Research in the Pedagogy Classroom: The Student Research. Teaching Coordination Project in Health Emergencies and Pandemics

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Abstract

Introduction. The main proposal is to establish the university classroom in the research projects for all students' environments. The classroom would be based on their own interests in relation to the definition of the subject, so that the practical section becomes the backbone of the organization of the course and can serve to contextualize the methodological and epistemological issues, without renouncing them. **Methodology.** This project has its origin in a teaching coordination project started in the 2019-20 academic year. It is realized by an action-research methodology based on acting and knowing from the proposed activities. In this sense the information was collected on the activities carried out from the survey methodology. **Results.** The results obtained during the development of this project in students of the Faculties of Educational Sciences of the University of Malaga, shows that participants favor thinking that both the acquisition of research skills and the awareness of the development of academic, scientific, and professional skills have occurred in the pedagogy classroom based on the development of activities, among several designed, such as "Research Lines". Selection of thematic areas of interest by the student looking for the work and analyzing it, investigating about it, with the skills that this entails. **Conclusions.** The subject was considered of interest because from the objectives to the proposed activities they are considered a sine qua non condition in the student and professional of Education, in general, and in Pedagogy, in particular. All this, even more, if possible, forces the Education professional to broaden horizons and gain development and research skills. The latter, perhaps, somewhat reviled in the educational (and school) field.

Keywords: Educational research, Pedagogy, Researcher students, Teaching coordination project, University.

1.   Introduction.

The title of this project bears the concept of Research, more specifically, research in the university classroom where the student is the main protagonist. The research process

involves investigating, analyzing, studying, delving into elements of interest or necessary at a given time. Therefore it is essential to highlight the students as the center of the research process.

As university professors of future education professionals, an extensive number of questions arise based on the fundamental interest of teaching in order to achieve "meaningful learning that strengthen in students the openness of understanding, freedom of thought and subsequently towards creativity" (Barale and Escudero, 2011, p.53).

The main proposal is to establish the university classroom focused on research projects for all students based on their own interests in relation to the definition of the subject so that the practical part becomes the backbone of the course organization and can serve to contextualize the methodological and epistemological issues, without renouncing them. This example may be of interest to the current dilemma of higher education in the social sciences between knowledge transfer and the development of competencies that offer a possible alternative (Jabbaz and Samper Gras, 2013).

This project has its origin in the teaching coordination project presented and started in the academic year 2019-20. Their continuity is considered necessary because, from the objectives to the proposed activities, they are considered a sine qua non for the students and the professionals of education in general and in pedagogy in particular.

1.1 Teaching coordination project and student's research: theoretical framework. Currently, we live in a health emergency situation due to COVID-19, causing a pandemic, a cyclical situation, which has forced a change in the mental, physical, organizational structure ... in the vast majority of contexts, among them the University, specifically, in the face-to-face learning. Thus, there have been countless adaptations, modifications and not only in the content as in its transfer. Agreeing that it is not the same to teach or work with a content in a virtual way, to allowing us the expression "you to you" in the classroom .

All this and even more forces the Education professionals to broaden horizons and gain development and research skills. The latter, perhaps, complain in the educational (and school) field having the questions: *How can we obtain information about the impact of the pandemic situation on the socio-emotional development of early childhood education students? How can we respond to the effect produced by confinement on Secondary Education students? Do we know if teachers have felt competent in this situation of confinement due to COVID-19 in their teaching? ...* These and similar questions we could ask are partly answered from research work also te one that can be carried out by the pedagogue, from their skills, strategies, research competences.

Using the current health emergency situation, and not limiting ourselves, we need to work on research skills from its base in Pedagogy students. Based on basic skills and using the digital tools that improving work despite limiting situations such as the current moment.

The character and humanistic definition of this project is governed by Rogerian postulates, based on statements such as:

> In my work as a counselor and psychotherapist, I found it increasingly rewarding to trust the client's ability to move toward self-understanding, allowing them to take constructive steps toward solving their problems. This happened when I managed to create a facilitating environment in which I projected myself with affection and authenticity (Rogers, 2016, p. 143).

This type of belief supposes that humanistic factor with which every Teaching-Learning process must have. As Rogers suggested, if he could carry it out with his patients, would it be possible with the student too? Answering this question seems easy, but it takes some investigation and research work in the classroom to check if this statement is correct.

As stated in the previous paragraphs, we will focus this project on a personal approach, an approach that we characterize in the nine points presented by Rogers (2016):

1. Preconditions. According to concepts such as self-concept or self-confidence, if a person considers himself safe for himself and others, he will be able to learn and transmit it.

2. Teachers share with the students the responsibility of the teaching-learning process.

3. Teachers provide resources to support the transfer of content and students' learning from a more theoretical point of view or from experience (their own or social).

4. Students are the protagonists and autonomous in their learning process.

5. A rich learning environment and context based on affection, authenticity, understanding and willingness to listen is preferred.

6. The main point is based on the constant support of the teaching-learning process.

7. Acceptance of students' own responsibility.

8. The evaluation of the student's learning and its extent is given by the student himself.

9. The environment defined by the previous points promotes and facilitatates learning favors a deeper climate, greater and better progress and the achievement of better levels and degrees of quality of life for the student.

Rogers (2016, p. 143) indicated statements by the students e.g. *"I do not know what I should learn, you are the expert"*, these kind of statements are currently known in the day to day of a regular class, specifically by part of students of the Degree in Pedagogy, those who

indicate statements such as *"you have to tell me how much the work has to occupy",* *"and* *"how do I do an analysis of the article, should I follow all the steps equal to the example?",* *"it costs us our free time to think it out because usually we are used to being told what to do ".* Statements like this made us to propose analysis tasks that promote research competences and understanding of phenomena also on the part of the student.

Despite this, the student is afraid to accept control and responsibility for themselves, they find themselves in that difficult balance of asking for freedom and knowing how to manage or handle it, due to the confusion generated by responsible freedom (Rogers, 2016).

Due to this statements, it is necessary and mandatory to change to that personalized approach and education, helping the student to gain autonomy and self-confidence, feeling the support of the teacher, as a facilitator and the guide in their learning process.

The personalized approach presented in this project is none other than working from the characteristics that define a new perspective and discipline such as educational neuropsychology.

This project intendes that the students learn to be a protagonists in their learning, having skills and strategies that establish the content to work. Taking as origin the motivation, interest, participation, all from a neuropsychological perspective. It is, therefore, about the need to improve the Teaching-Learning processes, starting from both the teacher and the student's perspective. Part of the ideas presented here have already been evaluated and discussed with the students of the Educational Guidance course in the 2020-21 academic year, resulting in a great need for their implementation.

2.   Methods

2.1. Objectives of the Project.

- Rethink learning spaces: the freedom to create.

- Learn how to learn effectively. They must leave the essence and idea that everything is under the teacher's instructions without freedom. In order to meet the general goal, they must leave this permise.

- Use digital tools that support the development of research skills.

- Know how to work with the contents according to the different subjects and resources in the field of Pedagogy.

- Interview the students of Pedagogy to obtain information about what they would like to receive and how to work on it.

- Bring the content of class work closer to the reality around us. Learn to differentiate and control whether it is possible to define what is defined in the classroom and if

it can be extrapolated to reality (school education, training and human resources in a society, youth center ...).

- Work on skills to know how to make decision and act in certain situations that could have a more or less everyday appearance.

- Transfer and create the premise of SEL (social emotional learning).

- Develop reflection skills beyond the merely instructive educational work in the classroom.

2.2. Objectives of the Project.

This research would correspond to a study or descriptive design by survey.

The research was carried out on a sample composed of students who were studying the third year of the MA degree in Pedagogy at the University of Malaga.

2.3. Research design.

Among the activities to be carried out we can point out the following:

- Activity 1: "To look for". Identification of the difficulties of students in making decisions regarding their work in the classroom (Faculty) and their projection of reality.

- Activity 2: "Our interests". Collection of particular interests of students, to set a motivational structure. Whereas it will be the students themselves who will develop their own questionnaires to get to know each other (helping to work on thinking and reflection skills).

- Activity 3: "We design". Design and development of activities by the students- for their work in the classroom and in their teaching-learning process.

- Activity 4: "CREATE". Design of educational intervention strategies to enhance curiosity, emotions, decision-making ... Creative innovation workshop. We create (we believe in our idea and we create it), we recreate, educate and learn.

- Activity 5: "Research Lines". Selection of thematic areas of interest by the students looking for the work and analyzing it, investigating about it, with the skills that this entails.

- Activity 6: "Free trainers". Design workshops or training courses (online, face-to-face ...) as future pedagogues or education professionals.

- Activity 7: "Essays". Presentation and application of the activities designed in the different subjects in Pedagogy, trying to transfer it to other degrees of CC.EE and trying to find that real experience in Early Childhood and Primary Education centers and Secondary Education Institutes collaborating with the project.

- Activity 8: "Visits". Participation of various personalities that the students feel close to, beyond great experts or personalities of great importance in various areas. Former students, professionals of the subject who bring reality to the classroom, recent graduates ...

Among the lines of teaching innovation that this project addresses are framed in:
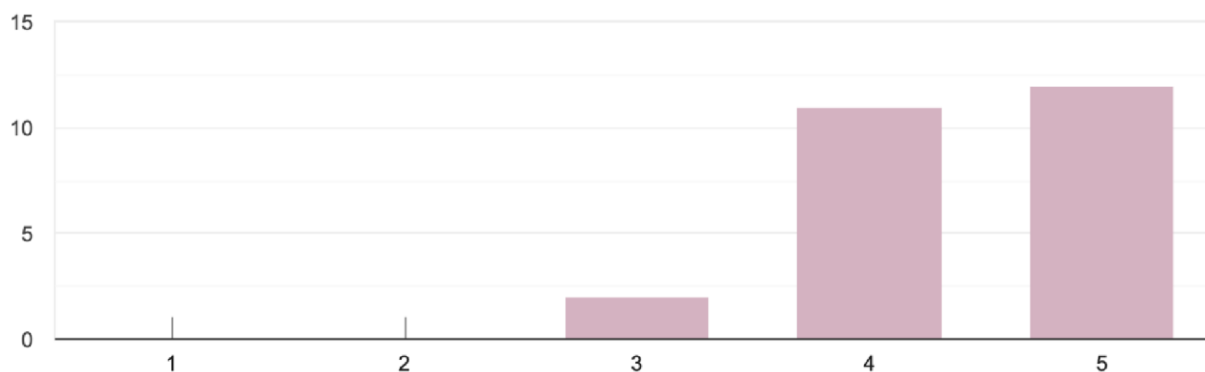
1. Educational attention to students with Specific Educational Support Needs.

2. Teaching research.

3. Integrative methodological proposals that promote multidisciplinary coordination, in one or more official degrees.

3. Results.

In the survey a series of activities was carried out, including completing a series of questions, importance and knowledge of the student's involvement and needs in the classroom and their learning. Likewise, the questions asked were defined based on the need to adapt teaching in times of health emergency - an online methodology, considering the importance of using different resources, acquiring new skills, among other elements.

Starting from a simple question such as whether they have felt comfortable in the classroom, we find the following results (figure 1):

Figure 1: Satisfaction and comfort in the classroom by students in the subject.

What value have these data with respect to this study. Knowing this data looking for what this percentage of 92% resulted (adding the scores of values 4 and 5) obtained. A questions were formulated from which to obtain detailed information about the description and reasons they could provide about why that autonomy made them feel comfortable in the classroom (who would have scored 4 or 5 in the previous question). We can see the results in the following figure (figure 2).
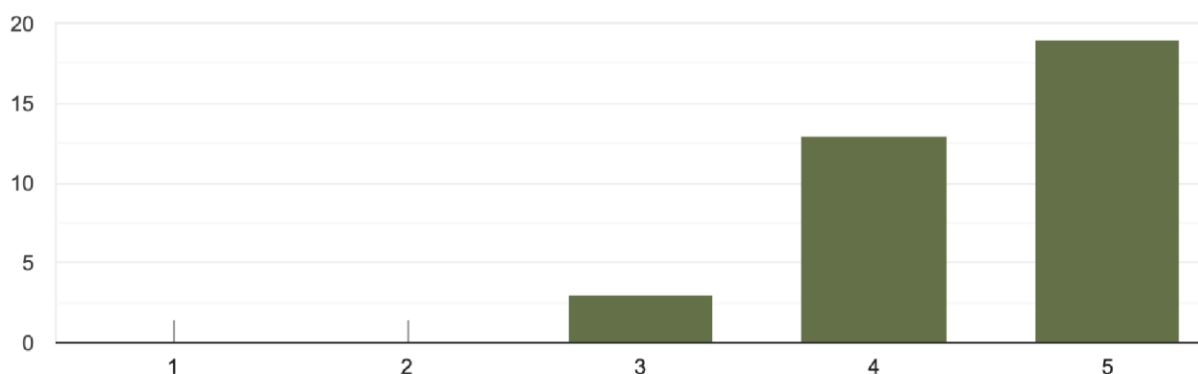
Figure 2: Some of answers of students about their satisfaction and comfortable.

Confidence and trust have been created during all classes. Where we have always been able to express what we thought without fear of being judged. He has always been understandable to us at all times

Good organization

For everyone's involvement

Because we carry out activities that bring us closer to real and current life, such as the practical cases that we will face as future professionals.

Assemblies, debates, group dynamics

In debates of my interest

During the exhibitions of the different thematic lines

Talks by professionals invited to class

The students answered the question about the importance and interest in the choice of themes and research areas in relation to the choice and autonomy in learning. The figure 3 - whether it was of interest to choose the thematic areas to work on and figure 4 - shows some of the reasons why that choice was important to them, resulting in 91.4% (adding the values 4 and 5) (figure 3) the importance of that choice:

Figure 3: Importance of choice in student's topic of research in the subject.

On the other hand some of the collected answers the question why it was important to choose the topic to work on by oneself. The figure 4:

Figure 4: Some reasons about the importance of choice.

I think they are current issues and that they are going to affect us in our professional life.

Because they are essential knowledge for our work as educators.

Because by giving us freedom of choice, we work on aspects or themes that are in our interest to know and work on.

Because I see that it has been a free choice, not something imposed.

Because we have been able to work in depth on issues that interested us ourselves.

Because it allows us to find out about topics that are not given in class and are of our interest.

When one works from self -interest, learning is greater.

Regarding the need to adapt to the current health emergency situation students were asked about the usefulness of incorporating digital resources in their work on the subject, such as Canva, video creation, TikTok, Instagram, Podcast ... Figure 5 shows how 96% (adding the responses of values 4 and 5) of the responses highlight a clear need to use this type of resource that favors teaching.
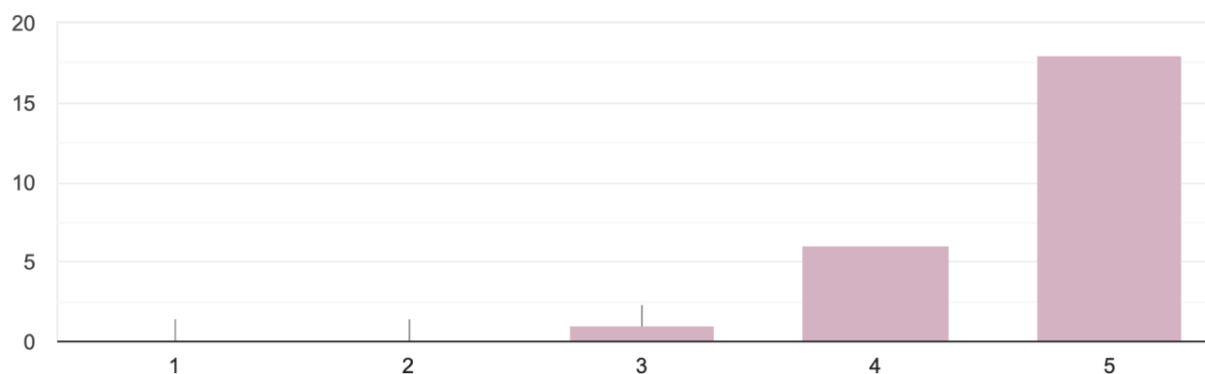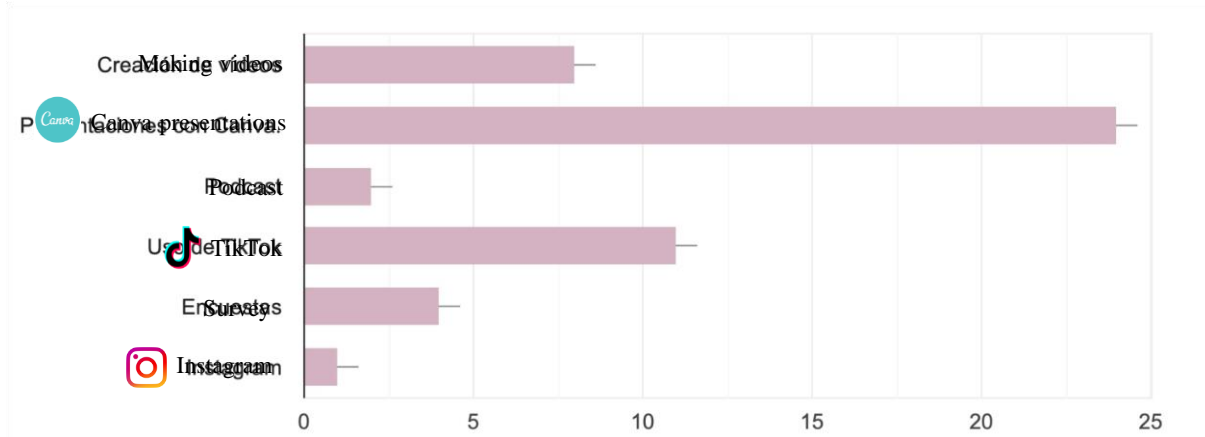

Figure 5: Usefulness of incorporating digital resources at work in the subject.

Within the use of resources the question asked was about the preference in the choice and use of some of them, resulting in what is shown in figure 6, where the use of Canva stands out with 96%, followed by the use of TikTok (with 44%) and in third place with 32% in the video creation.

Figure 6: What digital resource that you have used for your work, would you highlight.

Responses of the question why did they choose these tools (figure 7).

Figure 7: Some reasons why students decided to use App and resources in online classes.

Blessed CANVA, what a great discovery, and it makes me angry that I found out in 3rd year of the race. I had never done a tik tok and I
have found it fun to do it with my colleagues and we have learned from it. Just as they explain a topic to us with a tik tok which
means that we can use these resources that
today have become fashionable among young people, they are used in the school environment as learning.

Until recently I did not know the Podcast but I find it a very useful and interesting resource.
Online surveys these days are fascinating because they can reach so many more people.

What I liked to know the most in this subject with Canva since before I only used PowerPoint and Prezi, Canva offers many more dynamic and fun resources to make presentations among many more.
Canva has been the one that we have used the most in my group, since it is easier from a distance, so we can agree and we can change

things in real time. The tik tok was a lot of fun, I created it for the subject and it has been a discovery, since I have found other professionals in it (although now I can't stop watching videos)

Because Canva, for example, is a very easy and attractive tool for presentations, teachers tend to like the result a lot. And for example Tik

Tok seems to me to be a wonderful application, and thanks to it it is easy to reach a diverse audience.

It is always good to have more alternatives other than power point to do work and not stagnate

Because I believe that they are resources that are the order of the day and that we must know and learn to manage them better to make our interventions more dynamic and fun.

I have been able to learn very good tools and, in addition, it has helped me a lot to open
myself to them, such as editing videos, creating posters, etc.

Having these data, we asked about the visits in the classroom throughout the semester (figure 8). In this way, there was information about the different contributions of professionals in the field of Pedagogy (Álvaro) specifically Sports Pedagogy with the visit of Pedaresi Sport. Former students such as Marta and Alba, who contributed extensive

information on different services and experiences throughout the studies (training courses, internship scholarships ...) and their possibilities, along with providing information of using different resources and online tools, in addition to the experience with the Final Project of the degree (Alba). Finding the bulk of the responses in the positive options e.g.: *"helped me broaden ideas" "it gave me a lot"*.

Figure 8: Assessment of the contributions of the different visits to the classroom.

Some answers shows the assessment and importance of the visits of professionals to the subject - included in figure 9. An activity was adapted also to the online format, inviting and sharing the link of the session to the participants along with the option for those who could not attend, with a video recording of themselves, explaining their work area and providing suggestions, ideas… to the students.

Figure 9: Some answers from students about the interest of visits.

Thanks to the visits that have been Personally, the one I got most carried out in the subject, I have it is a living testimony of the been able to learn about other areas of pedagogy that I was unaware of.

Because they have been one more door to knowledge and concepts that I did not know, as well as new ways of including pedagogy in life.

involved with was Alba, because I think student body and the desire to work with care and professionalism.

They were all very different and very useful knowledge. I not choose the best or the because they all had their contribution, more or less important knowledge, from my point of view.

Everyone has contributed positive things to the training, on the one hand by relaxing us and on the other by making us see that there are more ways out than we think and paint us, that everything is a matter of desire and enthusiasm for what we like.

The visits in class have been very provided interesting to me, since they have could not been boring at all and very worst complete with information that I did not know.

3.   Discussion

By observing the obtained data, it would be interesting to continue this work, where the student feels comfortable and satisfied with his learning, among other things because he feels as part of the subject, in its conception and development. Therefore it is interesting to continue this study, considering to expand the study sample and including new activities, tools and resources to strengthen the research role of the students in the classroom.

The teacher is the one who must carry out the processes of reflection and regulation of knowledge based on knowing students in his classroom. Students may show frustration when learning certain subjects such as mathematics, which can be manifested by reluctance, rapid completion of activities, loss of attention and interest in primary school students.

Continuing with this type of argument, Serpati and Loughan (2012) replicated a previous study (Pickering and Howard-Jones, 2007) where the question was knowledge and involvement of teachers in terms of contents in Neurosciences applied to Education using researcg techniques. These authors came to conclusions similar to the previous study and obtained results related to the enthusiasm that prevails for neuroscience and education (Luque-Rojas, 2016, 2017, 2019).

As some models of innovation in education suggest, such as the model for school improvement from Leithwood et al. (2006, 2012) or Sengeova (2004, 2014) (Medina, 2015) profound change to improve educational institutions. This type of work helps us to meet the need to recognize the value of change and projection in the integral development and training of people (not only students but also teachers, families ...) who are trying to involve the entire educational community in change. We therefore believe that the fact that we work on research in the classroom, in addition to understanding how to find out what validity, reliability ..., involves enriching certain skills of the student in the academic process, but also professional, social and personal.

4.   Conclusion

The fact that we carry out and initiate the processes described in this project, based on the experience of unifying Neuroscience with Education, lies in improving human learning processes. Therefore, it is not only about including it in subjects or degrees based on educational sciences, but it can be extrapolated to a large number of degrees, since the ultimate goal is the optimization, improvement and development of our learning abilities, attitudes, skills or strategies.

The way we learn, thus, degrees related to the humanities, such as History, Philosophy, Art, Translation, Philology ..., to the social and legal sciences such as Law, Criminology ... Biological areas such as degrees related to basic sciences (Biology, Chemistry ...), health such as Medicine or Psychology, all this accumulation of areas of knowledge requires

various processes that help in the acquisition and also the use of those contents that are acquired, useful and practical use, which the students know how to apply in practice.

It is about supporting, through this optimization of resources and learning skills, the introduction of other elements, not just content, that help to control and "manipulate" our learning by factors such as **attention, emotion** or **curiosity.**

Within this project, it is intended to act from the ground up, that is from the beginning of the development of learning, from a perspective of Early Childhood Education, a phase in which a large number of social and contextual agents are involved. All this is reflected in **the process of change**, in which **the quality, processing and personal and social decisions of our learning prevail**.

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