5	1,5	3
Project Area	3	2,5	5,5
Civic Education			
Assisted Study			
Religious and Moral Education (optional)	0,5	0,5	1
Decided by the school	0,5	0,5	1
TOTAL	17	17	34

Table 1 – Curriculum of the 2nd Cycle, according to law (Decree-Law n.º 209/02, of October 17, amended by Decree-Law n.º 24/2006, of January 6).

SYLLABUS COMPONENTS 3 rd Cycle	Time per week (x 90 min.)			
	7 th grade	8 th grade	9 th grade	Total Cycle
Portuguese	2	2	2	6
Foreign Language 1	3	2,5	2,5	8
Foreign Language 2				
History	2	2,5	2,5	7
Geography				
Mathematics	2	2	2	6
Natural Sciences	2	2	2,5	6,5
Physics and Chemistry				
Visual Education	1	1	1,5	5,5
Another discipline for Arts Education (Dance, Music, Theatre, or other)	1	1		
Technology Education				
Physical Education	1,5	1,5	1,5	4,5
Introduction to ICT	-	-	1	1
Project Area	2,5	2,5	2	7
Civic Education				
Assisted Study				
Religious and Moral Education (optional)	0,5	0,5	0,5	1,5
Decided by the school	0,5	0,5	-	1
TOTAL	18	18	18	54

Table 2 – Curriculum of the 3rd Cycle, according to law (Decree-Law n.º 209/02, of October 17, amended by Decree-Law n.º 24/2006, of January 6).

In secondary education students have the opportunity to opt for specific areas of learning and may attend: a scientific-humanistic course, which assumes a continuation of studies at university; a vocational training course, more technical, favouring the insertion in the labor market; or an art specialization course, which features a dual perspective, that is, integration into the labor market or continuing education at university. To meet the needs of itinerant students concerning to basic education, the Mobile School has an alternative curriculum, according to the Legislative Order No. 1/2006, to respond to situations of equal opportunities in

access and success in school. Based on the national curriculum, and taking into account the very specific characteristics of these students, the curriculum of the Mobile School for students in 2nd and 3rd cycles was created according to the principle of a successful school. Art Education is included in a subject called *Communication and Expressions*.

SYLLABUS COMPONENTS ON MOBILE SCHOOL 2 nd Cycle	Time per week (x 60 min.)		
	5 th grade	6 th grade	Total Cycle
Portuguese	3	3	6
Foreign Language 1 - English	2	2	4
Past and Present World: - History - Geography	2	2	4
Mathematics	3	3	6
Life and The Universe: - Natural Sciences - Physics and Chemistry	2	2	4
Communication and Expressions: - Visual Education - Technology Education - Music - ICT	4	4	8
Physical Education	2	2	4
Project Area	1	1	2
Civic Education	1	1	2
Tutoring	4	4	8
TOTAL	24	24	48

Table 3 – Curriculum of the 2nd Cycle on Mobile School.

SYLLABUS COMPONENTS ON MOBILE SCHOOL 3 rd Cycle	Time per week (x 60 min.)			
	7 th grade	8 th grade	9 th grade	Total Cycle
Portuguese	3	3	3	9
Foreign Language 1 - English	2	2	2	6
Foreign Language 2 - Spanish	1	1	1	3
Past and Present World: - History - Geography	3	3	3	9
Mathematics	3	3	3	9
Life and The Universe: - Natural Sciences - Physics and Chemistry	2	2	2	6
Communication and Expressions: - Visual Education - Technology Education - Music - ICT	3	3	3	9
Physical Education	2	2	2	6
Project Area	1	1	1	3
Civic Education	1	1	1	3
Tutoring	3	3	3	9
TOTAL	24	24	24	48

Table 4 – Curriculum of the 3rd Cycle on Mobile School.

Secondary Education, on the Mobile School offers students the possibility to attend one of two vocational training courses available: *Technical Communications - Marketing, Advertising and Public Relations* and *Technical Management*. In this case, the alternative curriculum is not applicable, since, according to the Decree-Law No. 74/2004 of March 26, amended by the Decree-Law No. 24/2006 of 6 February, it's not possible to plan curriculum adaptation pathways on vocational training courses. Thus, the curriculum of the vocational training courses in secondary education on Mobile School are equal to those of regular education.

The component of Arts Education finds its expression in the subjects of *Graphic and Audiovisual Communication* and *History and Culture of the Arts*.

Curricular Practices in *Communication and Expressions*

Communication and Expressions brings together the areas of Visual Education, Technological Education, Music Education and Introduction to ICT. The projects developed by students in this subject have mainly a formative character, oriented to the collective responsibility and the constructivist model of learning. Each class of *Communication and Expressions* has two teachers, who regularly follow the students.

In the communication platform, on which each student has a specific password to enter, teachers and students have the following main tools: the *lesson guide*, the *chat*, the *forum* and the *learning objects*.

The *lesson guide* is what the student finds when he enters on the virtual classroom, the ordered listing of tasks that he will have to do during the class time.

The *chat* is nothing else than a chat room, a space to exchange instant messages that aims to make an initial greeting to those present, as well as placing some doubt concerning the difficulties that students may have, not doubts about the content of the lesson (there's another tool for that), but about the practical use of technological tools, for example, difficulty on internet access, which can cause a slower response. It is also in the chat that is open the possibility of creating a less formal relationship between students and teachers, where students sometimes expose their personal problems, often waiting for teacher support in their resolution.

The *Forum* is a space for discussion and presentation of responses according to each challenge set by the teachers in every classroom. It is also in the forum that students should put their difficulties and doubts concerning the contents of the lesson. In the case of debate on an issue, for example, students will present their interventions, as they can also attach pictures to complement what they mean. In case of having a practical task to do, like drawing, students complete it individually on their computer and then present it in the forum so that all works are viewed by all students in the class. Teachers leave a written comment at every work, as fast as possible, which allows the student to have an almost immediate feedback on his response to the challenge and he can make the necessary amendments during the time that follows the lesson. This also allows colleagues to comment on each other's work, albeit with previously established rules, allowing a joint development on learning, as well as the possibility that all of them witness the evolution of their colleagues, learning about the difficulties of others, that sometimes are theirs too.

The forums are always available for consultation even after the classes, which allows continuous monitoring of these students, particularly when they miss a class, thus being able to access its content and discussion.

These learning practices through the forums eventually lead to a cyclical alternation between action and critical reflection, as the methodology of action-research proposed, taking into account that each subsequent cycle is a reflective learning that evolves based on the experience achieved in the previous cycle (Coutinho *et al.*, 2009).

The *Learning Objects*, digital elements whose presentation has a short duration and that support learning and can be used in the context of small learning units (Beck, 2010), have the same objectives as those used in a system of regular education, like supplement the teacher's explanation or make an introduction to a particular concept of learning. In the case of learning objects for Communication and Expression of Mobile School, the overwhelming majority is all created by the teachers, with the concern that these resources have to be sufficiently attractive so as not to dissuade the student from watch it until the end. Among the learning objects used in the lessons of Communication and Expressions, there are the powerpoint presentations, reference websites and YouTube videos. Occasionally teachers also prepare documents in *doc*, *pdf*, *wav* and *captive* formats.

To meet certain specific characteristics of this type of education, teachers and students have other tools at their disposal, such as *tests*, formulated according to what the Moodle platform allows, for example the establishment of timeouts, open and closed response questions, multiple choice, and the possibility of responding by attaching files.

For this specific type of education, there are other tools available to the teacher, such as the application *Log Me In*, which allows teachers to enter into the computer of each student, from the point of view of a more individualized support and help them with specific details For example, telling the student where is a specific tool on the software he's using to develop the work in progress, or helping the student by entering a sequence of tasks that he seems not to understand.

Another important tool in the course of the activities are *private messages*, used when there is justification to communicate throughout the group. Without being exposed to the class, students can communicate with the teacher or with other colleagues about their problems.

Particularly notable is the ease with which these children deal with all these tools, they incorporate these methodologies in their work habits and they learn quickly to deal with all these fields of technological possibilities in an impressive way. This is the perspective of the teachers. While we can't ignore that these children were born in a generation too familiar with the technology, it's a fact that they quickly learn how to open a lesson, or what document formats they can attach. Even the resolution of some technical problems that arise is often made by students who, by communicating between them, also on these issues, help each other.

During the attendance week, students are challenged to face up project activities in group using analogic means of expression, especially traditional materials of painting and drawing.

The assessment of students is presented in forums. One of the forums that is permanently available is the "Tardy Jobs Forum". There, students check the result of their participation and of their colleagues everytime they need or want to, functioning as a warning in case of default. Periodically, it's made a self and peer-assessment, also in the forum, where the classification levels are proposed and discussed with students. According to the law, the Legislative Order No. 1/2005 says that classification levels are the responsibility of the class council, that discusses a proposal made by the teachers of each discipline. The Mobile School adopted the same principles.

Some developed activities in the subject of *Communication and Expressions*

In the context of learning *Communication and Expressions*, the students participated on practical activities using image editing software and digital draw software (MsPaint, Paint.Net and Photoshop), audio (Audacity and Acid Music) and multimedia animation (Movie Maker), which enabled them to develop specific skills in ICT. Learning this software has always been held in context, by the development of each activity, through tutorials that simulated the application of tools for the resolution of the requested tasks. Whenever possible, teachers planned activities considering the calendar of the attendance weeks, so as to achieve complementarity between the two environments, because one of the main objectives of each project was to be initially developed virtually and finalized in presence.

The Cuquedo illustrated by... me! was an activity based on the children's story "The Cuquedo" written by Laura Cunha and illustrated by Paulo Galindro. The illustrator was first invited to give an interview to the students of the 2nd cycle who, having knowledge of his work by biographical sketches and pictures, provided by teachers, posted a set of questions about his life and work, creating approach to the artist and curiosity about his work. This initial activity was conducted online, in which Paulo Galindro also participated virtually on the forum created for that purpose.

In the next step, also in a virtual environment, the text of the story "The Cuquedo" was presented to the students. Just the text, without any illustrations and also a document containing audio narration of the same story. Like this, students came to know the story they would illustrate. The illustrations were made by using digital draw programs, such as Paint.Net, and each student was responsible for illustrating a part of the story.

On the attendance week the students completed their activity by building a series of illustrated panels based on the illustration projects previously conducted in the virtual environment. Each student used his digital illustration to make a card panel painted with analogic materials, illustrating the scene of the tale that was required. This project was completed with the assembly sequence of painted panels that, in the same week, were visited by the illustrator Paulo Galindro. The artist traveled to the place where the students were, where he made a presentation, accompanied by pictures, about his work as an illustrator. The students had the pleasure and opportunity to meet this illustrator and to learn more about his work and about his motivations as well as to present the work they have done, which was much appreciated by the artist.

An Intergalactic Journey was a stop motion animation project done in a virtual and presencial environment with students in the 3rd cycle. The aim of this activity came during the release of an Astronomy Art Contest, sponsored by the Portuguese Society of Astronomy, celebrating the International Year of Astronomy - 2009. The competition aimed to promote the dialogue astronomy/art and students' interest in astronomy, encouraging their creativity, originality and innovation capacity and called for the participation of public schools through the work of visual arts and multimedia, poetry, short stories and music (SPA, 2009). This activity involved all the students in the 3rd cycle and all teachers in the Mobile School on an interdisciplinary context. In the virtual environment the students created a story, including texted descriptions of physical and psychological characters as well as descriptions of scenarios where each scene was taking place. This task was developed in the forum, since the release of ideas to the finalization of the text. The message of this story had an ecological matter, stressing the need to protect the Earth through various actions within the reach of ordinary citizens. After finishing the story, and still in the virtual platform, the work was splited for several groups, each group responsible for the visual creation of a particular character or a specific scenario, with digital drawings. The drawings worked as a project for the implementation of the final work, on the attendance week. That work was based on the projects made in a virtual environment. Students draw and painted the sets with analogic materials of drawing and painting and built the characters in the form of action figures, on paper. The animated film was made by means of sequential pictures worked in the program Photoshop and assembled in the program Movie Maker. Students also composed a soundtrack and recorded narration and dialogues, which complemented the film. This project resulted in a very motivating and participated activity, with the students involved in a team effort for which the contribution of each one was indispensable.

My Graphic Diary was a continuation of activities started in virtual environment by means of digital drawings and completed in presence with a sketchbook of white leaves and scratching materials. The project began with a lesson in which was explained to students how important is the daily drawing for the development of creativity and for the ability to draw. The students were also aware of the graphic diaries of various artists that are published on the internet, including the artist Eduardo Salavisa. From this lesson on, students understood the need to draw regularly, having a support arranged like a leaf notebook, even though it was virtual. So, with inspiration from the traditional black cloak and blocks of yellow leaves with rounded corners, two digital documents were provided to students: one image of the black background and rounded corners, with standard measures that served to create the cover of their sketchbook, so they can feel it like theirs; another image, which simulated a double sheet, ready to draw, as it is on a graphic diary when we open it. Challenges were launched weekly, according to the expressive capacity of the students, always with the aim of the drawing exercise, even digital. Among the challenges was included the illustration of a feeling, creating typography, illustration of a word of unknown significance, among others, including abstract drawings.

After some weeks of work in this regard, the project culminated in a practice session during an attendance week, where students had the opportunity to personally meet the artist Eduardo Salavisa and to draw on analogic graphic diaries of smooth leaves, that were provided by teachers, as well as scratching materials. This presence session was held in Lisbon, outdoors, in the area of Belém, which allowed students to complement this work with an historical involvement with monuments like the Tower of Belém, the Monastery of Jerónimos and a visit to the Museum of the Presidency (of the portuguese republic). Subsequently, as each student was carrying an analogic graphic diary from ths day on, teachers continued to lauch some challenges to their artistic expression, in particular graphical information related to its surroundings, as a homework. From this day until the end of the school year, this experience allowed students to develop their capacity to express themselves and contributed for the development of their aesthetic sense.

The Future of Mobile School

The Mobile School was an essential response to the creation of a new way of learning with the help of technological tools that crossed geographic barriers. The Mobile School was an inclusive school, giving opportunities to working children and teenage mothers who were deprived of a solid and stable school, with a strong identity with a sense of unity, potential characteristics of school success.

In the future, the Mobile School should be able to continue to be an effective response with quality, while evolving in order to continuously adapt to specific audience, targeting new students and new social partners.

However, the Mobile School was closed by the Ministry of Education in August 2010, in the period of students and teachers' vacation, without notice, for reasons of budgetary constraint (Wong, 2010). To accompany the students who were attending the Mobile School it was created a new project, called *Distance Education for Itinerancy* (DEI), which, according to Decree No. 812/2010 of 26th of August, aimed to optimize human resources, maintaining the quality of teaching resources. Despite this, all staff was quickly fired and, according to information gathered from stakeholders, the 28 new teachers were recruited at the beginning of the academic year of 2010/2011. Because of the rules of the portuguese system for recruiting teachers, these new teachers didn't know what kind of school was Mobile School when they applied for the job. Most of them had never worked in a similar experience and therefore had to have specific training, on rapid speed, which hampered the start of classes, delayed for several days (V. Palma, personal communication, September 28, 2010). Under the same Decree that created the DEI, the project came to be led by an university professor, unknown by the previous team.

After the uncertainty, anxiety and distress experienced by students and their parents, many of them were informed about the situation by e-mail, the missing of the Mobile School was spread in social networks. The reduction of human resources appeared to have had a negative effect because parents complained about the lack of tutor-teachers, who previously established more regular contacts with the parents (C. Costa, personal communication, March 1, 2011) but each one of those teachers became to have more students and a new education system which they need to be adapted to. The adaptation of students to new teachers was not easy and there are students who miss the friendship and closeness of the teachers who accompanied them for some years and who have created important bonds of affection (L. Paiva, personal communication, September 28, 2010, V. Palma, personal communication, September 17, 2010). Parents and students were indignant because EDI ended the attendance weeks, substituting them by one attendance day where only one class can be present at a time. The possibility of consolidation of a school's identity that had been built through these moments of sharing, collaboration and integration is lost. Students also resent the fact that, unlike what happened at least in the previous year, when even outside of class time was possible to clarify doubts with the course teacher, who was often online and available, it isn't possible anymore (Z. Pardal, personal communication, December 18, 2010). The availability of the new teachers on these terms doesn't happen probably because now they have to take their time preparing lessons and learning the new tools of their jobs. Taking into account the views of parents and students, the result of the implementation of this project indicates a decrease in the quality of the response to the

specific characteristics of these students, contrary to prior legislation that created it. According to information gathered from teachers of DEI, the number of students per class has been increased, as well as the number of students by tutor-teacher. Teachers give more than one class simultaneously. Reducing the number of teachers from Mobile School to EDI led to an inevitable strain on their working hours to the detriment of their personal life and without any extraordinary remuneration. Despite the commitment of the new teachers, the consequences in terms of the diminished quality of the response will surely be evident and should be booked when any evaluation of the first year of the project will take place.

The Mobile School should be remembered as a great step in education in Portugal, as a integrator system that provided inclusive access to basic education, allowing the formation of future interventional citizens in society. But the Mobile School was closed, and and on a society that pretends to be inclusive, where people are holders of an integrated development, it is important to guarantee a quality response in the educational field. Otherwise, these children, itinerantes and others, continue to suffer from their condition.

What's next? Clues to go further

Given the constraints mentioned in the previous chapter, there's a need to present here a set of measures, such as suggestions, that could benefit the development of the DEI project.

First, a serious evaluation of the work developed over the first two academic years of functioning (2010/2011 and 2011/2012). This means a study without ordered results, with referencies to the strengths and weaknesses, with positive and negative considerations, as well as recommendations for a better functioning of the structure. A report made by the University Institute of Lisbon reflects the concern regarding the closure of the Mobile School, recommending a systematic monitoring of the new educative offer of distance learning targeted to the same students, since this new project was not prepared in enough time (Brites, 2011).

The evaluation of DEI should also include the coverage rate of itinerant children in school age. These children were the initial target of the Mobile School, but counting them is something that has not been possible to do yet, due to a lack of a reliable database with the number of boys and girls who meet these conditions, and also because the original project didn't set quantitative goals in its guidance documents (Conceição, 2010).

Another situation would be to provide stability to the group of teachers, that has been modified and reduced in the last two consecutive school years, which is contrary to the assumptions of a very individualized form of education, always defended by the Mobile School. The work undertaken by teachers is very significant in terms of time for preparing lessons and in terms of gaining experience in the

adaptation to the required technological means. It's essential to provide these teachers reasonable working conditions, including employment contracts longer than one academic year, working hours that don't exceed those provided by law, and continuous training. These were needed measures to promote the stability and the motivation of the teams.

The argument of the expenditure, which served to close the Mobile School, shouldn't serve again to limit the structure and operation of the DEI project, because much more expensive will be the consequences suffered by the society if these children can't study anymore. This economic argument was also used to end the attendance weeks, which should be restored, not only because they enable experimentation with analogic materials and technologies by students – so important for art education –, but also because they allowed human contact between students and teachers in a relationship of physical proximity so necessary to the development of emotional ties that contributed to the motivation to learn.

The project should be widely publicized, not only because of its social importance, but also to allow contact with similar projects that exist in other countries and with which it could be possible to share experiences and acquire knowledge.

Finally, the project can't lose sight of its primary objective, the social inclusion through basic education, and should therefore be extended to other audiences that are deprived from attending school regularly, such as children with serious illnesses who remain hospitalized for long periods of time, or teenage mothers received by other organizations that aren't covered by the project.

These are just some suggestions that could boost the DEI project, thus contributing to create a more just and more equal society, in terms of opportunities.

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