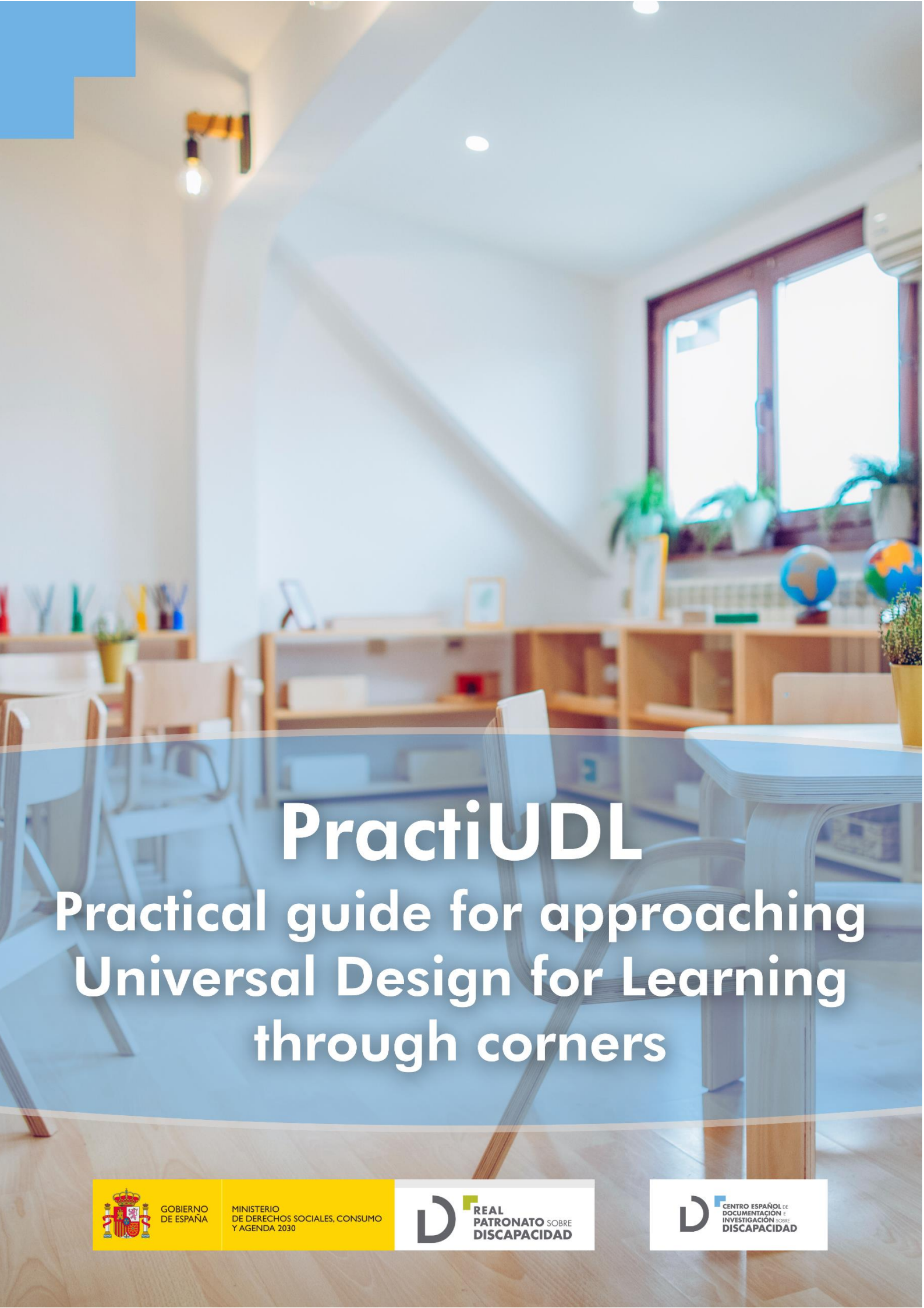


# PractiUDL

## Practical guide for approaching Universal Design for Learning through corners

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**PractiUDL. Practical guide for approaching Universal Design for Learning through corners**

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# Prologue

When the Centro Español de Documentación e Investigación sobre Discapacidad (CEDID) contacted me and proposed me to write this prologue, I did not hesitate for an instant to accept it. Being part of a text of this caliber and the impact that, I have absolutely no doubt, will have, gave me great pleasure. In addition, all the professionals who intervene in this work are great teachers and researchers, with more or less experience, and I am sure that they will give plenty to talk about (and to quote- what would the academia be without the reviled quotations-) in the years to come.

And there is no doubt that in Spain in recent times, and especially since the publication of the Royal Decrees that are the backbone of all the minimum teaching requirements at every educational stage in our country, Universal Design for Learning (UDL) has become a mantra that is on the table of the educational debate. Although there are voices opposed to its implementation, it is the state regulation itself which fervently invites teachers of all educational stages to program their learning situations under the premises of the UDL. Thus, throughout these years, effort has been done, in non-university education, to train in-service teachers so that they can know and understand UDL, and especially to try to provide teachers with resources so that they can implement the benefits that the new model offers.

However, the previous issue is palliative, since there are many teachers who could not be trained in inclusive methods during their university studies, and today they are required to work from this perspective. Thus, one of the great efforts that Administrations with competence in the matter should do is working for a paradigm shift in teachers' initial training (Childhood Education, Primary Education, Compulsory Secondary Education and Baccalaureate). And this teachers' updating process is necessary if we want to keep up with the expectations of our country as a signer of the International Convention on the Rights of People with Disabilities and the subsequent national regulations passed to regulate citizens' rights and life conditions.

For this reason, we must work not only on actions aiming at removing the barriers that arise due to knowledge evolution but mainly focus on advancing toward proactive models that allow the students who are being trained to be future teachers, to leave universities with the necessary and updated tools to teach, no more and no less, in a diverse, plurilingual, intercultural and ever-changing society.

And there lies the importance of the text presented here, and which I have the great pleasure to introduce. During the last decades, different initiatives have been developed to provide guides and resources to implement universal design for learning at university level. The Conference of Rectors of Spanish Universities (CRUE), together with the ONCE Foundation, promoted at the beginning of the previous decade a series of publications aimed to provide university teachers with tools on how to teach the

Design for All Model or Universal Accessibility in many undergraduate degrees. Thus, degrees such as Psychology, Law, Medicine or Social Work, among others, were the first chosen for this project. In subsequent publications, future teachers' training was also considered, and a text was written for those studies that accredited teaching work at all the educational stages.

However, the aforementioned books, in my humble opinion, have failed to have the expected presence in the Spanish university. Some works analyzed even how training on these premises was being given (Sánchez-Fuentes and Díez-Villoria, 2016) and the results found showed that there were still few universities that complied with the Decree of conversion to the European Higher Education Area (EHEA) regarding the minimum contents about this issue that should be covered in every degree. And, although these texts do not specifically refer to Universal Design for Learning, they could have been regarded as a seed that planted the basis of a society where there were professionals in every area who knew the benefits of inclusive models -in its widest sense- to develop a society consistent with the evolution we live today.

In addition, at present, we are participating and holding the debate on future UNI regulations, which shall regulate the requirements for the study programs that lead to obtaining an official university degree to exercise the teaching profession in Childhood and Primary Education. For this reason, the publication of this guide could not be more relevant and timelier. There is no doubt that Universal Design for Learning must be a content to be taught in all faculties of Education in our country and, thus, we -the university teachers- must provide our students, and future teachers, with specific resources.

A study recently published by Sánchez-Fuentes and Duk (2022) was precisely premised on the importance of contextualization. And the thing is that we cannot try to implement UDL without taking context into consideration. For this reason, this is a key issue in the UDL paradigm posed by CAST (2008, 2011, 2018, 2024). UDL is not a recipe to be implemented in the same way in different environments, with different students, with different conditions, and at different times. UDL must be something flexible that can be adapted to each classroom reality.

The 'working in corners' methodology presented in this publication has, in my view, enough versatility to be implemented in different ways -as stated in one of its headings - to achieve that every teacher can teach, and at the same time, apply the UDL premises in the degrees of Education. The reader is going to find a total of 10 corners on different aspects related to the UDL that every future teacher must know. Aspects such as the relationship between neuroeducation and UDL neural networks, how UDL has

evolved until reaching the current version, or the analysis of each of its three principles are part of this resource for teaching the UDL paradigm at the university.

Furthermore, the guide presents a well-built and updated theoretical framework that is mainly based on previous studies which consider UDL as a reference model in education, in the different stages. The reader will also be able to find a well-defined methodology that, without any doubt, will help him/her to understand it correctly and be able to subsequently implement it in the classroom.

Finally, the annexes provided by the authors are a necessary tool to complete the proposal and get everything you need to give a proper training on UDL.

I wish, and it is my greatest desire, that this document really contributes with the grain of sand necessary to continue adding among all, little by little, in pursuit of a future society in which students at every educational stage really have the same opportunities. I have always defended, and this is what I try to transmit in my classes, as well as in the teachers' training sessions I conduct both in Spain and Latin America, that the importance of education does not lie in the present moment, but in the near future, for which we are training the professionals who will become the pieces of the mechanism of a modern society in future years.

To conclude this prologue, as David Rose, co-founder of the Center for Applied Special Technology (CAST) and main author of the first studies on UDL, pointed out, this is an ever-changing model that aims to understand the society in which it is implemented, and adapt to it. Rose, in a recent publication in the form of an essay (2022) -'Cracks in the foundation: personal reflections on the past and future of the UDL guidelines'- explained how the privileges that his generation of white men, with university studies and well-paid jobs, had conditioned many aspects of North American life in recent decades and, hence, the perspective and philosophy that nurtured educational decisions. Thus, in the same document, Rose gave some details on the evolution of UDL and its adaptation to the moment that the United States are currently living. That is, a model of a society with different races, cultures, religious affiliations, sexual identities and an endless of variables that constitute what each of us is. Even so, in the same line of thought, the teachers Calderón-Almendros and Echeita-Sarrionandia (2022) expressed the importance of considering education, and consequently, inclusive education, an inalienable right of every human being, however different we may be.

For all these reasons, I invite every user of this guide to reflect on the kind of future teachers they want to train. We must be aware that the use of appropriate and inclusive tools in our university classrooms will condition the life of the future citizens of our country. The Pygmalion effect, so much studied and considered in compulsory

education stages, has also sense at the university. We must think very carefully about what we are doing in the faculties of Education, the importance we are giving and how much effort we are demanding from our students, who will be the teachers of the future. How we want the classrooms of the future to be will depend on the work we do today in our higher education institutions.

"Education does not change the world,
education changes people. People change the world"
Paulo Freire

**Sergio Sánchez Fuentes**
Universidad Autónoma de Madrid

# 1. Introduction



Since the request of Agenda 2030 (UNESCO, 2016) to ensure inclusive and quality education for all throughout life, all education systems of the world have redoubled their interest in inclusive education. Despite this desire to progress, the development of an inclusive education is stagnant due to multiple factors, among which we can highlight the rigidity of educational structures, the shortage of available resources or the inadequate training of the teachers to meet a heterogeneous student body due to their origin, genre, skills and cognitive and emotional development. Reversing the blockade and advancing toward full inclusion goes through strengthening the education system so that it can reach everybody (UNESCO, 2009).

In this process of change, teachers' attitudes and beliefs towards inclusion, as well as their ability to value and meet the needs of all students, and not only the ones of those with specific needs for educational support, are considered an essential aspect. Teachers' commitment and contribution is so decisive that it has been admitted that inclusive education will not progress if teachers lack values, knowledge and attitudes that allow all students to be successful (Florian, 2019; UNESCO, 2020). Before this requirement, the highest obstacle is that teachers' training plans have been strongly questioned and considered insurmountable obstacles to develop inclusive approaches (Agencia Europea para el Desarrollo del Alumnado con Necesidades Educativas Especiales, 2011; Naciones Unidas, 2023).

In Spain, to carry out teaching tasks, it is necessary to have previously obtained a University Degree. Despite this quality assurance, many studies have pointed out that when future teachers get a degree, they get it without having acquired the competences necessary for facing the current educational challenges, and without playing an active role committed to inclusion (Cremades-Andreu, 2023). Likewise, it has been highlighted that there is a great decompensation between the basic pedagogical competences that generalist teachers acquire, and the competences acquired by specialist or support teachers. This difference may help us understand, partly, the segregated treatment that students with specific needs for educational support receive in our education system (Arnaiz-Sánchez et al., 2021; González-Gil et al., 2019).

As a measure to reduce this differentiated treatment, which affects especially the most vulnerable students, the Organic Law 4/2007, of 12th April, which amends Organic Law 6/2001, of 21st December, on Universities (LOMLOU) established that a common education for all should be guaranteed, both for those with specific learning difficulties and those with a higher capability and motivation to learn. For that purpose, relevant organizational, methodological and curricular measures shall be adopted, in accordance with the principles of Universal Design for Learning (hereafter, UDL). This instruction is a small achievement in the advance toward inclusion, since it facilitates the teachers of the ordinary classes to orientate their pedagogical practices so that

every student benefits from them (Rose and Meyer, 2002). But today it is also a challenge for the education system which has the responsibility of training teachers to implement UDL.

Echoing this need, this guide presents a work proposal to be implemented in initial training sessions by university teachers, who are being called to make a higher use of inclusive teaching practices, thus becoming a role model for their students (Lewis, 2019; Schwab and Alnahdi, 2020). It is an experiential and participatory proposal that seeks to improve initial teachers' training, offering future teachers the opportunity to experiment by themselves what they will try to teach in their classrooms. This proposal brings together two of the multiple resources that may be used to develop teaching and learning processes from an inclusive approach: UDL and the methodological strategy of 'working in corners'.

# 2. Objectives



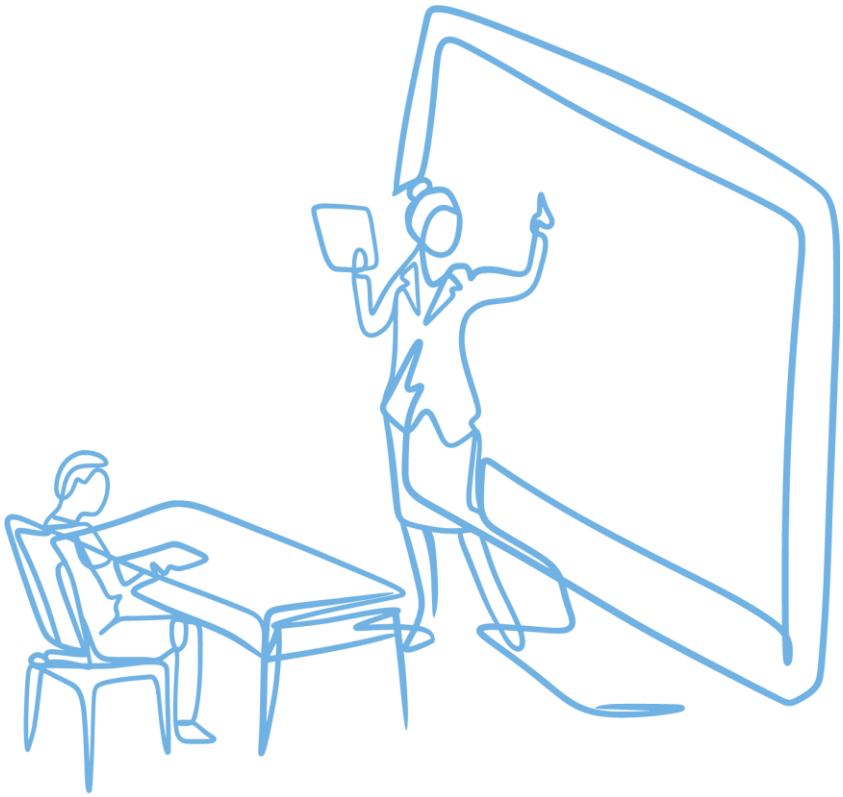
The main objective is providing teachers with a guide to address Universal Design for Learning (UDL) in the University Degrees of Education, through corners.

The specific objectives are:

− Providing teachers with resources so that students learn about the paradigm of Universal Design for Learning (UDL).

− Offering a proposal that allows the student not only to understand the paradigm of Universal Design for Learning (UDL) but also to experience it.

− Exemplifying Universal Design for Learning (UDL) through a flexible and dynamic proposal that fosters individual choice according to one's own interests.



# 3. Theoretical framework



## 3.1. Teachers' training



The consolidation of an inclusive education system is only possible if "ordinary" schools become more inclusive and show their capacity for offering the same opportunities to all its students in their communities. Among other actions, achieving this competence requires a change of mentality of the teachers, who must be perceived as a driving agent of school transformation, orienting their educational practice to offer an appropriate response to the individual characteristics of their students (Florian, 2019). The teachers themselves have informed that we could contemplate the success of every student if a more individualized education was provided, which started from their previous knowledge and allowed them to improve their academic performance (Arnaiz-Sánchez and Martínez Rodríguez, 2018). However, it seems that the experiences and learnings that students receive during their formative stage are not enough to carry out this innovation (Moliner García et al., 2016; Yahari and Solís Gómez, 2022).

**Teachers' training programs** must be in line with inclusive education approaches and provide teachers with the necessary skills to legitimize diversity as something appreciated in the classroom (UNESCO, 2009). In our country, it seems that we are still far from this point, and all the agents involved coincide in pointing out the emergency and urgent need to reformulate initial teachers' training. In this regard, in 2023, the Ministerio de Universidades (*Ministry of Universities*) initiated proceedings for the approval of the new requirements for the study programs leading to the obtention of official university degrees that enable to exercise the teaching profession, since the current criteria are still the ones approved more than fifteen years ago by Order ECI/3857/2007, of 27th December. Simultaneously, that same year, the research conducted by Márquez and Sánchez (2023) on the main contributions made by scientific research to inclusive education since 2015, also concluded that current initial teachers' training plans should be promptly rethought. These authors pointed out that, to advance in inclusive education, a polyvalent initial teachers' training must be guaranteed, which can ensure the acquisition of the competences necessary to answer effectively to complex and diverse classrooms' contexts and do it from the coordination and collaboration with the rest of the school and community members. Furthermore,

specific research on UDL mainstreaming in teachers' initial training has shown that its presence is insufficient (Sanahuja et al., 2023a; 2023b).

University teaching, and more specifically in university degrees aimed at training future education teachers (such as the Degree in Childhood Education, Degree in Primary Education, Degree in Pedagogy, Master's degree in Compulsory Secondary and Baccalaureate, Vocational Training and Language Teaching or the Master's degree in Psycho-pedagogy, among others) must be consistent between the theory taught and the way the lessons are implemented. This idea is presented in a very simple and illustrative manner in López-Pastor (2017), when they point to the double importance of evaluation in teachers' initial training and the inconsistency that occurs, in many cases, in the classrooms of the faculties of Education:

> The tailor's wife is the worst clad.
> A teacher of Didactics (of) ".....", in any given Faculty of Education:
> - As the law states: "assessment shall be formative and continuous, fostering students' participation through self-assessment and co-assessment".
> - Study it well, it will be one of the questions in the exam! (p. 52)

These inconsistencies that we sometimes do, must make us reflect and consider how to plan and teach our lessons in a manner that is consistent with the theoretical foundations addressed. For this reason, when incorporating the UDL paradigm in initial training, we must do it consistently and following the postulate logic defended by this approach.

Thus, when **teachers' initial training** does not provide strategies and tools that ensure a quality education answer for all students, independently of their specific characteristics and qualities, we are allowing that inequality in classrooms increases (Arvelo-Rosales et al., 2021). It is so stated in different studies that point out how individual curricular adaptations have a negative impact on the level of self-determination, autonomy and empowerment of the students who receive them. Adopting palliative or compensation measures addressed to students with higher difficulties means developing a parallel curriculum that deprives this student from interacting with his/her equals in the same environment (Muñoz-Cantero et al., 2018). It is necessary to eradicate the idea that students with learning difficulties must be grouped outside the ordinary classroom. On the contrary, we must start working curricular contents in common learning areas (Salas et al., 2018). One of the possible strategies to follow to ensure inclusive and quality education for every student in our classrooms is to follow the guidelines for identifying and eliminating barriers in teaching methods and curricular materials, as proposed by UDL.

## 3.2. Universal Design for Learning (UDL)

UDL has its origins in the 1980s, in the Centre for Applied Special Technology (hereinafter, CAST) and is proposed as a pedagogical framework aimed at increasing the alternatives of a diverse student body to access learning, considering their previous knowledge, personal interests, paces, and learning styles (López, 2008).

Based on a group of principles derived from the fields of Neuroscience, Learning Theories and the contributions of the technologies (Rose and Meyer, 2002), UDL endeavors to overcome one of the main difficulties faced by teachers in school classrooms: an inflexible curriculum. These learning situations designed from the perspective of a "single size for all" generate multiple barriers, especially for those groups of students who do not fit in the standard group or may find themselves outside the "average" (CAST, 2018). With the clear idea of overcoming this model, UDL was proposed as an alternative that allows the analysis and assessment of curricular designs and educational practices so that inclusive learning and teaching can be facilitated to all students, especially, to those groups who have historically been excluded, such as students with disabilities (Alba Pastor, 2017; Meyer et al., 2014; Rose et al., 2005).

As stated above, UDL is underpinned by the contributions of neuroeducation, based on three neural networks involved in information processing or in teaching and learning processes. The importance of these networks lies in its connection to the "why", the "what" and the "how" of teaching and learning processes (Alba Pastor, 2019). The neural networks and their connection to UDL are:

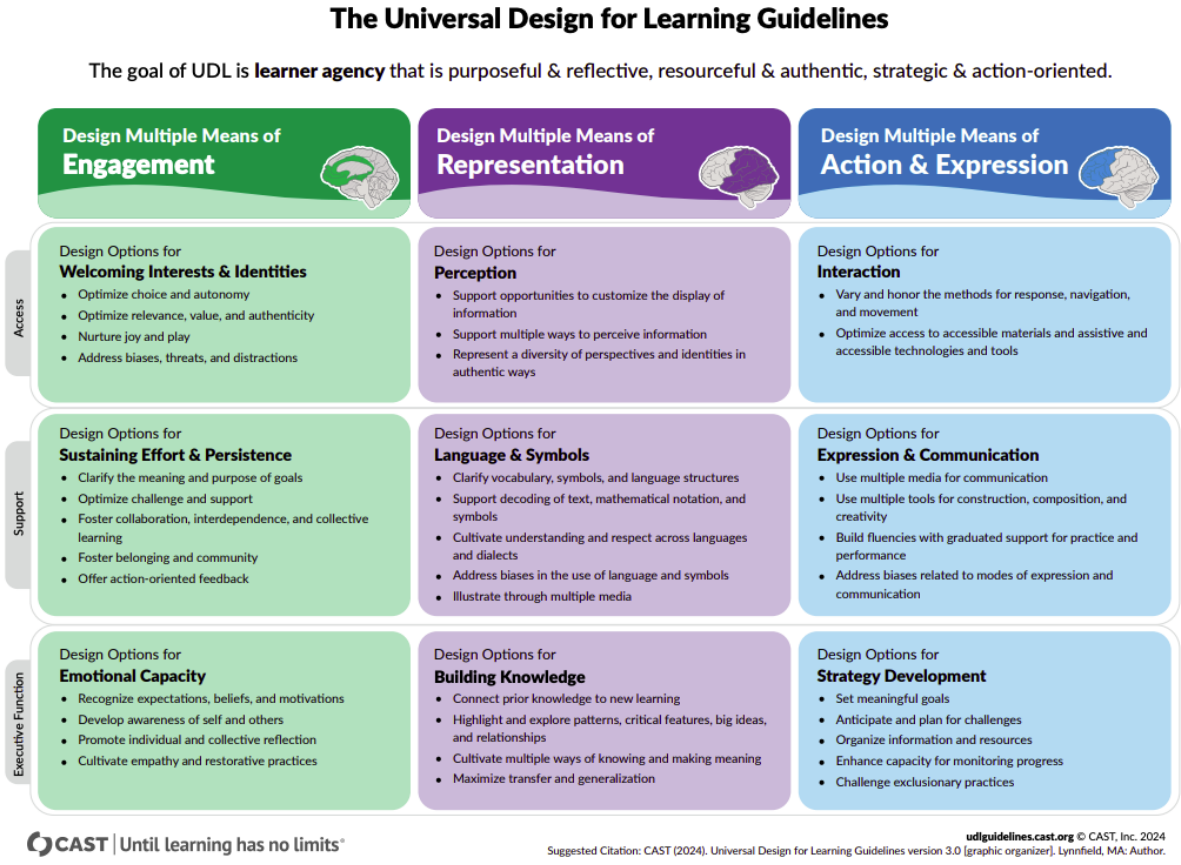
- **AFFECTIVE NETWORKS:** these networks are in charge of assigning emotional significance. They determine the student's degree of involvement in the task, learning and environment that surrounds him/her. They are related to the "why" we learn something.

- **RECOGNITION NETWORKS:** these networks are specialized in recognizing the information presented, while facilitating the incorporation of the information to the student's previous knowledge. Therefore, it is related to the "what" of learning.

- **STRATEGIC NETWORKS:** these networks are responsible for the executive functions that allow the student to perform the task, after having previously designed an action plan. These networks are related to the "how" of learning.

One of the main contributions of the recent UDL version 3.0 is addressing also the issue of the "who" (CAST, 2024). In this new update, students' multiple identities are highlighted as part of the variability. Thus, flexibility in objectives, materials and assessment becomes relevant (Sánchez-Fuentes, 2023). Since it is a framework that provides recommendations suitable for all areas of knowledge, UDL has shown that all students can benefit from the recommendations of having accessible and quality processes and materials. In addition, it promotes curriculum transformation, moving from rigid designs to some more flexible ones that allow to provide each student with the necessary support. To guarantee this, the most recent version of UDL (CAST, 2024) relies on three principles oriented to ensure the presence, participation and progress of all students (see figure 1). It is important to place emphasis on the idea that this framework has evolved over time, from the version 1.0 to the most recent one 3.0, and will continue to evolve in future versions to include new contributions to educational research. Therefore, we encourage the reader to check the latest developments in the CAST webpage.

**Figure 1. Guidelines for Universal Design for Learning (version 3.0)**




**Source:** CAST, 2024.

• **DESIGN MULTIPLE MEANS OF ENGAGEMENT**. This principle refers to the importance of achieving that students are motivated and committed to their learning. Emotions are a key element in learning and teaching processes. Learning becomes more productive when it takes place in a cooperative, no-competitive atmosphere, where positive emotions abound (Bakker and Fasciglione, 2019; CAST, 2024). Therefore, increasing students' involvement in learning requires understanding that the ways in which they may feel motivated for learning may differ. Whereas, on the one hand, innovation, spontaneity or the surprise effect may be elements that make students feel connected with the pedagogical activity, on the other hand, there may be students who prefer more routine or simple processes. This involves that teachers must be able to present a variety of options so that each student can involve himself/herself according to his/her preferences.

• **DESIGN MULTIPLE MEANS OF REPRESENTATION**. It is a proven fact that not all students receive and understand the information given in a unique way; neither do they use the information in the same way as the rest of their classmates. This means that there is not a standard way of presenting information or a unique means of representation that is optimal for all students. In many cases, situations related to conditions of disability, linguistic or cultural differences, or even learning difficulties may require a different way of presenting the contents, such as visual, auditory or personalized to guarantee its accessibility (CAST, 2024). Therefore, it is essential that teachers present information in a variety of ways in their sessions. This idea sticks to the approach on which this UDL principle is based, which conceives the fact that students differ in the ways in which they understand and receive the information they are given. For this reason, we cannot think in a unique means of representation that is optimal for all students, since in many cases situations related to conditions of disability, cultural or linguistic differences, or even learning difficulties may require a different way of presenting the contents (CAST, 2018). Therefore, it is important to present the information in a variety of ways in our sessions. With this principle, we promote ingenuity and knowledge in our students, by presenting content in different ways.

• **DESIGN MULTIPLE MEANS OF ACTION & EXPRESSION**. Another proven fact is that not all students answer the questions or give their opinion or knowledge through the same means or channel. There are students who express themselves better through written words, while others prefer to communicate orally, for instance. Likewise, we also know that the trajectory followed to do the proposed tasks, or the means used to achieve the proposed goals differ among them. This involves that teachers must always offer flexible approaches that allow students

to perform the learning tasks through different means of expression and action, thus contributing in order that students are strategic, and mainly that they can express themselves in different ways. In addition to the three principles shown, UDL is organized in guidelines and considerations. This organization allows us to understand how we can incorporate each of the UDL principles in our teaching practice.

For all these reasons, we can state that UDL is an inclusive working framework because it considers that there is no standard way of motivating, involving or teaching our students. On the contrary, it is shown as a flexible scheme that can and must be contextualized to the classroom needs.

# 4. Methodology



## 4.1. Corners as an inclusive methodological strategy

We know that 'working in corners' is not a new methodological strategy, since it has pioneers such as Freinet, Dewey or Kilpatrick (Laguía and Vidal, 2008). Furthermore, there is a long tradition of its use in the stage of Childhood Education, as evidenced by some didactic experiences (Alarcón, 2016; Ceiro Catasú et al., 2023; Cruz-Guzmán et al., 2020), as well as in the stage of Primary Education (Álvarez Muñoz and Hernández Prados, 2022; Casado Berrocal and Castro Bayón, 2017). For instance, Meneses et al. (2022) propose, when teaching in initial stages, teacher-directed activities and free-choice activities in the corners. The specific proposals for each corner change, according to the students' needs and the learning situations developed. They suggest some examples of corners such as the following: the corner of language or writing, the corner of the experiences, the corner of practical expression, the corner of the library, the corner of mathematics, the corner of computer science, the corner of constructions, the corner of symbolic game, the corner of costumes, the corner of creative game, among others. This active and participatory way of learning is spreading more and more to other stages such as Compulsory Secondary Education or University, specifically in teachers' initial training (Vicente et al., 2014).

Broadly speaking, the working corners can be understood as previously planned or delimited spaces in which students, whether individually or in groups, do different learning proposals (Fernández et al., 2009). Every corner must contribute to students' global learning and must be organized in an accessible way. Thus, each corner must be clearly identified with signs or identifying markers. In addition, the teacher must have left in each space all the necessary material so that students can do the corresponding activity in the corner (Pinto, 2012). When implementing the corners, Martín and Vieira (2000), propose three key moments:

a. the assembly (briefly introduce the different corners. The teacher explains the functioning and the proposal for each corner),
b. the students implement the didactic proposals proposed in each corner and
c. idea-sharing session (the students comment and explain the activities carried out).

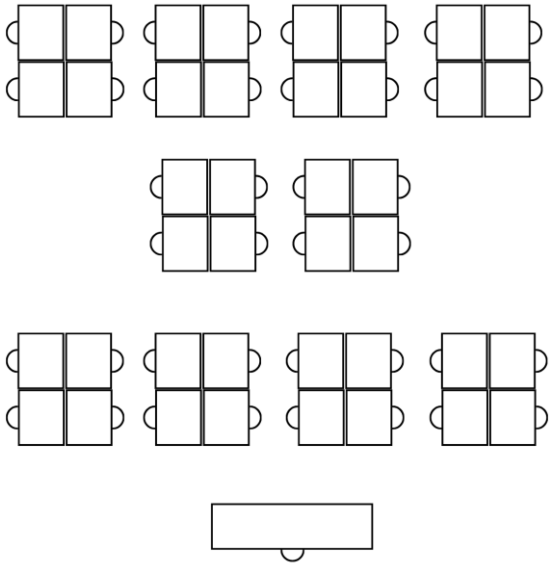


In a nutshell, corners are a methodological strategy that can be used at the university level (and at any educational stage) to effectively promote students' participation and active learning. In the words of Gispert and Ribas (2010), corners allow to meet the diversity of learning styles, levels, and learning situations, because students can simultaneously perform different activities. Thus, corners are a way of organizing the class work that allows students to act with autonomy and decide the activities they want to do according to their needs and interests. We can affirm that this didactic methodology favors classroom organization from an inclusive perspective (Benet et al., 2016) and, in this case, it can help us so that students understand the goal and what is expected of them in each corner.

## 4.2. General description of the materials for its implementation

This proposal consists of ten corners. Therefore, to implement it, it is necessary to organize the classroom into 10 clearly differentiated spaces, one for each corner. For the proper development of the session, we recommend that each space has the same number of chairs and tables as people in the groups, and that they are placed one in front of the other (figure 2). Thus, students will be able to work more comfortably and interact better with the members of their group. In addition, depending on the size of the classroom, it might also be advisable, whenever possible, to do the activity in two or three classrooms. This will facilitate the work and students' concentration towards the task.

**Figure 2. Proposal for classroom distribution**



**Source:** prepared by the authors.

Each corner shall be marked with some identifying markers showing the corresponding number and title (available in annex 0).

In addition, each space will have:

- Data sheets with the instructions for each corner (see section 4.4. Data sheets of the corners).
- Computer graphics with brief instructions for each corner and the explanatory audio (annex 11).
- The materials necessary to do the activity (annexes 1 to 9).
- Stamps to complete the route sheet (annex 10).

Sometimes, the complementary material (see section 4.4. Data sheets of the corners).

To facilitate the movement through the corners, each group will be given a route sheet (annex 10) with the titles of the corners and, on the side, a white circle where they must put a stamp when they complete a corner. Each stamp is a letter that will form a hidden word in the route sheet. Therefore, all the groups shall go through the ten corners to complete their sheet. Once they complete it, they will get the "hidden" word which comes from Latin 'diversitas', which means "diversity". This will help students be aware of their progress, know which corners they still need to complete, and will also serve as an incentive for their motivation.

In case that you do not have stamps, see annex 10. To implement this proposal, it is important to know that there are different implementation possibilities, as stated in section 4.3. However, there are some key elements that you need to bear in mind to achieve the planned goal. Specifically, you must follow two phases: a) explanation of the corners and UDL contextualization; b) sharing of the learning achieved. Next, we will explain each of them:

## First phase. Explanation of the corners and UDL contextualization

In this first phase, we shall explain the students what the proposal of the corners entails and how it will be implemented. Thus, we recommend doing a presentation with a brief explanation of the mentioned methodological strategy and the distribution of the different corners in the classroom.

QR code with the presentation template

Each corner has an implementation procedure, whether it is in group or individually. Table 1 shows the implementation procedure proposed for each corner.

**Table 1. Implementation procedure for the corners**

| Corner | How do we do the activity? |
|---|---|
| 1. From UD to UDL | In groups |
| 2. Curriculum and UDL DUA | In groups or individual |
| 3. Neuroeducation and UDL | In groups |
| 4. Design multiple means of engagement | Individual |
| 5. Implementation of UDL | In groups |
| 6. Design multiple means of representation | In groups |
| 7. Design multiple means of action and expression | Individual |
| 8. Key ideas | In groups or individual |
| 9. DIAMOND-9 | In groups |
| 10. Active rest area | Individual |

**Source:** prepared by the authors.

Once the instructions have been explained, it is convenient to identify the students' previous knowledge. For that purpose, it is recommended to use the bridge metaphor. You can draw or project a bridge on the board and ask the students to write or draw on the left what they think UDL is. The question raised could be "What do I know about UDL?". When all the students have added their ideas, they will be told that the activity of the bridge will be resumed later, when sharing ideas. Both if it is done in the same session or in the following one, the students shall write down on the other part of the bridge (on the right) the knowledge acquired, relating what they previously knew and what they know now.

After asking the students about their previous knowledge, it is convenient to contextualize UDL. It does not mean giving a comprehensive explanation, but providing them some general information about its origin, its underlying philosophy and implementation framework. It is recommended to explain the structure of the framework with its three principles, nine guidelines and considerations.

Before starting to go through the corners, groups of 4-6 people must be formed (this may change depending on the number of students who attend the session). Each group will be given a route sheet (annex 10), which they will have to complete by putting stamps in the spaces and thus, revealing the word they must discover. The movement time should be restricted to all the group. For that purpose, a chronometer can be displayed on the digital board so that all the students bear in mind that they must finish the activity before the time is up. After having explained part of the paradigm, as well as the movement instructions, students will be able to start working in the corners. To begin with, it is recommended to assign a number to each group. It will correspond to the corner with which proposal they will start. It is recommended that there are always fewer groups than corners, to implement it correctly.

The role of the teachers will be to accompany the students and revitalize the spaces so that all the students work and there are no spaces of distraction or agglomerations.

### Second Phase. Sharing learning

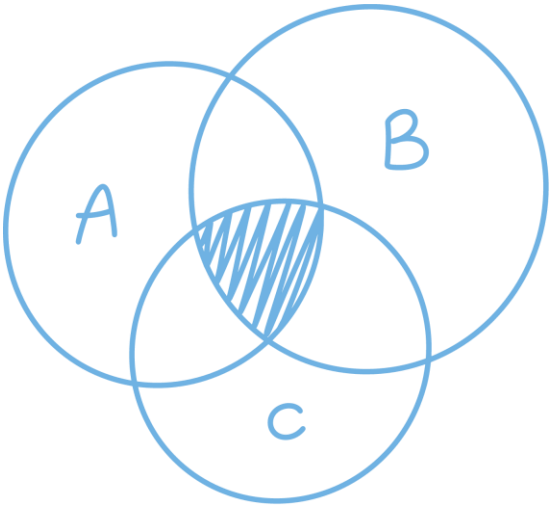
Once the time has elapsed, and the students have gone through every corner, they must share what they have learned. Depending on the implementation route chosen (section 4.3), idea-sharing will be conducted in the same session or in the following one. Regardless of the moment in which it is implemented, it is recommended to go back to the bridge metaphor (if it has been proposed), now motivating the students to write down about what they think that they learned on the other part of the

bridge (on the right). The question they should answer is “What am I learning?”. Later, the teacher may open the floor for questions, reflections or concerns that the students have regarding the session.

## 4.3. Different possibilities of implementation

One of the objectives of this guide is to show how to work UDL in the university in a way consistent with its philosophy. Since according to this paradigm, it is necessary to provide different options so that each person chooses according to his/her preferences, it is also convenient to diversify the possibilities for implementing this proposal. Next, we propose three different possibilities to implement the corners: a) Deepen into the issue; b) Practical implications; c) Prioritization of corners. It must be highlighted that every teacher can choose or vary the routes depending on the classroom needs.

**a) Examine the issue in depth**




The corners’ proposal is a first starting point to explore the UDL paradigm. However, depending on the learning objective that you want to work on with the students, it may be necessary to modify the number of sessions allocated to this. The first proposed implementation route involves reflecting on the degree of depth with which you want to address the UDL philosophy.

**Low degree of depth (1 session):** if you want students to become aware and learn some basic notions of the principles and some practical implications, we suggest that you only allocate one session. The session may be conducted as follows:

- Introduction of the session.
- Brief explanation of the UDL paradigm.
- Description of the corners and the dynamics to follow.
- Free movement of the students through the corners.
- Valuation of the experience.
- Final reflection.

**Medium degree of depth (2 sessions):** if you want to examine in more detail the theoretical aspects of this paradigm, we recommend that you allocate two sessions. In the first one, the activity of the corners will be done. In the second one, we recommend examining in detail the students' reflections on this experience and relate each corner to the theory of the principles, and, if considered appropriate, their respective guidelines and considerations.

**High degree of depth (3 sessions):** if you want to achieve a high degree of depth, we suggest that you allocate three sessions. Apart from the session of the corners (first session), and its relationship with the UDL theory (second session), we recommend a third session where the students must conduct an activity to implement the principles, guidelines and considerations of this paradigm. A possibility could be to propose to choose, in groups, a competence from the curriculum and try to design a learning situation to work it from the perspective of UDL. The instruction they shall follow is to apply the three UDL principles and, at least, a consideration of each of them.

**b) Prioritization of the corners**

The initial proposal consists of ten corners and is thought for a two-hours session, approximately, and for a maximum of 50 people who experience it simultaneously. Since we do not always have this time, or there are higher ratios, another possible way of implementing the proposal is modifying the number of corners according to the needs.

If you have less than two hours, we recommend implementing five corners. Although the ten corners address one or different key elements of the UDL paradigm, some corners must be prioritized over the rest since they are considered basic pillars to understand this philosophy. The five corners that may be implemented in this session are:

1) Corner 1. From UD to UDL.
2) Corner 5. Implementing UDL.
3) Corner 6. Experiencing means of representation.
4) Corner 7. Different ways of doing things.
5) Corner 8. Key ideas

This is only a proposal. Each teacher may prioritize a corner depending on what he/she wants to work with the students.

If you have two or more hours, we recommend implementing the ten corners. These will allow to set the basis of this paradigm and get a general overview of what it involves.

If you have more than 50 students, we recommend implementing the ten corners. In addition, we must bear in mind that for the proper dynamism of the session, there should be one group of students less than corners. Thus, the remaining corner may be used to prevent agglomerations, streamline the session and avoid moments of distraction.

In addition to the above, we recommend unifying the materials of the different corners in one box. The box can be of any material, although you must bear in mind the size of the resources to keep all of them in the box. This learning box shall facilitate material organization and transport and will prevent its deterioration.

## 4.4. Data sheets of the corners

Next, we present a data sheet for each the corners proposed. In each data sheet we specify the title, the main objective addressed, the approximate time for its implementation, the necessary resources and a brief description or implementation.

## 1. THE PHILOSOPHY OF FROM UD TO UDL

**Title:**
From UD to UDL!

**Objective:**
Know the origin of UDL and its fundamentals.

**Time:**
Approximately 8 minutes.

**Resources:**
- Brief theoretical explanation (annex 1):
  - 📎 Text
  - 🎧 Audio
  - ⚠ Read before doing the activity!
- Students need a mobile device (to take photos and with a QR reader) 📲.

**Description / Implementation:**
This activity is based on walking as a learning strategy. We suggest walking around the campus or the building in which you are now (Martins and Riquelme, 2021). You must look for and take photographs of architectural elements adapted to facilitate accessibility (for example, stairs and lift), and elements typical of Universal Design (for example, access ramps). After finishing the tour, and based on the photographs taken, we suggest that you reflect on the following questions:

- ❓ Have you found any poorly adapted or inaccessible space?
- ❓ Have you found elements that facilitate accessibility (adaptation made after the construction of the building)?
- ❓ The building where you are now was built from universal design (building thought and designed for all)?

The photos you took, and these issues will be resumed in the idea-sharing session.

## 2. CURRICULUM AND UDL

**Title:**
Curriculum and UDL.

**Objective:**
Analyze the presence of Universal Design for Learning (UDL) in the education legislation and the curriculum.

**Time:**
Between 13-15 minutes.

**Resources:**
- Document with access to the education legislation and the curriculum (annex 2).

- Students need a mobile device with a QR reader .

**Description / Implementation:**
The first level of curricular concretion refers to the Basic Curricular Design (DCB), in which the Central and Autonomous Government set the minimum teaching requirements of the curriculum. We propose to trace the references made to UDL in the LOMLOE and the Royal Decree and Degree of the corresponding educational stage.

You can write down, in the proposed document, the references you found in each document about UDL. We will resume it in the idea-sharing session.

This activity can be conducted individually or in groups.

## 3. NEUROEDUCATION AND UDL

**Title:**
Neuroeducation and UDL.

**Objectives:**
Relate the three neural networks to the three UDL principles.

**Time:**
Approximately 5 minutes.

**Resources:**
- Jigsaw puzzle and brief theoretical explanation (annex 3):

  Text

  Audio

- Students need a mobile device (with a QR reader) .

**Description / Implementation:**
At first, we propose to make a jigsaw puzzle to relate the affective, recognition, and strategic network to the explanation and the part of the brain drawing where each one is located.

You have two options to conduct this activity. you can choose the one that suits you best. In the first option ( **Level of difficulty: low**) you simply must pay attention to the colors to complete the jigsaw puzzle. In the second option ( **Level of difficulty: high**), you must read it carefully to complete it. We encourage you to start with the second option!

In the jigsaw puzzle, pay attention to the color that identifies each UDL principle, this structure will help you to identify and become familiar to each of the principles, guidelines and considerations.

Secondly, we propose to read and listen to a brief theoretical explanation that will help you to relate the three neural networks to the three UDL principles.

## 4. PRINCIPLE OF DESIGN MULTIPLE MEANS OF ENGAGEMENT

**Title:**
Making Action Plans (MAPS).

**Objective:**
Reflect on the individual needs and wishes about one's own learning and design a personal action plan.

**Time:**
Between 9-10 minutes.

**Resources:**
- A sheet with the MAPS template (annex 4).

**Description / Implementation:**
The **principle of design multiple means of engagement** is closely related to the students' emotional perspective and personal objectives. This principle highlights the importance of fostering that students set personal goals and reflect on the actions that must be conducted to achieve them, while thinking about their own behavior.

We propose to reflect on a personal goal **related to your learning** and make your action plan using the tool we provide you. This tool is called Making Actions Plans (MAPS) (Falvey et al., 1994) and will help you to reflect on an important topic to plan possible actions for the near future. It is necessary to complete the tool in annex 4, individually, specifying the following elements:

1. Your history: what do you think you need to reorient regarding your learning?
2. The dream: what do you want to achieve?
3. The nightmare: what are you worried about? Are you afraid of something while trying to achieve the proposed goal?
4. Contributions: what have you progressed in? Which are your strengths?
5. What does it involve? Analyze the actions or resources necessary to achieve the goal.
6. Action: design an action plan considering the people involved, the action to be conducted and the timing.

 You can add information in multiple formats, such as text, drawings, images, etc.

## 5. IMPLEMENTING UDL

**Title:**
Implementing UDL.

**Objective:**
Incorporate UDL measures in the didactic proposal aiming at improving it.

**Time:**
Approximately 15 minutes.

**Resources:**
- Electronic device to make improvements .
- Proposal to be improved (annex 5).
- UDL principles, guidelines and considerations (annex 6).

**Description / Implementation:**
In this corner we give you a didactic proposal. You must review it and try to include some UDL guidelines and considerations aiming at improving it. some questions that may help you with the improvements are:

- How would you improve information presentation?
- Could you include different types of response in the activity?
- How would you include aspects for motivating and engaging students?

❗ You must include the three UDL principles at least once.

## 6. PRINCIPLE OF DESIGN MULTIPLE MEANS OF REPRESENTATION

**Title:**
Experiencing multiple means of representation.

**Objective:**
Realize, by means of the game, the diversity of preferences when perceiving information.

**Time:**
Between 4-5 minutes.

**Resources:**
- Annex 7. Game of concept representation.
- Board and markers for drawing.

**Description / Implementation:**
The **principle of multiple means of representation** is related to the means of presenting information and understanding it. The different guidelines and considerations focus on the importance of providing information through different channels. As you might have seen, in this guide we used the visual, oral and written channel to facilitate access to information and its comprehension.
We invite you to play the game of guessing concepts that we provide you. It is about representing, in groups of 3, the concept on the card you have chosen, and each participant does it in a different way. These are the instructions ⚙:

1) One person will represent the concept with mimics, another one with a drawing, and the third one with an oral description. You must do it simultaneously. There are concepts with different levels of difficulty, being the green concepts, the easiest ones; the yellow concepts, the intermediate ones; and the pink concepts, the most difficult ones. You can try the three levels!

2) Once you have gone through 1 or 2 rounds, and all the members of the team have guessed and represented a concept, you will have to ask yourself which modality of representation you paid more attention to.

3) You must reflect on the answers. Some interesting questions you can ask are:
   - Which channel of representation have you paid more attention to?
   - Have you coincided?
   - The fact of receiving information through different channels has helped you?

We will resume it in the idea-sharing session.

## 7. PRINCIPLE OF DESIGN MULTIPLE MEANS OF ACTION AND EXPRESSION

**Title:**
Different ways of doing things!

**Objective:**
Understand that students can solve a specific task using different materials and strategies.

**Time:**
15 minutes approximately.

**Resources:**
- Chairs.
- Sheets and pencils.
- Card game.
- Sticks.
- Plastic glasses.
- Students need a mobile device (to take photos) 📲.

**Description / Implementation:**
The **principle of multiple means of action and expression** is related to the strategies and procedures for expressing and showing one's knowledge. Preferences on these issues vary from one student to another. For this reason, UDL proposes to make the ways in which students show their knowledge flexible. This means offering different types of response in the tasks so that students can choose the one that best suits their abilities or preferences.

To put this idea into practice, in this corner you will find different materials. The objective is that you choose one of the materials and decide the most proper strategy for building a tower. **You must bear in mind that you cannot mix materials to build the tower**. You must build it individually, always trying that each person chooses a different material. Once the towers have been built, you need to take a photo of the tower you have built.

💭 **Listen to the following audio after having made the proposal**. Which relationship has it with the principle of design multiple means of action and expression?

🎧 Audio: https://vocaroo.com/1mTSd6lP6FoU

We will resume it in the idea-sharing session.

## 8. KEY IDEAS

**Title:**
Key ideas about UDL.

**Objective:**
Remember some key ideas about Universal Design for Learning (UDL).

**Time:**
Between 5-6 minutes.

**Resources:**
- Students need a mobile phone with a QR reader to access the quizizz app📲.

**Description / Implementation:**
The UDL implementation framework is based on technology and digital media. On this occasion, we propose, by means of the quizizz app, a series of key ideas about UDL that you must know.

https://quizizz.com/join/quiz/67c1eeb65171707a8b6ec8dd/start?from=admin&preview=true

## 9. DIAMOND-9

**Title:**
Rethinking priorities! Classroom diversity.

**Objective:**
Hypothesize and rethink priorities regarding attention to diversity in the classroom.

**Time:**
Approximately 8 minutes.

**Resources:**
- Document with the diamond and 18 cards (annex 8).

**Description / Implementation:**
For this activity we propose the Diamond-9 dynamics (OCDE, 2011):

1) Pick up a group of priorities (18 cards) and choose the 9 cards (topics/items) that you consider more important.

2) You must place the 9 cards chosen on the diamond grid by order of importance. The topic to which you give the most priority must be placed at the top of the diamond, and the one to which you give the least priority must be placed at the bottom. Topics placed in the same line are given the same importance.

3) Take a photo of the composition you have designed as a group. We will resume it in the idea-sharing session.

We will resume it in the idea-sharing session.

## 10. ACTIVE REST AREA

**Title:**
Actively resting.

**Objective:**
Rest from the task and perform any of the actions proposed in the area.

**Time:**
No more than 5 minutes.

**Resources:**
- Sheets with the actions to actively rest (annex 9).

**Description / Implementation:**
On the table you will find different sheets with the actions to perform in active rests: yoga, language, mathematics, arts and ICT. Whenever you need it, and in a self-controlled way, you will be able to take an active rest. It involves stopping doing the task and replacing it by an action that allows you to switch off and recover before returning to the activity.

👉 Active rests will not exceed 5 minutes.

# 5. Conclusion



The stage of teachers' initial training is essential and plays a key role in the construction of the professional identity of the teachers who will be in the classrooms in the future (Álvarez-Medina and Sánchez-Heredia, 2022; Živković, 2018). The experiences, educational experiences and learning received during the university training stage will condition their future teaching task. For this reason, universities must establish a solid base that allows trainee teachers to acquire the necessary competences to face the teaching challenges. Future education professionals must know the theoretical-practical fundamentals of all the essential elements that play an important role to plan and program the teaching-learning process aiming at students' learning (Gil Izquierdo et al., 2018).



We consider that today UDL stands as an innovative pedagogical philosophy whose main characteristic is its applicability to every knowledge area and educational stage. Thus, this guide offers a practical proposal to work UDL through corners in the university degrees of education, by fostering a methodology that favors university students' active learning. However, this requires that the teacher organizes carefully the time and space so that students acquire and understand the theoretical-practical fundamentals of UDL. In addition, this pedagogical proposal helps the students from the faculties of Education to know first-hand the proposal of 'working in corners' (Barrera et al., 2024; Sanahuja et al., 2024). This fact allows them to experience, in the university classroom, a methodological strategy that, for sure, they will use to teach basic knowledge in their subject or educational stage. On balance, this guide tries to provide teachers with strategies that allow them to meet the diversity in the classroom. As well as to place our students again as the center of the teaching-learning process, holders of the inalienable right to education (Yahari et al., 2023).

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# 7. Annexes


PROFESSIONAL LEAGUE
ARRR

Annex 0. Corners' identifying markers

Annex 1. Brief theoretical explanation from UD to UDL

Annex 2. UDL and curriculum

Annex 3. Neuroeducation and UDL

Annex 4. Principle of design multiple means of engagement

Annex 5. Resources to improve through UDL

Annex 6. Principles, guidelines and considerations

Annex 7. Principle of design multiple means of representation

Annex 8. Diamond-9

Annex 9. Active rest

Annex 10. Template: The Lost Word

Annex 11. Computer graphics with the instructions for the corners

# Annex 0. Corners' identifying markers

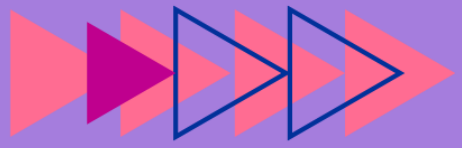




# FROM UD TO UDL



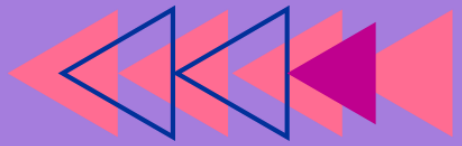
In groups





# 2

# CURRICULUM AND UDL



In groups



# 3

# NEUROEDUCATION AND UDL

In groups



# DESIGN OF MULTIPLE MEANS OF ENGAGEMENT

Individual

# 5

# IMPLEMENTING UDL

In groups

6

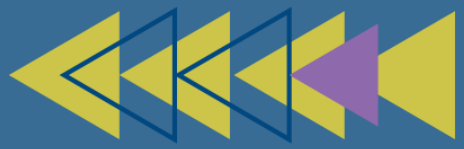
# DESIGN OF MULTIPLE MEANS OF REPRESENTATION

In groups

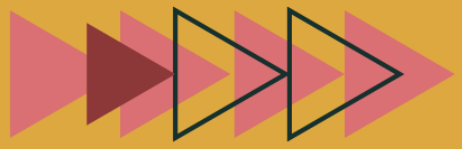


# 7

# DESIGN OF MULTIPLE MEANS OF ACTION AND EXPRESSION



Individual





# KEY IDEAS



Individual





# DIAMOND-9



In groups

# 10

# ACTIVE REST AREA

Individual

# Annex 1. Brief theoretical explanation from UD to UDL

## From Universal Design (UD) to Universal Design for Learning (UDL)

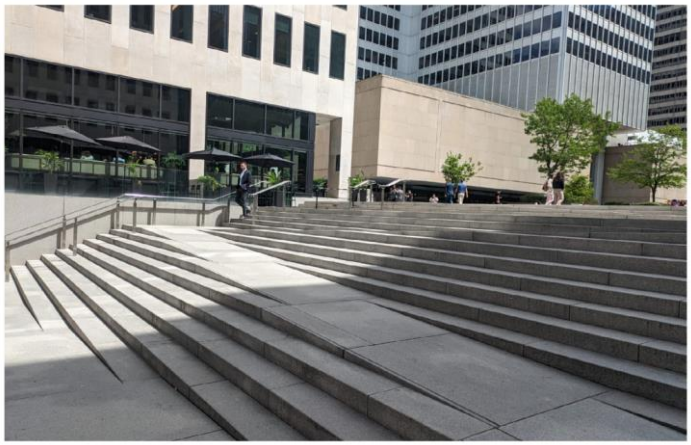
The advances in **Technology and Universal Design** (UD) are the foundation of **Universal Design for Learning (UDL),** through its practical application by means of the ICTs. One of the first ideas we must consider when referring to UDL is that this construct does not have its origins in the field of education, but it comes from the field of architecture.

**In the 1970s, the architect Ron Mace** founded in the **United States, the Center for Universal Design (UD)**. Mace started using a wheelchair because he had poliomyelitis, and this allowed him to become aware of the numerous existing architectural barriers in the streets or buildings (Alba Pastor, 2022). For this reason, the main purpose of Universal Design (UD) lies in promoting:

> the design of products or environments that are usable by anyone, as far as possible, without the need of a subsequent adaptation for a specific audience (CUD, 1997 quoted in Alba Pastor et al., 2014, p. 5).

As an example, figure 1 shows some stairs designed from Universal Design (UD).

**Figure 1. Stairs conceived from universal design (UD)**



It is important to bear in mind that Universal Design (UD) does not only focus on people with disabilities but aims to overcome any barrier or obstacle that people may temporally or permanently experiment. For example, if we are walking around with a shopping cart or a baby pushchair, or suffer from a sprain, in the stairs shown in figure 1, we will most probably use the ramp instead of the stairs. Whereas if we are in a hurry and in good physical condition, we will probably choose to climb the stairs. Thus, **Universal Design** is also called design for all and therefore, it is not only and exclusively focused on people with disabilities.

**Source:** own elaboration.

## From Universal Design (UD) to Universal Design for Learning (UDL)

Based on the ideas outlined in the previous section, the CAST (**Center for Applied Special Technology**) established the didactic approach of **Universal Design for Learning (UDL)**. The CAST originated in 1984 in Massachusetts (EE. UU.). In its early stages, this center was dedicated to the design of flexible computing environments and tools addressed to students with disabilities. But they soon realized that these environments or tools not only benefited students with disabilities but also the rest of the people (Tirado, 2023).

In the **1990s**, researchers such as:

- **Anne Rose** (specialized in neuropsychology of the development),
- **David Meyer** (specialized in clinical psychology, education and graphic design),
- **Grace Meo** (specialized in childhood education),
- **Skip Stahl** (specialized in accessible educational materials) and
- **Linda Mensing** (specialized in educational technology)

**designed a framework for implementing UDL in the classroom** based on **educational research, technologies and digital media**, as well as on the recent advances of **neuroscience applied to learning** (Alba Pastor, 2022; Costa-Renders et al., 2020; Márquez, 2015).

🎧 Audio: https://voca.ro/1gutxlqygdTs

# Annex 2. UDL and curriculum

🔍 We propose to trace the references about UDL in the education law.

| Education Law | QR Code | Write down the references you found |
|---|---|---|
| For instance: *Organic Law 3/2020, of 29 December, which modifies Organic Law 2/2006, of 3 May, on Education.* | | |

In addition, we present below the education legislation for **Childhood Education.**

| Curriculum | QR Code | Write down the references you found |
|---|---|---|
| For instance: *Royal Decree 95/2022, of 1 February, which establishes the ordination and minimum teaching requirements of Childhood Education.* | | |
| For instance: *Decree 100/2022, of 29 July, of the Council, which establishes the ordination and curriculum of Childhood Education.* | | |

🔍 We propose to trace the references about UDL in the education law.

| Education Law | QR Code | Write down the references you found |
|---|---|---|
| *For instance: Organic Law 3/2020, of 29 December, which modifies Organic Law 2/2006, of 3 May, on Education.* | | |

In addition, we present below the education legislation for **Primary Education**.

| Curriculum | QR Code | Write down the references you found |
|---|---|---|
| *For instance: Royal Decree 157/2022, of 1 March, which establishes the ordination and minimum teaching requirements of Primary Education.* | | |
| *For instance: Decree 106/2022, of 5 August, of the Council, on the ordination and curriculum of the stage of Primary Education.* | | |

🔍 We propose to trace the references about UDL in the education law.

| Education Law | QR Code | Write down the references you found |
|---|---|---|
| *For instance: Organic Law 3/2020, of 29 December, which modifies Organic Law 2/2006, of 3 May, on Education. In addition, next we present to you the Royal Decree and Decree (Valencian Community) for the stage of Childhood Education* | | |

In addition, next we present to you the education legislation for the stage **Compulsory Secondary Education**.

| Curriculum | QR Code | Write down the references you found |
|---|---|---|
| *For instance: Royal Decree 217/2022, of March 29th, which establishes the organization and minimum and minimum teachings of Compulsory Secondary Education.* | | |
| *For instance: Decree 107/2022, of August 5, of the Consell, by which it is established* | | |

| | | |
|---|---|---|
| *which establishes the organization and the curriculum of Compulsory Secondary Education.* | | |

🔍 We propose to trace the references about UDL in the education law.

| Education Law | QR Code | Write down the references you found |
|---|---|---|
| *For instance: Organic Law 3/2020, of 29 December, which modifies Organic Law 2/2006, of 3 May, on Education. In addition, next we present to you the Royal Decree and Decree (Valencian Community) for the stage of Childhood Education.* | | |

In addition, we present below the education legislation for the stage of **Baccalaureate**.

| Curriculum | QR Code | Write down the references you found |
|---|---|---|
| *For instance: Royal Decree 243/2022, of 5 April, which establishes the ordination and the minimum teaching requirements of Baccalaureate* | | |
| *For instance: Decree 108/2022, of 5 August, of the Council, which establishes the ordination and curriculum of Baccalaureate* | | |

# Annex 3. Neuroeducation and UDL

## Relationship between the different neural networks and UDL

**The UDL framework is aligned with neuroeducation**; specifically, with the three neural networks which are directly related to the learning processes (Alba Pastor, 2022; Elizondo, 2022), these are:

- *Affective networks*: explain **the "why" of learning**. These networks include attention, motivation and interest and are related to **designing multiple means of engagement in learning**, whose goal lies in achieving that students are motivated, participate actively and are aware of their learning process.
- *Recognition networks*: explain **the "what" of learning**. These networks are focused on detecting and perceiving information and transforming it in useful knowledge. It involves **designing multiple means of representation**, so that students can identify and manage the resources to support their learning.
- *Strategic networks*: explain **the "how" of learning**, which involves planning, organization and expression. It is focused on **designing multiple means of action and expression** to help students to be strategic and set their own learning goals.

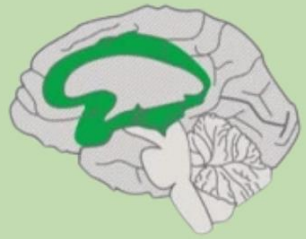
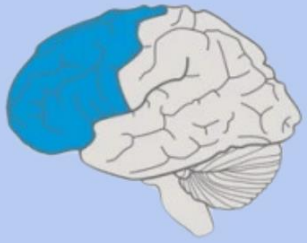
These networks function differently in each person. This is so stated by Alba Pastor et al. (2018, p. 11):

> [...] there are students who recognize and process information better through hearing than sight, and vice versa. Other students, for example, might be good at designing strategies, but not at implementing or evaluating them; there will be students who learn better by trial and error, practicing, whereas other students will assimilate contents better vicariously (through models). Likewise, not every student will be motivated in the same way and there will be differences in the way they get involved in their own learning.

*Pay attention to the identifying color of each UDL principle, this structure will help you to identify and become familiar with the principles, guidelines and considerations.

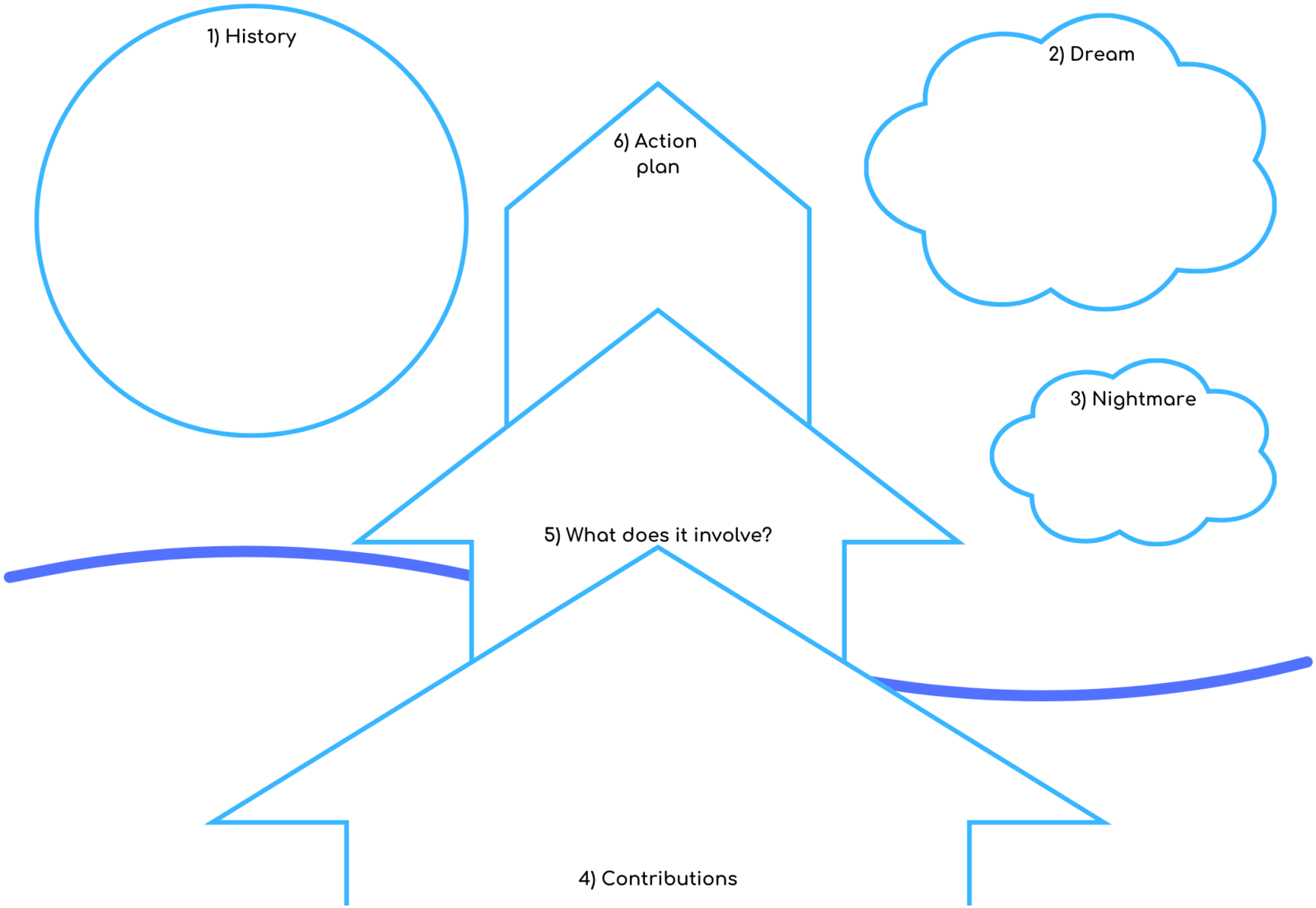
🎧 Audio: https://voca.ro/1ntOzo4YPtNG



| | | |
|---|---|---|
| AFFECTIVE NETWORKS | Specialised in assigning emotional meanings to tasks. They are related to motivation and involvement in one's own learning. In practice, these networks are influenced by people's interests, mood or previous experiences. |  |
| RECOGNITION NETWORKS | Specialised in perceiving information and assigning meanings to it. In practice, these networks allow us to recognise letters, numbers, symbols, words, objects, etc., as well as more complex patterns, such as a writer's literary style and abstract concepts, such as freedom. |  |
| STRATEGIC NETWORKS | Specialised in planning, executing and monitoring motor and mental tasks.<br>mental tasks. In practice, these networks allow people, from taking a book out of a backpack to designing the structure and backpack to designing the structure and writing of a writing a text commentary. |  |

| | | |
|---|---|---|
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| STRATEGIC NETWORKS | Specialised in planning, executing and monitoring motor and mental tasks.<br>mental tasks. In practice, these networks allow people, from taking a book out of a backpack to designing the structure and backpack to designing the structure and writing of a writing a text commentary. |  |

# Annex 4. Principle of design multiple means of engagement

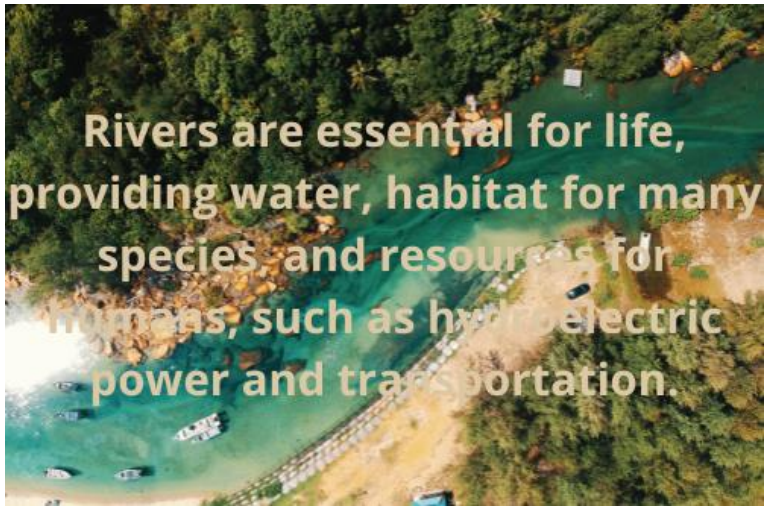

1) History
2) Dream
6) Action plan
3) Nightmare
5) What does it involve?
4) Contributions

# Annex 5. Resources to improve through UDL

*Every educational stage*

**RESOURCE 1**




## The Whispering Tree

Deep in the heart of an ancient forest stood an old oak tree. Its branches stretched high, touching the sky, and its roots ran deep into the earth. The animals of the forest loved the tree, for it provided them with shade, shelter, and acorns to eat.

But this tree was special—it could whisper. When the wind blew through its leaves, it told stories of the past, of kings and queens, of lost treasures, and of the many creatures that had lived beneath its branches.

One day, a lonely little boy wandered into the forest. He sat beneath the tree, feeling lost and sad. The tree whispered to him, telling him stories of courage and kindness. The boy listened, his heart growing lighter with every word.

Years passed, and the boy grew into a man. He never forgot the tree's wisdom. And so, every time he returned to the forest, he would sit beneath the old oak, listening to its whispers, knowing he was never truly alone.

## *Childhood Education*

**RESOURCE 2**

The teacher of 5 years-old children explains to you how he conducts the assemblies with his students. He is worried because he realizes that the students are demotivated and are not willing to learn. The teacher wants to include a dynamics or activity to improve the classroom atmosphere and help students with these issues, but he is lost and needs your experience.

Using what you now know about UDL…

- Have you got a proposal for helping the teacher with the assemblies?
- How would you include aspects for motivating and engaging students?

## *Primary Education*

**RESOURCE 3**

The parallel teacher tells you that she wants to do a joint activity to work the autumn. She proposes that the students draw a leaf on a paper and hang them on the wall. She refuses to give them a template with the drawing of a leaf because she considers that they can do it alone, but you, meeting diversity in the classroom, doubt.

Now that you know more about UDL…

- Would you propose another way of working the autumn?
- What would you say to the teacher to create a more innovative proposal that facilitates learning?
- Would you use other options?

## *Compulsory Secondary Education*

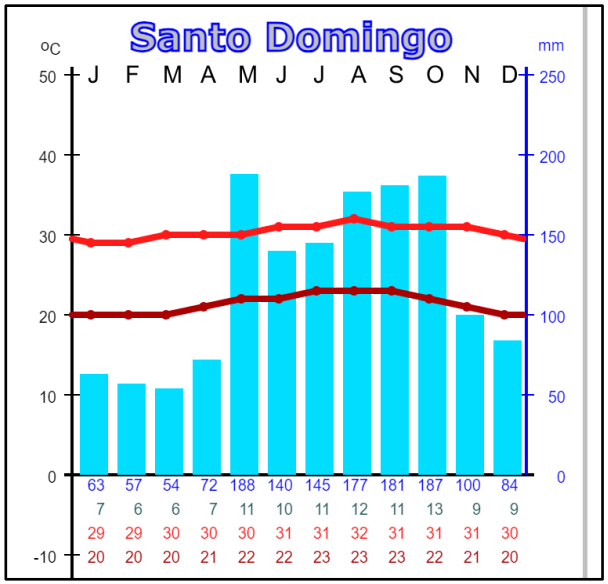
**RESOURCE 4**

You are the teacher of a class of the first year of Secondary School and are teaching the climates in Spain. The teacher of the class of 1st C proposes you to design a joint activity to teach this topic. In your class there are 30 students, grouped in heterogeneous teams of 5 people. You need to know that one student has fine motor skills problems, another student needs a Significant Individual Curricular Adaptation, with a curricular level of 5th year of primary school, and there is also another student with high capacities.

The other teacher proposes you to do a climograph, that is, a double entry graph which presents, in a summarized way, the precipitation and temperature values measured by a specific weather station. She considers that it is not necessary to provide a graph template, nor the precipitation and temperature averages, since she believes that the students should calculate these values. In addition, she proposes that each student draws a graph in the notebook and hands it in at the end of the session.

Thinking about your classroom…

- Would you accept the proposal of the other teacher?
- Could you rethink the activity from the UDL perspective? How?
- Could you include different types of response in this activity?



## *Baccalaureate*

**RESOURCE 5**

The tutor of the second year of Baccalaureate asks for advice on how he could invest the time of the tutoring sessions with his students. He tells you that he gives them this hour so that they use it as they consider appropriate, despite suggesting reviewing for the exams, advancing the tasks or rewriting the notes clearly. He is worried because he notices that the students are demotivated, lost and without commitment to learning. He thinks this is because they feel insecure about their future. The teacher wants to introduce a dynamics or activity to improve the classroom atmosphere and help students with these issues, but he is lost and needs your experience.

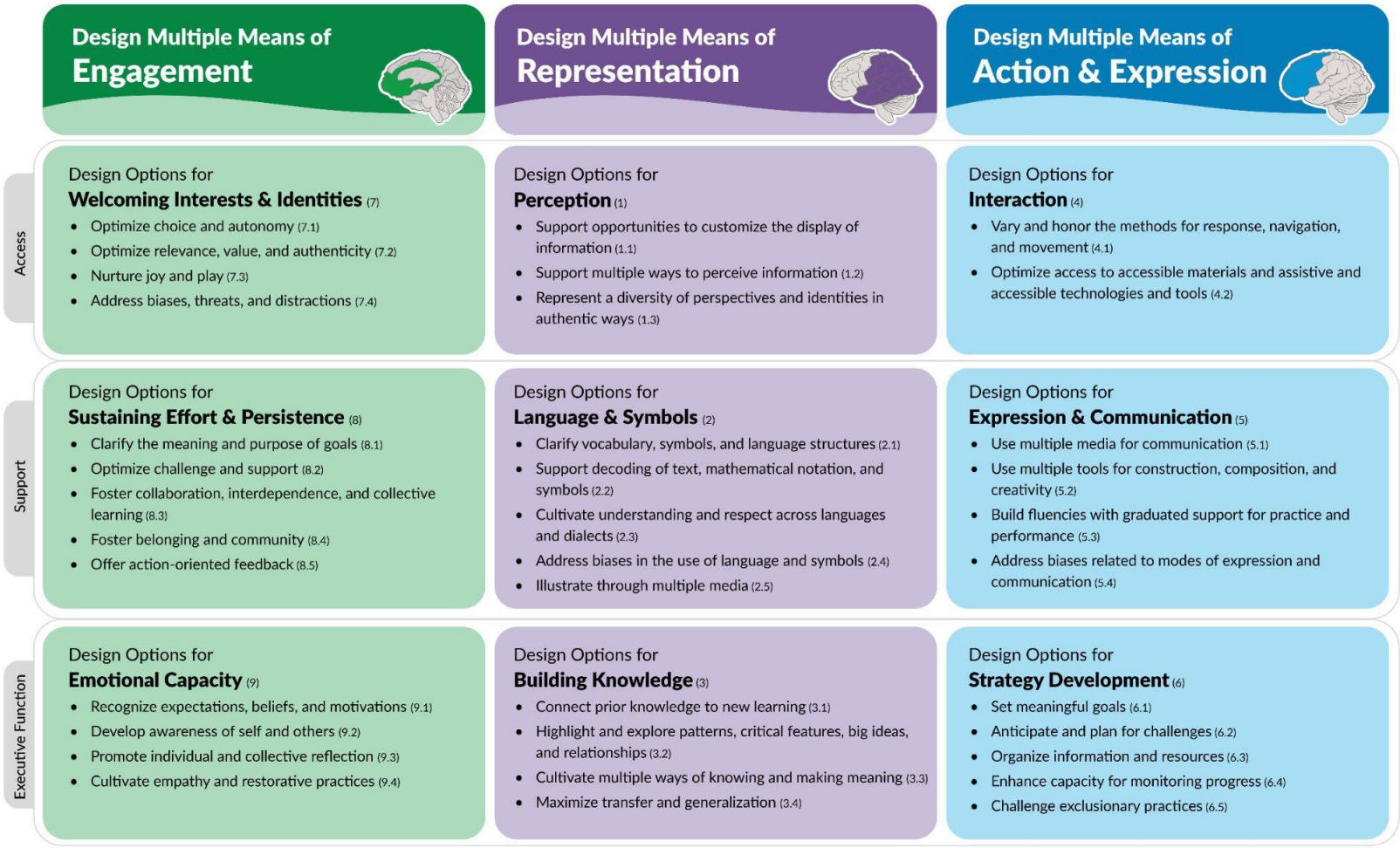
Using what you now know about UDL…

- Have you got a proposal for helping the teacher with his/her tutoring?
- How would you include aspects for motivating and engaging students?

# Annex 6. Principles, guidelines and considerations

# The Universal Design for Learning Guidelines

The goal of UDL is **learner agency** that is purposeful & reflective, resourceful & authentic, strategic & action-oriented.




CAST | Until learning has no limits®

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Suggested Citation: CAST (2024). Universal Design for Learning Guidelines version 3.0 [graphic organizer]. Lynnfield, MA: Author.

# Annex 7. Principle of design multiple means of representation





Dog



Cat



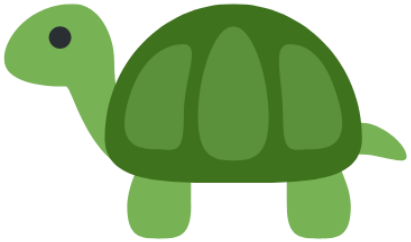
Frog



Giraffe



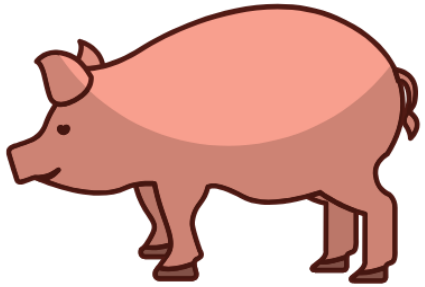
Bird



Turtle



Lion



Pig

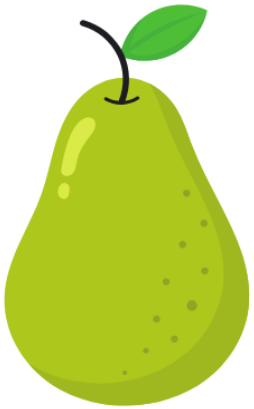




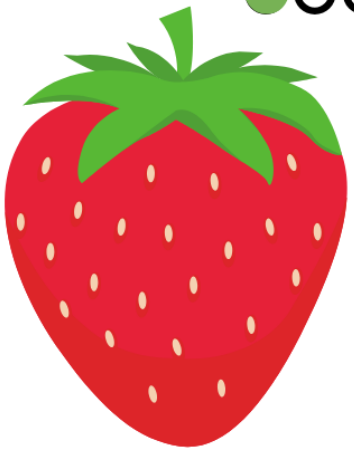
Apple



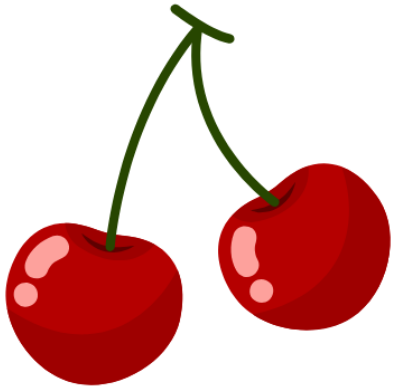
Banana



Pear



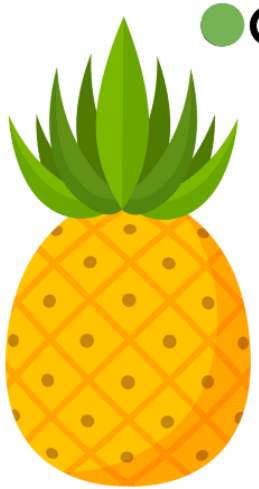
Strawberry



Cherries



Peach



Pineapple



Lemon





Happiness



Fear



Anger



Love



Sadness



Surprise

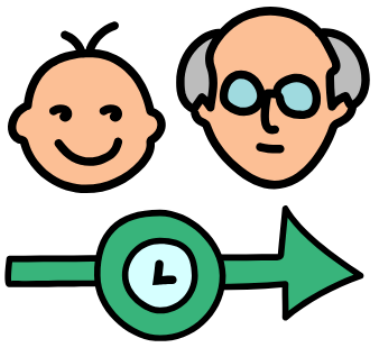


Confusion

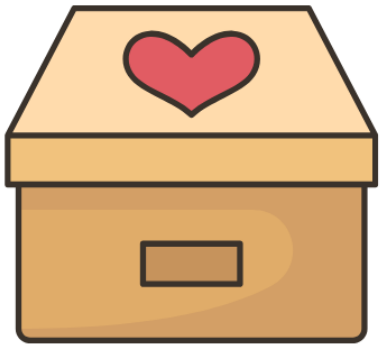


Shame





Age



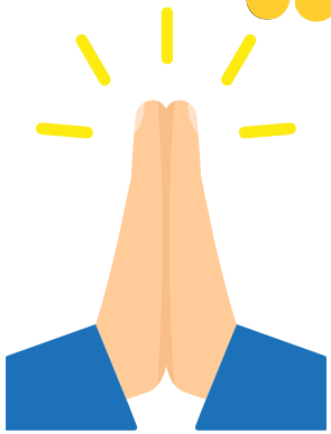
Memory



Noise



Communication



Sorry



Idea



Autumn



Winter





Democracy



Friendship



Intelligence



Envy



Music



Help



Religion



Creativity





Diversity



Discrimination



Inclusion



Ambition



Contradiction



Responsibility

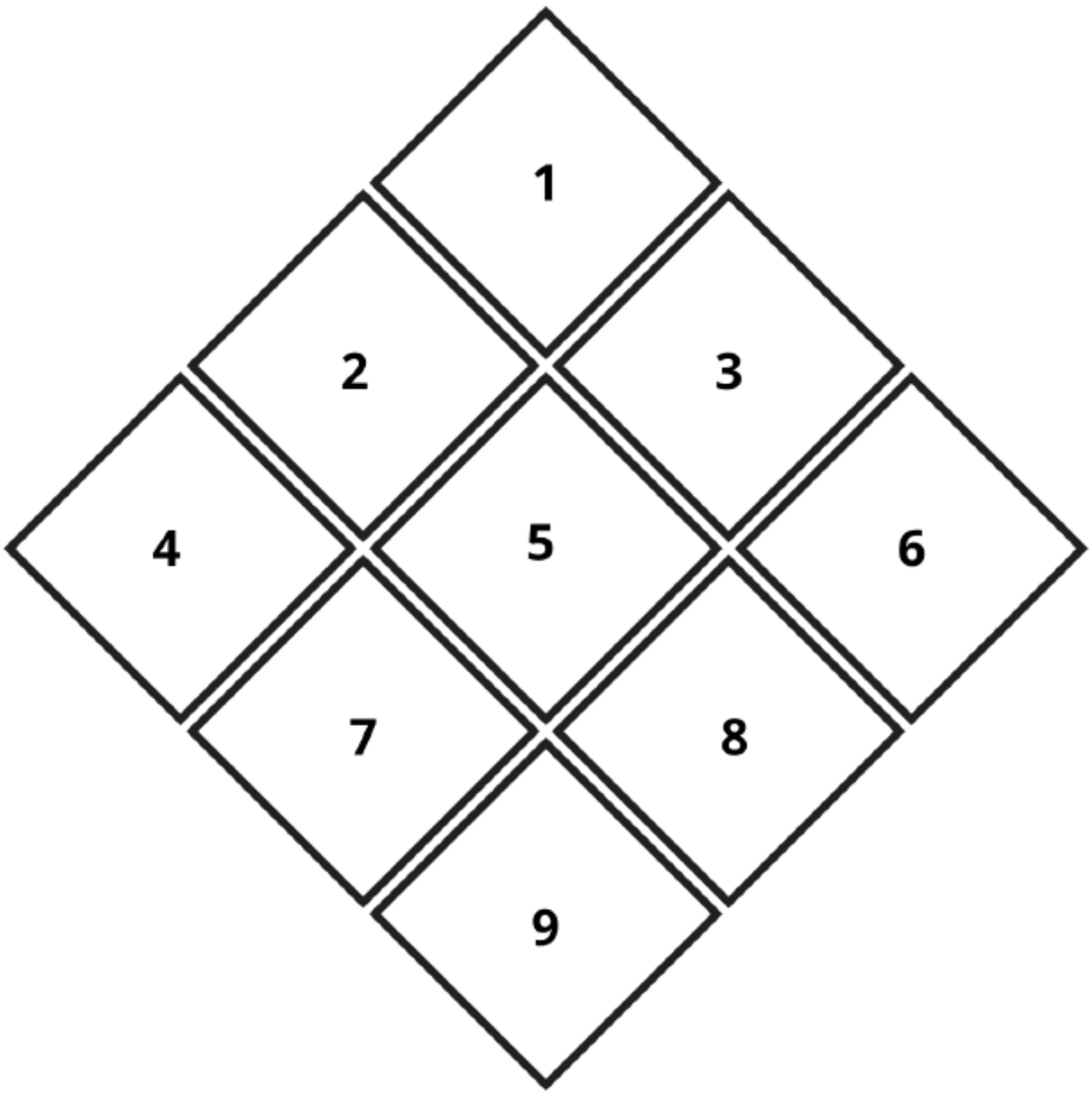


Success

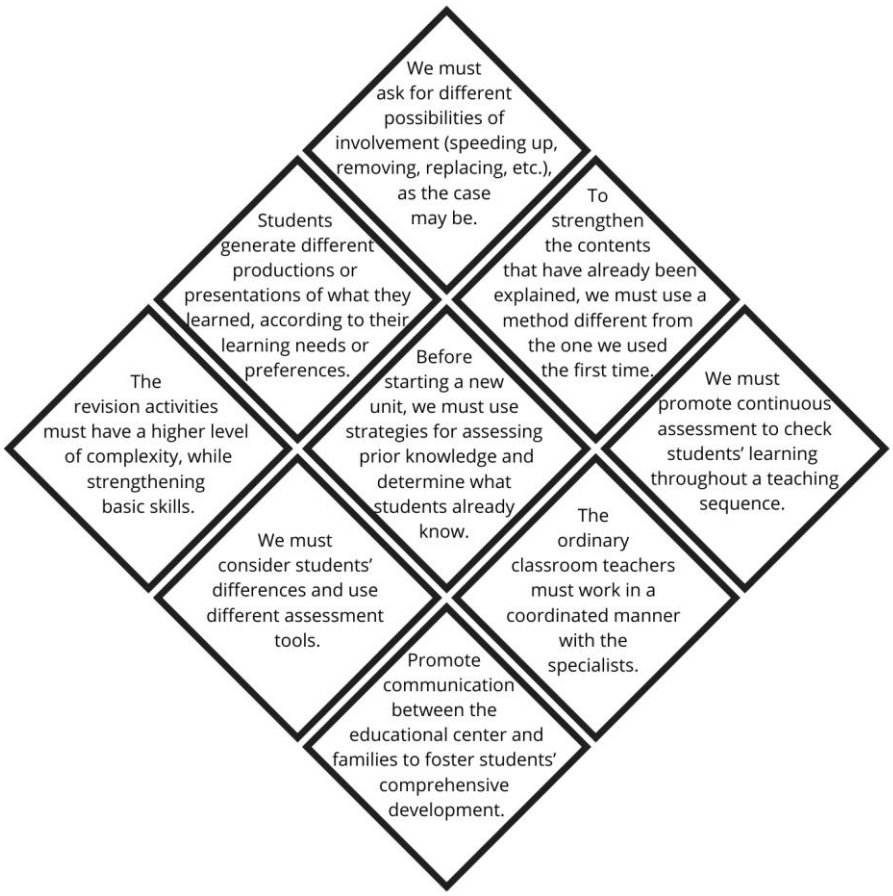


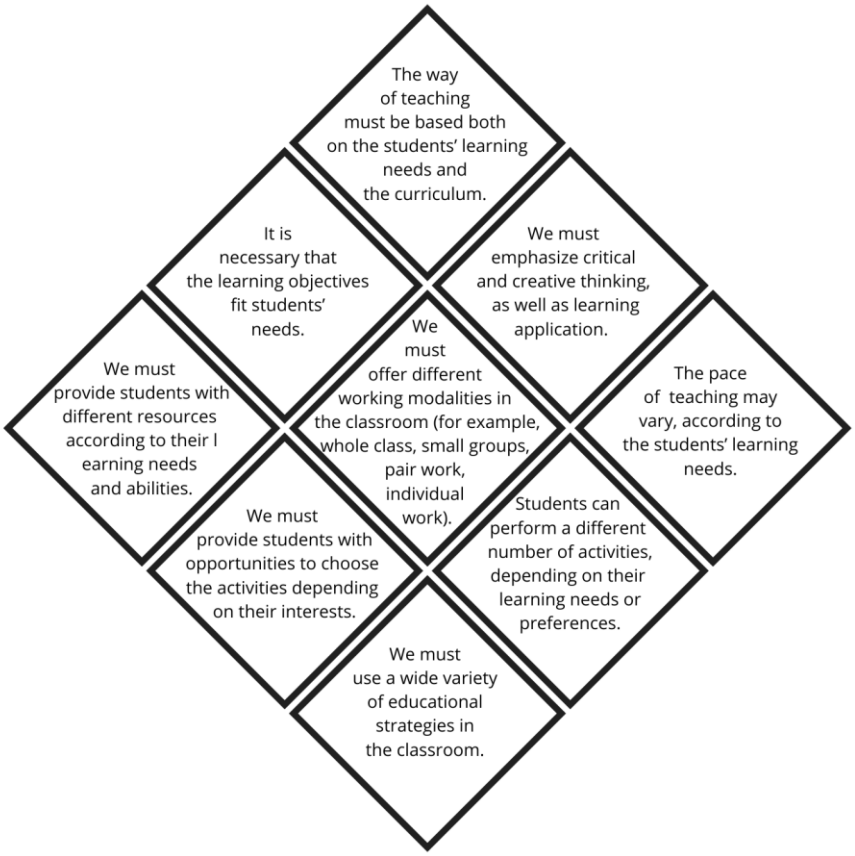
Self-esteem

# Annex 8. Diamond-9




**Fuente:** own elaboration based on Heacox, D. (2002). *Differentiating instruction in the regular classroom: how to reach and teach all learners. Grades 3-12*. Free Spirit Publishing.


We must ask for different possibilities of involvement (speeding up, removing, replacing, etc.), as the case may be.
Students generate different productions or presentations of what they learned, according to their learning needs or preferences.
To strengthen the contents that have already been explained, we must use a method different from the one we used the first time.
The revision activities must have a higher level of complexity, while strengthening basic skills.
Before starting a new unit, we must use strategies for assessing prior knowledge and determine what students already know.
We must promote continuous assessment to check students' learning throughout a teaching sequence.
We must consider students' differences and use different assessment tools.
The ordinary classroom teachers must work in a coordinated manner with the specialists.
Promote communication between the educational center and families to foster students' comprehensive development.


The way of teaching must be based both on the students' learning needs and the curriculum.
It is necessary that the learning objectives fit students' needs.
We must emphasize critical and creative thinking, as well as learning application.
We must provide students with different resources according to their l earning needs and abilities.
We must offer different working modalities in the classroom (for example, whole class, small groups, pair work, individual work).
The pace of teaching may vary, according to the students' learning needs.
We must provide students with opportunities to choose the activities depending on their interests.
Students can perform a different number of activities, depending on their learning needs or preferences.
We must use a wide variety of educational strategies in the classroom.

# Annex 9. Active rest

# TECHNOLOGY

LOOK FOR INFORMATION ON THE SUBJECT ON IG

# TECHNOLOGY

LOOK FOR INFORMATION ON THE SUBJECT ON TIKTOK

# TECHNOLOGY

CHECK OUT WHAT TWEETS THERE ARE ON THE SUBJECT

# TECHNOLOGY

GET IDEAS FROM PINTEREST

# TECHNOLOGY

PLAY A PODCAST THAT INTERESTS YOU

# LANGUAGE

SAY NICE THINGS TO A PARTNER



# LANGUAGE

WRITE SOMETHING NICE ON AN IMPORTANT SITE



# LANGUAGE

READ SOMETHING THAT INTERESTS YOU



# LANGUAGE

TWEETS ABOUT WHAT IS HAPPENING IN CLASS #



# LANGUAGE

TALK TO SOMEONE ABOUT WHAT YOU HAVE LEARNT



# YOGA

DO THIS POSE FOR 1 MINUTE



# YOGA

DO THIS POSE FOR 1 MINUTE



# YOGA

DO THIS POSE FOR 1 MINUTE



# YOGA

DO THIS POSE FOR 1 MINUTE



# YOGA

DO THIS POSE FOR 1 MINUTE



# ARTÍSTIC

LISTEN TO A SONG OF YOUR CHOICE



# ARTÍSTIC

DRAW A PICTURE OF WHAT YOU HAVE IN MIND



# ARTÍSTIC

PAINT A MANDALA



# ARTÍSTIC

REQUEST A SONG AND DANCE IT



# ARTÍSTIC

MAKE A CRAFT



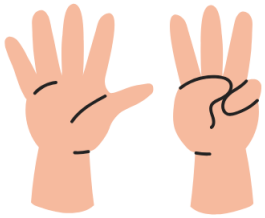
# MATHS

USE THE TANGRAM TO MAKE SHAPES



# MATHS

COUNT ELEMENTS OF THE CLASS



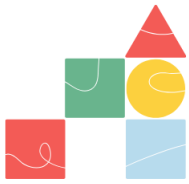
# MATHS

ORDER THE GROUP ACCORDING TO THEIR ANNIVERSARY



# MATHS

FORM GEOMETRIC SHAPES WITH YOUR GROUP

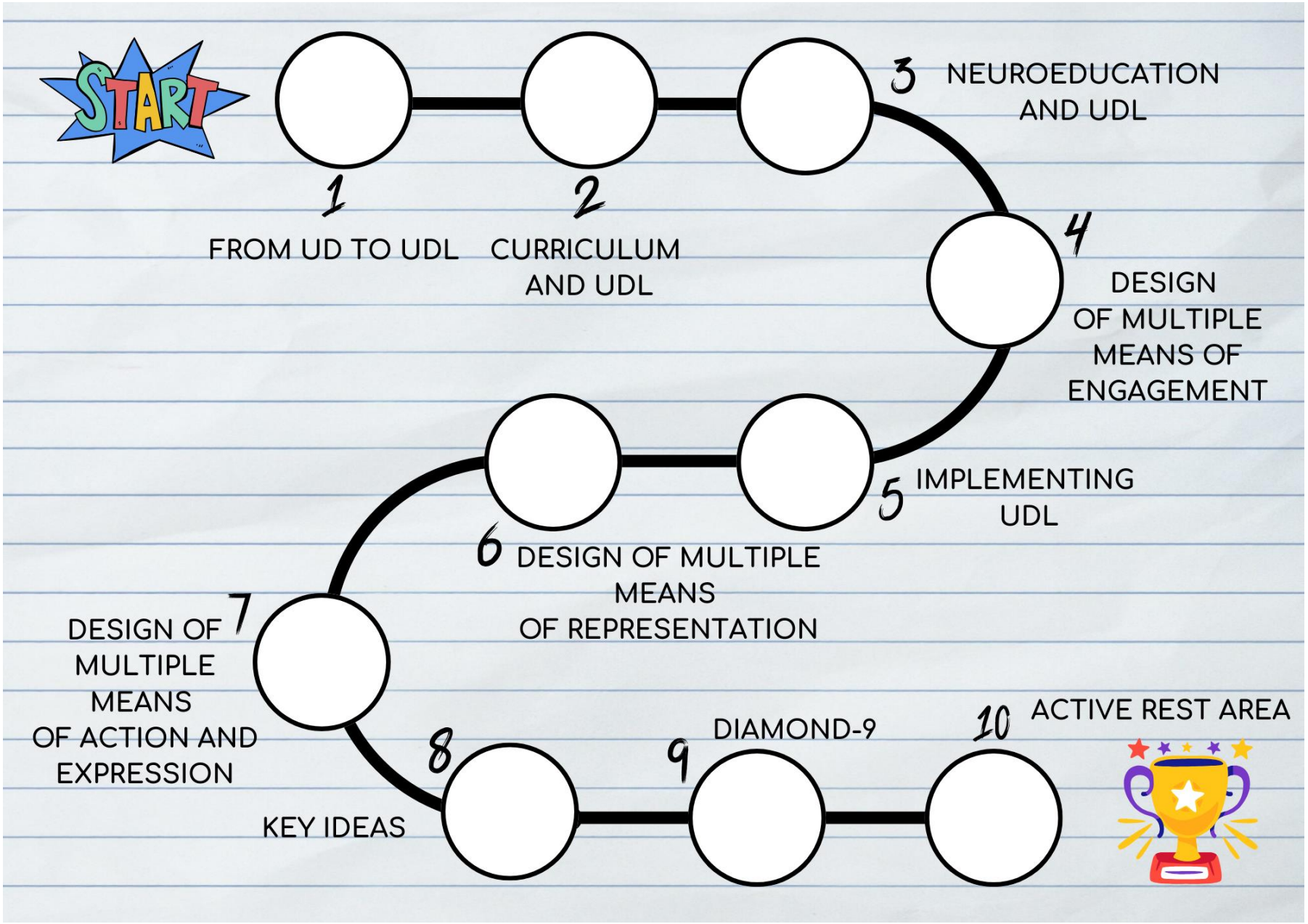


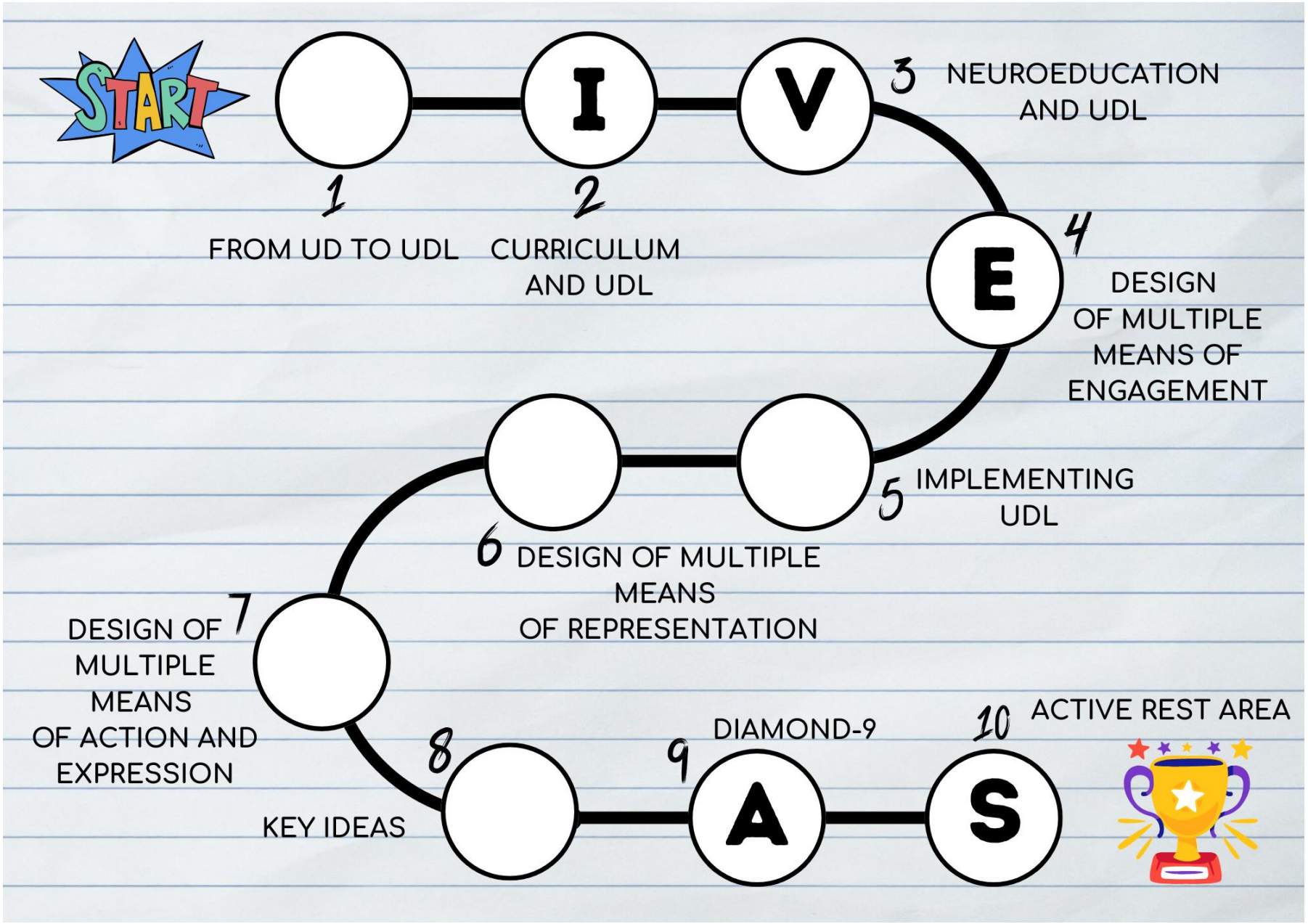
# MATHS

WALK FOR 3 MINUTES AND COUNT THE STEPS



# Annex 10. Template: The Lost Word


START
1
FROM UD TO UDL
2
CURRICULUM AND UDL
3
NEUROEDUCATION AND UDL
4
DESIGN OF MULTIPLE MEANS OF ENGAGEMENT
5
IMPLEMENTING UDL
6
DESIGN OF MULTIPLE MEANS OF REPRESENTATION
7
DESIGN OF MULTIPLE MEANS OF ACTION AND EXPRESSION
8
KEY IDEAS
9
DIAMOND-9
10
ACTIVE REST AREA


START
1
I
2
V
3
NEUROEDUCATION AND UDL
FROM UD TO UDL
CURRICULUM AND UDL
E
4
DESIGN OF MULTIPLE MEANS OF ENGAGEMENT
5
IMPLEMENTING UDL
6
DESIGN OF MULTIPLE MEANS OF REPRESENTATION
7
DESIGN OF MULTIPLE MEANS OF ACTION AND EXPRESSION
8
KEY IDEAS
9
A
DIAMOND-9
10
S
ACTIVE REST AREA

D I V E R S I T A S

D I V E R S I T A S

D I V E R S I T A S

D I V E R S I T A S

D I V E R S I T A S

D I V E R S I T A S

D I V E R S I T A S

D I V E R S I T A S

# Annex 11. Computer graphics with the instructions for the corners

# 1.FROM UD TO UDL

## 1 OBJECTIVE



KNOW THE ORIGINS AND BACKGROUND OF UDL.

## 2 TIME



**8** MINUTES



## 3 RESOURCES

BRIEF **THEORETICAL EXPLANATION** IN ANNEX 1:



AUDIO TEXT

**READ** BEFORE DOING THE ACTIVITY!



YOU NEED A **MOBILE DEVICE** WITH A QR READER TO TAKE PHOTOS.

## 4 DEVELOPMENT

**1.** WE GO FOR A **WALK** THROUGH THE CAMPUS AND OBSERVE ITS ARCHITECTURE



**2.** WE **LOOK FOR** AND TAKE **PHOTOS** OF ARCHITECTURAL ELEMENTS ADAPTED TO FACILITATE ACCESSIBILITY, AS WELL AS ELEMENTS TYPICAL OF UNIVERSAL DESIGN.



**3.** WE **REFLECT** ON THESE QUESTIONS:

HAVE YOU FOUND ANY POORLY ADAPTED OR INACCESSIBLE SPACE?

HAVE YOU FOUND ELEMENTS THAT FACILITATE ACCESSIBILITY, SUCH AS A LIFT?

THE BUILDING WHERE YOU ARE NOW WAS BUILT THINKING OF EVERYBODY?





# 2. CURRICULUM AND UDL

## 1 OBJECTIVE



ANALYZE THE PRESENCE OF UNIVERSAL DESIGN FOR LEARNING IN THE EDUCATION LEGISLATION AND CURRICULUM.

## 2 TIME



**13 - 15**

MINUTES

## 3 RESOURCES

**DOCUMENT** WITH ACCESS TO THE EDUCATION LEGISLATION AND THE CURRICULUM IN ANNEX 2.

YOU NEED A **MOBILE** DEVICE WITH A QR READER TO TAKE PHOTOS

## 4 DEVELOPMENT

1. **LOOK** FOR THE **REFERENCES** TO UDL IN THE LOMLOE, THE ROYAL DECREE AND DECREE OF THE CORRESPONDING EDUCATIONAL STAGE.



2. **WRITE** DOWN IN THE DOCUMENT THE REFERENCES TO UDL YOU FOUND IN EACH DOCUMENT.



3. **WE WILL RESUME** IT IN THE IDEA-SHARING SESSION.



# 3. NEUROEDUCATION AND UDL

## 1 OBJECTIVE



RELATE THE **3** NEURAL NETWORKS TO THE **3** UDL PRINCIPLES.

## 2 TIME



**5**



MINUTES

## 3 RESOURCES



**JIGSAW PUZZLES**

BRIEF **THEORETICAL EXPLANATION** IN ANNEX 3:





AUDIO



TEXT



YOU NEED A **MOBILE DEVICE** WITH A QR READER TO TAKE PHOTOS.

## 4 DEVELOPMENT

**1.**RESOLVE THE **JIGSAW PUZZLE** YOU HAVE **2** OPTIONS:

- **LOW LEVEL OF DIFFICULTY:** YOU HAVE TO PAY ATTENTION TO THE COLORS TO COMPLETE THE JIGSAW.



- **HIGH LEVEL OF DIFFICULTY:** YOU HAVE TO READ IT CAREFULLY TO COMPLETE IT.

**2. READ OR LISTEN** TO A BRIEF THEORETICAL EXPLANATION ABOUT NEURAL NETWORKS AND UDL PRINCIPLES IN ANNEX 3.





# 4. DESIGN MULTIPLE MEANS OF ENGAGEMENT

**MAKING ACTION PLANS (MAPS)**

## 1 OBJECTIVE

REFLECT ON THE INDIVIDUAL NEEDS AND WISHES ABOUT ONE'S OWN LEARNING.

DEVELOP A PERSONAL ACTION PLAN.

## 2 TIME

**9-10** MINUTES

## 3 RESOURCES

A SHEET WITH THE MAPS [MAKING ACTIONS PLANS] TEMPLATE IN **ANNEX 4**.

## 4 DEVELOPMENT

1. **REFLECT** ON A PERSONAL GOAL RELATED TO YOUR LEARNING.

2. **DEVELOP** AN ACTION PLAN WITH THE TOOL WE PROVIDE, WHICH IS CALLED **M**AKING **A**CTIONS **P**LANS (MAPS).

3. TO DEVELOP THE MAPS, YOU MUST **REFLECT** ON THE FOLLOWING:

- WHAT DO YOU THINK YOU NEED TO REORIENT REGARDING YOUR LEARNING?
- WHAT DO YOU WANT TO ACHIEVE?
- WHAT ARE YOU WORRIED ABOUT?
- WHAT HAVE YOU ALREADY PROGRESSED IN? WHICH ARE YOUR STRENGTHS?
- ANALYZE THE NECESSARY ACTIONS OR RESOURCES TO ACHIEVE THE GOAL.
- SPECIFY AN ACTION PLAN CONSIDERING THE PEOPLE INVOLVED, THE ACTION TO BE CONDUCTED AND THE TIMING.

# 5. IMPLEMENTING UDL

## 1 OBJECTIVE

INCORPORATE UDL MEASURES IN A DIDACTIC PROPOSAL AIMING AT IMPROVING IT.



## 2 TIME



**15** MINUTES

## 3 RESOURCES



**ELECTRONIC DEVICE** TO MAKE THE IMPROVEMENTS ANNEX 5 WITH THE PROPOSAL TO IMPROVE.

**ANNEX 5** WITH THE PROPOSAL TO IMPROVE.

UDL PRINCIPLES, GUIDELINES AND CONSIDERATIONS IN **ANNEX 6.**

## 4 DEVELOPMENT

**1.REVIEW** THE DIDACTIC PROPOSAL TRYING TO INCORPORATE SOME UDL GUIDELINES AND CONSIDERATIONS TO IMPROVE IT.

**2.**TO IMPROVE IT WE CAN **REFLECT ON** THE FOLLOWING QUESTIONS:

**HOW WOULD YOU IMPROVE THE PRESENTATION OF THE INFORMATION?**

**COULD YOU INTRODUCE DIFFERENT TYPES OF RESPONSE IN THE ACTIVITY?**

**HOW WOULD YOU INCLUDE ASPECTS FOR MOTIVATING AND ENGAGING STUDENTS?**

YOU MUST INCORPORATE THE **THREE UDL PRINCIPLES**, AT LEAST, ONCE.



# 6. DESIGN MULTIPLE MEANS OF REPRESENTATION

**EXPERIENCING MULTIPLE MEANS OF REPRESENTATION.**

## 1 OBJECTIVE

REALIZE, BY MEANS OF THE GAME, THE DIVERSITY OF PREFERENCES WHEN PERCEIVING INFORMATION.

## 2 TIME



5



MINUTES

## 3 RESOURCES

**ANNEX 7** GAME OF REPRESENTATION OF CONCEPTS.

**BOARD AND MARKERS** FOR DRAWING.



## 4 DEVELOPMENT



1. **PLAY** THE GAME OF GUESSING THE CONCEPTS WE PROVIDE YOU.

2. **FUNCTIONING OF THE GAME:**
   - IT IS ABOUT **REPRESENTING**, IN GROUPS OF 3, THE CONCEPT ON THE CARD YOU HAVE CHOSEN. ONE PERSON WILL REPRESENT THE CONCEPT WITH **MIMICS**, ANOTHER PERSON WITH A **DRAWING**, AND THE OTHER ONE WITH AN **ORAL** DESCRIPTION. YOU MUST DO IT **SIMULTANEOUSLY**.
   - THE CONCEPTS HAVE **THREE LEVELS OF DIFFICULTY**, DEPENDING ON THEIR COLOR: GREEN IS EASY, YELLOW IS INTERMEDIATE, AND PINK IS DIFFICULT.

3. ONCE YOU HAVE GONE THROUGH 1 OR 2 ROUNDS, YOU WILL REFLECT ON THE FOLLOWING QUESTIONS:

**WHAT HAVE YOU PAID MORE ATTENTION TO?**

**HAVE YOU COINCIDED?**

**HAS IT HELPED YOU TO RECEIVE INFORMATION THROUGH DIFFERENT CHANNELS?**



4. I**DEA-SHARING** SESSION.

# 7.DESIGN MULTIPLE MEANS OF ACTION AND EXPRESSION

**DIFFERENT TYPES OF ACTION!**

## 1 OBJECTIVE



UNDERSTAND THAT STUDENTS CAN SOLVE A SPECIFIC TASK USING DIFFERENT MATERIALS AND STRATEGIES.

## 2 TIME



**15** MINUTES

## 3 RESOURCES

**CHAIRS.** 

**SHEETS AND PENCILS.** 



**CARD** GAMES.

**CHOPSTICKS.** 

**PLASTIC CUPS.** 



YOU NEED A **MOBILE DEVICE** WITH A QR READER TO TAKE PHOTOS.

## 4 DEVELOPMENT

**1.** IN THIS CORNER YOU WILL FIND DIFFERENT **MATERIALS.**

**2.** ITS AIM IS TO **CHOOSE** A MATERIAL AND DECIDE THE MOST PROPER STRATEGY FOR BUILDING A **TOWER.**



**3.** MATERIALS **MUST NOT BE MIXED.** YOU MUST BUILD THE TOWER **INDIVIDUALLY**, TRYING AT ALL TIMES THAT EACH PERSON CHOOSES A DIFFERENT MATERIAL.

**4.** ONCE THE TOWERS HAVE BEEN BUILT, YOU MUST TAKE A **PHOTO** OF THEM.



5. AFTER MAKING THE PROPOSAL, **LISTEN** TO THE FOLLOWING AUDIO. WHICH RELATIONSHIP DOES IT HAVE WITH THE PRINCIPLE OF ACTION AND EXPRESSION?



**6.** IDEA-SHARING SESSION.



# 8. KEY IDEAS

**KEY IDEAS ABOUT UDL**

## 1 OBJECTIVE



REMEMBER SOME KEY IDEAS ABOUT UNIVERSAL DESIGN FOR LEARNING

## 2 TIME






MINUTES

## 3 RESOURCES

**MOBILE** DEVICE WITH A QR READER



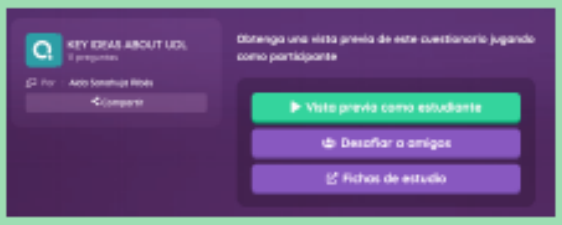
## 4 DEVELOPMENT

1. **RESOLVE** SOME QUESTIONS REGARDING KEY IDEAS ABOUT UDL USING THE **QUIZIZZ APP**

2.**INSTRUCTIONS:**

- SCAN THE FOLLOWING QR CODE OR ACCESS THROUGH THE **LINK** TO BEGIN ANSWERING THE QUESTIONS

HTTPS://QUIZIZZ.COM/JOIN/QUIZ/67C1EEB65171707A8B6EC8DD/START?FROM=ADMIN&PREVIEW=TRUE



# 9. DIAMOND-9

**¡RETHINKING PRIORITIES! DIVERSITY IN THE CLASSROOM**

## 1 OBJECTIVE



HYPOTHESIZE AND RETHINK PRIORITIES REGARDING ATTENTION TO DIVERSITY IN THE CLASSROOM.

## 2 TIME



**8**



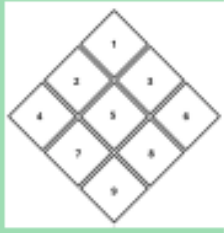
MINUTES

## 3 RESOURCES



**ANNEX 8:**

- DOCUMENT WITH THE DIAMOND
- 18 CARDS




| | |
|---|---|
| Hay que basar la forma de enseñar en las necesidades de aprendizaje de los estudiantes, así como en el currículum. | Es necesario que los objetivos de aprendizaje se ajusten a las estudiantes en función de sus necesidades. |
| Hay que hacer hincapié en el pensamiento crítico y creativo y la aplicación del aprendizaje. | Hay que proporcionar a los estudiantes diferentes recursos en función de sus necesidades de aprendizaje y habilidades. |

## 4 DEVELOPMENT

**1. PICK UP 18** CARDS AND CHOOSE THE **9** CARDS WITH THE TOPICS YOU CONSIDER THE MOST **IMPORTANT**.

**2.** YOU MUST **PLACE THE CHOSEN 9** CARDS ON THE DIAMOND BY ORDER OF IMPORTANCE.

YOU MUST PLACE AT THE TOP THE TOPIC TO WHICH YOU GIVE THE MOST PRIORITY, AND AT THE BOTTOM THE TOPIC TO WHICH YOU GIVE THE LEAST PRIORITY. THE TOPICS PLACED IN THE SAME LINE ARE GIVEN THE SAME IMPORTANCE.

**3.** TAKE A **PHOTO** OF THE COMPOSITION YOU HAVE AGREED AS A GROUP.



**4.** IDEA-**SHARING SESSION**.



# 10. ACTIVE REST AREA

## 1 OBJECTIVE



REST FROM THE TASK AND PERFORM ANY OF THE ACTIONS PROPOSED IN THE REST AREA.

## 2 TIME



5



MINUTES

## 3 RESOURCES

**ANNEX 9.** SHEETS WITH ACTIONS TO ACTIVELY REST.

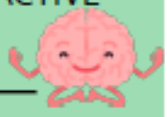


## 4 DEVELOPMENT

**1.** ON THE TABLE YOU WILL FIND DIFFERENT **SHEETS** WITH ACTIONS TO PERFORM IN ACTIVE REST: YOGA, LANGUAGE, MATHS, ARTS AND ITC.

---

**2.** WHENEVER YOU NEED IT AND IN A **SELF-CONTROLLED** WAY, YOU WILL BE ABLE TO TAKE AN ACTIVE REST.



---

**3.** IT INVOLVES **STOPPING** DOING THE TASK AND **REPLACING** IT BY AN ACTION THAT ALLOWS YOU TO SWITCH OFF AND RECOVER BEFORE RETURNING TO THE ACTIVITY.

---

**4. RULE:** ACTIVE REST SHALL NOT EXCEED **5 MINUTES.**





5



# 8. Executive summary

This guide is a resource for university teachers of Education Degrees to work, from an experiential and practical perspective, the UDL foundations in the university classrooms. It proposes to incorporate UDL through the methodological strategy of 'working in corners'. By means of 10 corners, different aspects of this paradigm are addressed, from its origins in the field of architecture or its neuroscientific grounds, to its presence in the current education legislation or the practical possibilities for its implementation in the classroom. It offers materials to be printed, and considers different modalities of implementation, which allow teachers to choose those that are more suitable for their context. Every proposal aims to set the basis of UDL, respecting its philosophy, which allows a higher understanding of this paradigm. This material may be of interest for addressing UDL in teachers' initial training due to its practical nature and its consistency with the principles of this paradigm.

# 9. Summary in plain language



This document is a guide for education teachers

who teach at the university.

This guide teaches about UDL.

UDL stands for Universal Design for Learning.

UDL is a way of teaching

that helps all students.

The guide uses 10 workspaces.

We call these spaces “learning corners”.

In these corners, you learn about:

− Where UDL comes from.

− How the brain works with UDL.

− UDL in education laws.

− How to use UDL in class.

The guide has materials that can be printed.

Teachers can choose how to use the guide in their classes.

The guide helps to:

• Understand UDL better.

• Teach UDL to future teachers.



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