

Innovation Model applied in Graphic Design in Motion. Flipped Classroom in Algeciras.

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Abstract

The proposal I present, consists of the presentation of my own experience as a case study of innovative teaching application. The experience consists in the use of the didactic methodologies of Flipped Classroom and Project Based Learning in the subject of Graphic Design in Motion in 3rd year of Superior Studies of Design in Algeciras (Spain) Art School during the school-year 2016/2017. About this real experience, I have developed a research project with qualitative methodology as a approach and data collection system to understand and to be able to better apply my innovative project and also to identify the innovative culture of the center as a context. The research will be supported by the necessary theoretical foundation and the previous analysis of the state of the matter. Throughout the process of research and application, I am student at the Master in Innovation and Research in Education at UNED¹.

Keywords: Project based learning, Flipped classroom, Algeciras Art School, Graphic design, Innovation.

1. Introduction.

After 15 years of profession dedicated to teaching at very different levels, in the 2016/2017 school year I was working at the Art School of Algeciras² (Spain), where I taught four subjects related to the area of Audiovisual Media at three educational levels different that coexist in the center.

In one of these groups, I carried out a personal experimental project of educational innovation. This is the first time that I do it and I consider it very interesting and useful to focus on this real experience that I lived as a professional, as a practice for the Master of UNED that I was doing (Innovation and Research in Education). I believed that the real experience would enrich my activities for the Master, but above all, I considered that working on them in the Master would help me improve as a teacher in this experiment.

On a personal level, I was especially motivated with this work, since it then led to my TFM³ for this Master. Taking into account that my real innovative action at the Algeciras School of Art lasted until June 2017, that is, completing a school year, its comprehensive development was considered suitable as a research object for a TFM.

2. State of the question and theoretical argument.

Theorizing is fundamental because we cannot reduce innovation models to simplistic precepts. As García Aretio (2013) exposes, behind these models of Flipped Classroom and ABP⁴ there is a philosophy, another way of doing education, a theoretical approach very different from the one that supported the previous traditional model, although the use of new didactic methodologies has not to stop relying on general theories of pedagogy.

The Flipped Classroom and the ABP as Teaching Models start in the first instance from a position and paradigm oriented to decision and change. That responds to the principles of methodological integration, complementarity, attention to interculturality and transdisciplinarity. As an innovation model, it must be oriented to profound change, generate a culture of improvement and the institution's integral advance. All agents, management team and teachers, must be involved. The Flipped Classroom and Project-Based Learning (ABP) are linked to other teaching methods such as Problem-Based Learning (ABP) and are embedded within the Collaborative Methodological Model. When considering the practical part of application the most important in the learning process, it reveals the didactic model as derived from the constructivist theory, which defends that knowledge cannot be simply transferred, but is constructed by the student. The constructivist theoretical model requires that the activity must be student-centered, that it must be interactive, that the role of the teacher must be that of guide and counselor, and that the instructional emphasis must be placed on relationships, questions, and creativity. Learning is conceived as a conquest for those who learn.

¹ National Univeristy of E-Learning.

² Algeciras, city in the south of Andalusia, Spain. It is very near of Gibraltar and Morocco.

³ TFM (“Trabajo Fin de Master”) Final Master Work. This is a research textual work.

⁴ ABP (“Aprendizaje Basado en Proyectos”) Project-Based Learning.

Investing a class involves a comprehensive approach with various techniques ranging from direct face-to-face explanation to the construction of learning by the student. By structuring them comprehensively, all phases of the learning cycle are completed. According to García-Barrera (2013), the Flipped Classroom falls within the four Rotation Models (Blended Learning). The other three are: Classroom Rotation, Laboratory Rotation and Individual Rotation.

To study these models, the analysis of cases is very interesting, since, in addition, and as we mentioned at the beginning, this represents the bulk of bibliographic sources (articles). The study of cases of good practices of application of these didactic models, comes to corroborate the exposed thing already in the State of the Question. Since the analyzed theorists, have been mostly teachers who have put the models into practice or who, in turn, have relied on case studies.

The cases studied coincide to a high degree in the applied procedural methodologies, in the results obtained, in the problems detected and in the approaches and concerns expressed by the teachers. The motivation to apply innovation arises at the personal level of the teacher himself who usually has a self-taught training on methodologies or at least the training acquired for it has been on his own initiative. The aim is always to improve the teaching-learning process to achieve better academic results and, above all, more meaningful learning. The adaptation to organizational or logistical situations that require these models as more suitable is also present. Most of the applications have been in the University or in Secondary Education, although the university professors are the most visible when publishing their results in articles in specialized magazines. Secondary teachers, at most, do it in open informative blogs. In all the cases, the improvement of the academic results and the general satisfaction on the methods by both the teachers and the students are verified.

However, they all agree on highlighting the same disadvantages and problems encountered. On the part of teachers, there is the enormous volume of extra work involved in preparing classes for these methodologies and the difficulty of carrying out new classroom dynamics to which they are not accustomed. Amongst the students we find the habitual reluctance to new methods that take them out of the traditionally acquired routine and the initial effort that involves taking initiative to build their own knowledge and maintain an active attitude in learning. Despite everything, the students agree that learning is indeed more meaningful. Of all the cases studied, greater success is observed not only in academic results, but above all in the satisfaction of the experience in students and teachers in cases where the methodology has been prepared with greater systematization and reflection by the teacher. Uncertainty and ambiguity have been the great enemies in the cases studied. Cooperative work, so valued in the pedagogical fields is revealed in all cases as one of the most difficult and most necessary aspects of care, since, traditionally, in previous educational settings (Secondary, Primary) they are not worked on or, rather, they are not taught to work correctly.

In the State of the Question we have researched what has already been investigated and established by other previous authors regarding the two topics researched: the Flipped Classroom and the ABP. Monographs have been scarce and many articles in specialized magazines, from which I have had to select, opting for the most current or recent ones. With respect to both topics, we find a constant horizontality between the authors, who coincide in opinions, results, data exposition and conclusions. Among them, we highlight that the implementation of educational innovation models such as these in particular is necessary and positive, that improves learning, that increases the level of teaching, that improves academic results and the quality of the classroom climate in teaching and the attitudinal.

The disadvantages or points to improve of the implantations of the models are also common points in all the authors, indicating the increased burden of teaching work, the greater difficulty of their approach and programming, the doubts, the insecurities and the lack of support. institutional. The students also agree in valuing the new methodologies positively, but they reject the greater workload and the insecurities generated in the face of poorly organized implantations. They highlight the contribution of the models to the achievement of transversal skills and learning.

Therefore, both models require intense, systematic and careful organization, programming and planning on the part of the teacher to be carried out successfully and satisfactorily by both parties. However, it has been revealed as a necessary fact to conceive the models as flexible when it comes to adapting them to each specific implementation case.

The need for prior training in innovation by teachers has also become obvious in order to implement them with the rigor that their correct resolution requires. For my part, I have established my own design of the model based on the confrontation of the experiences and knowledge obtained in the State of the Question, the analysis of cases and the obtaining of data with other instruments in the field work, the exchange with colleagues and with other colleagues from the master, the bibliographic study and the learning acquired in the master and the teaching experience itself.

3. Methodology

My project is therefore an innovation project that I applied in reality and that involves, in parallel, before, during and after, a research project that scientifically supports its application, and which, in turn, develops during the process, and at the end in an evaluative way, will help its construction, its improvement and the obtaining of conclusions and analyzed results that are useful in the future.

The general process to carry it out will be as follows: I made a research design, which, added to the study of the state of the question and always based on the context, resulted in to a design of the innovation program, which had a real application on which I continued to conduct research. Both things (real application and research) gave results whose aim is improvement at various levels.

The reality of this group-classroom, made up of three students, understood in their context, their needs and circumstances, with respect to the institution and the teacher who should teach them this subject, represents a particular case with some needs and problems that made me take the decision to apply this didactic model, for this subject and this group-classroom, being its complex and singular reality.

The project arises from the following question: will this innovation program help my students learn better? To which other secondary questions are added, will I be able to do it with the necessary quality of execution? Would my students and I be satisfied with the experience? Would it help me or others in the future? Would I help to create innovative culture in this School?

The methodology that I followed first involved a Research Design where I propose hypotheses, variables, limitations, general and specific objectives and theoretical foundation (theoretical and epistemological approach, innovation model, research methodological model, didactic model and didactic methods). These were: the cultural-interpretive model, the qualitative one, the socio-communicative and collaborative approaches, ABP and Flipped Classroom.

Next, I did the state of the question, the analysis of the context (the city, the neighborhood, the school, the families) and the resources. I carried out the real application of the innovation and at the same time the investigation and procedural evaluation. Both, the methodology and the data collection, respond to the methodological complementarity. After the process, I prepared the results report (analysis, conclusions and recommendations) and the appropriate dissemination work appropriate to the different audiences. The project ends with the corresponding bibliography and annexes.

4. Main results

The results that I hoped to achieve were: the best and most significant learning in my students in this subject thanks to the applied innovative methodology, the best development of their skills, especially attitudes, the productive contribution to the innovative culture of this educational center in question and my learning and improvement as a teacher.

However, from the beginning of the application of the didactic model, I was able to observe some first positive results that I had registered through participant observation. The element that so far has been shown to be the most transformative has been the change of roles carried out by me in order to create an Inverted Class, since it has been the trigger for these first positive results. These are:

1. Enthusiastic and entrepreneurial attitude on the part of the students, after the presentation of the didactic model by me, which took them the first days of the course to re-decorate, adapt and organize their classroom (abandoned, deteriorated and seriously lacking space) in a functional, useful and very pleasant climate and environment workspace. To do this, they have looked for abandoned furniture and belongings in other areas of the school, they have directly requested the director of the center for some things or installation services at zero cost, they have exposed all their work, they put music, they have looked for stoves and even an air freshener. In other words, they have organized the classroom as a flexible space (in fact, there are new changes every day) and have creatively used the available space. The difference with respect to other classrooms of the center has been commented assiduously and with enthusiasm by the rest of the teachers who teach them.

1. To start the construction of their project and the knowledge they needed to do it, the students decided to do two very elaborate brainstorming that have served them productively to start their work. From here on, their work has been constantly cooperative, one of them working as leader-coordinator.

2. The students have created a Blog to which they upload entries explaining step by step they take in their work.

3. We have carried out a Life Stories exercise, written in writing by the students. They have received the practice with enthusiasm, this has served to create bonds between us and to advance in the climate of trust.

The students have discovered a new technique and consider it useful, among other things, to present themselves in a future TFG⁵. Then, I processed the narrations with a text analysis program (Atlas.ti) in order to analyze and draw conclusions.

4. Communication and collaboration on my part with fellow teachers has also had positive results, and I have seen, through small interviews or talks, an open and positive attitude towards innovative actions and immediate support for my model in application. They do not apply innovative methods because they do not know them or knowing them, because they do not dare. Several of them have asked me for advice and have proposed that I teach them. I do not consider myself in a position to teach them this subject, but I can propose for the next course to create a Working Group, so that together we cooperatively advance, learn and contribute to creating innovative culture in the center.

5. Conclusions

The analysis of all the data collected during the research process parallel to the actual application of the innovative model, has evidently been a further step in these processes. However, I have also evaluated the project in a procedural way during its development through participant observation, so that it allowed me to adapt the actions in favor of improving the process itself.

In the final analysis that I presented in the report, I triangulated with the data obtained by different means and techniques used. The conclusions were thus truthful and valid. The final evaluation of all my work, both research and application of the innovative model, has been essential and necessary to advance future improvements, both by me and by other researchers and / or teachers who come to my report for a study of case.

Innovation doesn't so good if it stays in isolated actions. Taking into account that AlgecirasArt School does not present at first a strong culture of innovation, one of the objectives of my work has been to contribute to achieving it. For this, two actions have been important: disclosure and recommendations, that is, to carry out direct communication with the School's management at the end of the work and with the analysis and conclusions in order to inform them of the results of the case and offer you a report of recommendations to introduce, strengthen and improve innovative actions in the center in future courses. This step is especially important given the circumstance that my place in this center was temporary, and this meant that the following year I was assigned to a different center.

There was also improvement in the strictly academic or learning outcomes, since, comparing the product (project of a promotional Video of the School) carried out last year by the students of this subject from the previous year, the current students exceeded in projection, objectives and technical quality to the previous one.

As a self-evaluation during the process, I think that for the future I should increase my role as promoter of class dynamics, and improve interaction with the students to achieve a more cooperative work with them without invading their autonomy. I must also intensify communication and collaborative actions with my fellow teachers and the board.

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⁵ TFG (“Trabajo Final de Grado”), Grade Final Project, a research work at the final of University Grade.

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Picture 1. Art School of Algéciras. 2017. (Author's photo).



Picture 2. In class, they are doing a brainstorming. 2017. (Author's photo).



Picture 3. They are doing a travelling with a skate. 2017. (Author's photo).