AVANZANDO EN INCLUSIVIDAD: SITUACIONES DE APRENDIZAJE EN EL AULA DEL FUTURO

ADVANCING INCLUSIVITY: LEARNING SITUATIONS IN THE CLASSROOM OF THE FUTURE

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Abtract

In this article we describe the process of pedagogical transformation that is being carried out in the CEIP Alejandro Rubio de Guadalix de la Sierra, through the creation of the Classroom of the Future and having as a horizon the DUA principles.

Based on the analysis of our context, we have described the most significant milestones that are promoting the change we want to achieve in order to have a center that responds to the needs of students and promotes professional teacher development in line with the educational challenges of the 21st century.

The process has involved carrying out, by the management team, a distributive pedagogical leadership, with the aim of promoting the work of the teaching coordination bodies, agreeing on curricular and methodological agreements. For this, it has had the support and advice of an Educational Inspection that guides and facilitates. All this has given rise to proposals for

competency learning of students through learning situations in the Classroom of the Future. We intend to generalize the methodology of this space to ordinary classrooms.

This more collegiate and center-based work dynamic keeps us immersed in an atmosphere of illusion and enthusiasm that drives us to make the transformation of the center a reality.

1.   SITUATION OF THE CENTER AND ITS CONTEXT

CEIP Alejandro Rubio is in Guadalix de la Sierra, a rural municipality in the northern area of Madrid. It is the only center in the town, which is also a preferential schooling center for students with educational needs associated with motor disabilities and pervasive developmental disorders, which marks our own identity.

The **municipality** has very specific socio-cultural characteristics in which coexist a high percentage of deeply rooted families, who show precise and determined interests, even though there is no excessive concern towards learning information and communication technologies (ICT). On the other hand, we detected that a large percentage of families have difficulties in adequately accompanying their children in this learning process.

In line with the above, the profile of our **students** is in this family duality, which translates into a high percentage that either do not have the means or do not have the knowledge to carry out an adjusted accompaniment in the learning of ICTs.

Regarding the learning profile of our students, it should be pointed out that they are extremely diverse, requiring teachers to provide individualized responses adapted to each profile.

As for the **faculty meeting**, its most relevant characteristic is its stability and in many occasions with a long trajectory in the center. Their extensive professional experience provides security and strength. At the same time, this stability and professional security in some cases may hinder the integration of new methodologies and adaptation to changes.

The center has a trajectory of several years of training in new methodologies with the intention of adapting and improving our educational response to this diverse reality. It should be noted that in recent years part of the faculty has taken **training** courses at the center related to cooperative learning, active methodologies, project-based learning, and the Classrooms of the Future.

The **faculty board sets and promotes** a clear line of training and coordinated work, based on agreement and consensus, which is accepted by all teachers and encourages us to put into practice the new knowledge acquired.

In this sense, in recent years we have been working, on an experimental basis, on this new knowledge, which has allowed us to evaluate its implementation and its generalization to the classroom as a way forward.

Sometimes, the difficulty of putting these experiences into practice has been accompanied by a certain frustration, since the success of the change is not only found in the introduction of new technological resources in our classrooms, or in the change of the learning space, but also implies a deeper and more structural pedagogical change that generates a rethinking of the bases of the teaching and learning process, of the role of the students and therefore, of our role as educators.

For this reason, the action line of the faculty board tries to strengthen the work towards a common goal, accompanying and involving the teaching staff in this path, also understanding that part of our work is to facilitate the adaptation of the teaching work to the new demands, while promoting a good working environment that favors coordination and teamwork, which encourages professionals in this process of change and adaptation to the emerging environment. Regarding the coordination of the center with the rest of the educational context, it is important to point out the accompaniment, orientation and guidance that exists with the Inspection service towards the faculty board

and teaching staff, which provides solidity in the design and making of decisions, while facilitating them by providing a broader and more global perspective.

Another noteworthy aspect of the center is the search for global synergies between different projects and dimensions of the center that collaborate with each other and facilitate the path of change. An example of this is our participation in the **Proa+ Program**, which in our strategic design places special emphasis on this task, addressing the improvement of school learning, methodological renovation, elimination of barriers, and reception and attention to teachers.

Finally, another aspect to consider in this contextual description is the **new normative situation**, which encourages and pushes us to keep moving forward, drawing learning in terms of competencies, presenting students with a broad learning scenario where, regardless of their talents, intelligences and ways of acquiring knowledge, they could be successful, adapting to their different educational needs.

2.   WHY GENERATE A PEDAGOGICAL TRANSFORMATION?

The need for pedagogical transformation arises to establish a concrete proposal, agreed, and adapted to the current situation, responding:

- **To the heterogeneity of our students,** which requires from us a greater capacity for individualization in our teaching actions.
- **To the need to acquire new learning with a competence perspective,** both due to the changes in the LOMLOE curricular approach and to the increasingly variable contextual needs in which we live**.**
- **To the teaching needs,** facilitating the adaptation to these new educational requirements, creating a facilitating environment that eliminates the feeling of teaching vertigo in the face of certain changes.

A significant milestone in our transformation was the year 2021, when our Educational Innovation project was selected in the call of the Ministry of Education of the Community of Madrid, being able to implement it in the current academic year 2022-2023.

The Classroom of the Future of CEIP Alejandro Rubio called FUTURELEARN, is the answer to the concerns raised above, trying to reach a common line of action that generates the need for change in our teaching work, and responding to the challenges that society and the changing legislation are marking us at the educational level.

The Classroom of the Future is not an end in itself, it is a tool that will help us to generate the desired methodological change, thus adapting to the regulatory demand, on the one hand, and trying to give an inclusive response to the diversity of students enrolled in the center.

Understanding that the change is methodological, the need to generate a figure in the center is established: **Coordination of Active Methodologies** centralizing the coordination of all educational experiences at different levels of

primary school, and in turn, facilitating communication with the Management Team and the figure of support to the Classroom of the Future.

3. HOW IT ALL BEGINS?

From this starting point, we established a series of basic objectives for the design of this first experiment:

- **Ensuring success.** The experience must be a positive one for both students and teachers. We are aware of the frustration generated by the implementation of innovative measures, when many illusions are placed in a process that finally ends up being unsuccessful.

- **Generate motivation and create positive expectations in both students and teachers.** It is important to be willing to try and experiment with new ways of teaching and learning. Breaking down the barriers that sometimes present themselves to teachers, who can live with insecurity and uncertainty in the face of new legislative and social demands faced in teaching practice.

- **Consolidate progress.** One of the priority intentions is that those advances and methodological changes that are created remain established and have a vision of permanence in the center. It is important not to make oscillating movements in our teaching practices**.**

- **Move forward together,** as a center. To make the whole student body participate in the experience, experiencing and sharing a common vision. Our intention in this approach was not only to generate pilot experiences in some classes to later generalize it to the rest of the classrooms. In this case, we need to generate a change that will benefit all the students in the primary school.

During the **implementation process** of the new pedagogical changes, it was essential to centralize them from the CCP **(Pedagogical Coordination Commission)**, where the coordinators of each of the cycles are a direct and

active part of the decisions that are being taken, being able to direct the line of action according to the characteristics of the center, the students, and teachers of the same.

With this working line we wanted to **promote vertical and horizontal coordination,** holding meetings of teaching teams, assessment, and monitoring to share experiences, difficulties, proposals for improvement and curricular and methodological agreements.

In order to establish a real and safe starting point for the teaching staff, the faculty board together with the coordinator of active methodologies agreed on some **common guidelines for action**.:

1.- Establish the **area of Natural Sciences** as the curricular axis of the learning situations, connecting with knowledge from other areas. The methodology coordinator established a pre-selection of contents by level that were easy to approach through projects.

2.- To carry out **learning situations** with different **final products** (theater, documentaries, interviews, videos, audios and/or presentations) for each of the educational levels of the Primary stage in which we sequenced the elements of the curriculum offering resources that favor the learning competence. For this purpose, we established the following guidelines:

- o Start with an initial situation: activity or motivational video chosen by the teacher.
- o Create work teams and distribute tasks.
- o Search for information using the center's tablets/laptops.
- o Make a final product that students design, record and edit.
- o Present the product in front of classmates and/or families developing communication skills.

3.- To set a **timetable for the organization** of the Classroom of the Future at each level. This first course we have chosen to carry out projects of short duration (two weeks) that allow a progressive and compatible approach with the current methodology.

With this framework we intend to provide security and tranquility to the teaching staff, and in this line, we have carried out different sessions:

- **Training for all teachers** in which we have explained the purpose and methodology of the Classroom of the Future and our proposal for implementation.

- **Coordination with the team of teachers who teach Natural Sciences** to specify the project proposal for this course.

- **Quarterly assessment and monitoring** that allows us to share the results, the difficulties encountered, the successes achieved and the proposals for improvement for the following quarter.

The continuous assessment is allowing us to note the following improvements:

- **In relation to the attention to diversity,** there is evidence of progress in the inclusive response to students. Everyone participates in the same proposal offered with different levels of performance, valuing the contribution of all in overcoming the challenge and/or elaboration of the final product. In this way, we can see through observation that students with a low level of participation and success in the regular classroom, increase their participation in the Classroom of the Future, being the protagonists of their own learning.

- The practice of these learning situations in the Classroom of the Future greatly **improves cooperative skills** and can be generalized to other classroom situations**.**

- **The importance of taking care of learning environments and spaces.** Throughout the first quarter of the course, we have been incorporating material and furniture for collaborative use and adapting the space better. In this sense, we have been able to see how the space itself becomes an element that generates and facilitates learning.

On the other hand, the continuous assessment process we are carrying out has also allowed us to highlight the following areas for improvement:

- **Tendency to plan directed and closed activities.** Although the design of learning situations aims for activities to be open, there is a certain unconscious tendency to plan very directed activities, which sometimes leave little initiative to the students.

  In the design of the next learning situations, it is important to be aware of this pedagogical inertia, trying to give way to more open, flexible and participative didactic proposals that clearly and precisely contemplate different levels of performance, taking into account the diversity of the students, in which the teacher will develop a role of companion and facilitator of the learning process of the students, who are the real protagonists of the process.

- **Lack of initial digital competence of students** to perform autonomously the audiovisual productions proposed as a final product. This aspect has generated a situation of work overload for teachers. In order to overcome this situation for future productions, the possibility of training students in learning situations designed in parallel, preferably within the area of artistic education, has been proposed, so that they can improve their digital competence in the generation of audiovisual content in a more autonomous way.

4.   HOW DID WE DO IT? IMPLEMENTATION OF A LEARNING SITUATION

As an example of the work done, we present the following **learning situation** aimed at students in the 2nd year of Primary Education in which the interdisciplinary curricular linkage can be observed, with the Natural Sciences area as the axis.

This proposal consists of 8 sessions. In the following link you will have access to the complete proposal.

https://drive.google.com/drive/folders/1VKCyjxK35fKsFRoVlPkAbFf6B2OY x66z?usp=sharing

Below, we show the development of the first one:

The learning situation is initiated with a guiding question that orients the process and a justification and contextualization of the process.

LEARNING SITUATION		
Guiding question: Can you help us save the planet Horus?	Course: 2nd grade	No of sessions: 8
Justification/contextualization: The population of the planet Horus is suffering from a terrible disease that weakens its inhabitants. The president of the planet commissions a group of explorers to travel to Earth to investigate the functioning of the human being and try to find a cure for this disease. Each group of explorers must investigate a system of the human body and make a retransmission to their planet with the information obtained.		
Evaluation criteria, key competences, and contents: SPANISH LANGUAGE AND LITERATURE. NATURAL SCIENCES. DIGITAL CULTURE AND PRACTICE.		

Task 1

Title: What devices make up the human body?	Course: 2nd grade	Area/s: LCL, CN, CPD	No of sessions: 1

Description:	Final product:
The students receive a broadcast from the president of the planet Horus. Using their tablets, they must investigate which devices make up the human body and select one of them to do their research. Once the working groups finish their research, the large group establishes the apparatuses that make up the human body.	List of human body systems. Selection of the system to be investigated.

Evaluation criteria and key competencies:
- CN Know the vital functions in the human being. (CD).
- LCL Participate in communication situations, respecting the rules of communication: turn to speak, order in the discourse, listen and appreciate the interventions of others. (CL)
- CN Use the computer to consolidate and self-evaluate the contents and procedures worked on in the unit. (CD)
- LCL Use oral language effectively to communicate and learn. (CL)
- LCL Value group work, showing attitudes of cooperation and responsible participation, accepting differences with respect and tolerance. (CL) (CSC)

Contents:

- The vital functions.
- Use of Information and Communication Technologies to search for information in a guided manner.
- Communication situations, spontaneous or directed, using an ordered and coherent discourse.
- Comprehension and expression of verbal and nonverbal messages.
- Strategies for using oral language as a communication and learning tool: listening, data gathering, questioning.
- Use of techniques to enhance group cohesion and cooperative work.

Sequencing of exercises and activities	Description	Timing	Scenarios	Resources	Students with SEN

- The video is watched in a large group. -Working groups of two or three students are established. - A person in charge of collecting the contributions of the classmates is established. - Information is collected using the tablets. - Include those aspects that have been discovered in the search. ach group selects the device they want to investigate.	The teacher will guide the Internet search process by providing addresses where it is possible to find this information.	1 session	Future Classrom	-Motivatio-nal video. -Tablets	It is necessary to guide the search so that the videos used are appropriate and adapted to the level of understanding of the students.

ASSESSMENT Indicators	Means	Tools
• CN Uses technological media on a regular basis in the learning process (CD). • CN Knows the devices that make up the human body. • LCL Participates in communication situations, respecting the rules of communication: turn to speak, order in discourse, listening and appreciating the interventions of others (CL). • LCL Expresses him/herself orally to meet communication needs in different situations with precise vocabulary and coherent structure (CL). • LCL Effectively uses oral language to communicate and learn (CL). • LCL Values group work, showing attitudes of cooperation and responsible participation, accepting differences with respect and tolerance. (CL) (CSC)	Record of agreements reached.	Rubric of participation and involvement in the task.

In this learning situation, "Save planet Horus", through the viewing of a motivating proposal, students are challenged to carry out a mission to save the planet from a serious disease that can only be cured by studying the human being since they are very similar species. With the knowledge of the human body they will find the cure to the disease.

After the viewing, a guided research process is carried out, in which the students look for information about the different devices of the human body using technological resources, in this case tablets.

Once we have the relevant information and selected the device we are going to study, it is time to work in cooperative groups selecting the necessary information and elaborating the proposal that will give an answer to the challenge.

After the eight sessions, the final product is a video recorded on a chroma background with the conclusions of each of the groups about the human body.

They make it with the help of the tutor and present it characterized within the learning situation, thus developing their linguistic competence.

5. CONCLUSIONS

Adaptation to regulatory and social changes leads us to seek new ways of working with students. A methodology focused on the acquisition of key competences using a new concept of flexible educational spaces adaptable to the students, in which a systematic use of technological resources in the learning process can be carried out.

The implementation of the Classroom of the Future FUTURELEARN, aims to promote the use of active methodologies for the development of student competencies in response to the context that surrounds us.
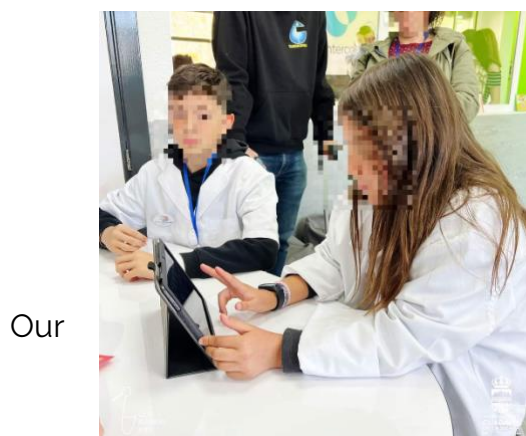
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trajectory is too short to be able to make a complete assessment, but the general feeling is that we are on the way to a methodological change, and the participating teachers have noted a high level of involvement of all students in the proposed learning situations. Therefore, we

value that it is a pedagogical tool that enables teachers to design educational actions that respond to all levels of student performance. We thus see an increase in student motivation to participate in this type of activities, linking this improvement to the methodology and the use of non-conventional spaces and furniture.

In our work dynamics we want to maintain, on the one hand, project work, and on the other hand, the care and creation of attractive, motivating and facilitating learning spaces and environments.

For the next learning situations to be developed, we intend to continue advancing towards a multidisciplinary vision, always having as premises: the achievement of success of all students, the generation of motivating experiences and the creation of positive expectations and the consolidation of progress from a center perspective, advancing all together in teamwork.

This structure should be maintained in the planning of the project for future courses, providing an overall vision for the whole center, offering pedagogical support and accompaniment to teachers throughout the process of design and contextualization of the model to each specific learning situation, while at the same time we can count on the advice and guidance of the Inspection service that allows progress to be made. This planning is intended to generate improvement in the professional development of teachers to respond to all our students in a motivating and competent environment.

Finally, we would like to highlight the **formative and continuous assessment** as an essential element of this whole process, carried out in a framework of

reflection and joint deliberation that is allowing us to make shared decisions and the subsequent adjustment to the reality of our classrooms, always in the search for permanent improvement.

BIBLIOGRAPHIC REFERENCES

- Bolívar, A. (2019). *Una dirección escolar con capacidad de liderazgo pedagógico*. La Muralla.

- Fernández Enguita, M. (2018). *Más escuela y menos aula: la innovación en la perspectiva de un cambio de época*. Morata.

- López-Vélez, A.L. (2018). *La escuela inclusiva: El derecho a la equidad y la excelencia educativa. En busca de la equidad y la excelencia.* Universidad del País Vasco/Euskal Herriko Unibertzitatea, Argitalpen Zerbitzua/Servicio EditoriaL. Enlace.

- Moya, O. y Luengo, F. (2023). *Desarrollo curricular LOMLOE. Teoría y práctica. Experiencias LOMLOE de aula y centros: situaciones de aprendizaje y perfil de salida, programaciones y evaluación competencial con informe.* Anaya. Enlace.