

TRANSFORMATIVE EDUCATIONAL ACTION

Critical skills to understand the world from a global citizenship approach







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> ISBN: 978-84-121198-9-3

Publication year: 2022

Published by: Fundación InteRed

C/ Alameda, 22. 28014 Madrid - Spain

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The Project "Transformative Educational Methods for Social Inclusion and Global Citizenship" has been co-funded by the Erasmus+ program of the European Union. The content of this publication is of the exclusive responsibility of InteRed, CESIE and Südwind, thus, neither the European Commission, nor the Spanish Service for the Internationalization of Education (SEPIE) are responsible for any use which may be made of the information disseminated therein.

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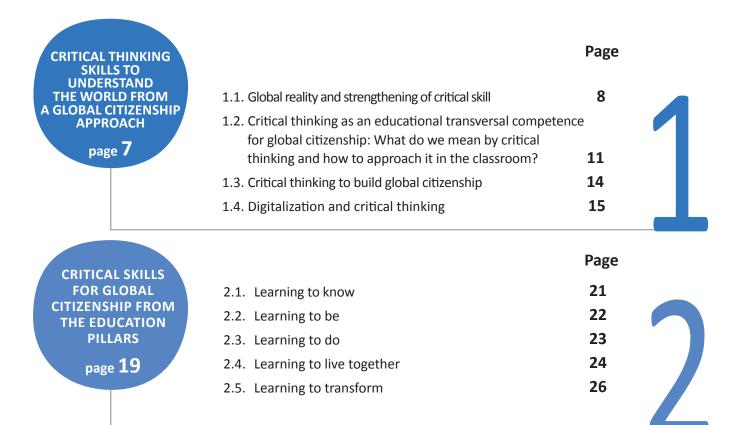






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Preface

he development of the necessary skills for the understanding of global reality and global problems is fundamental for today and tomorrow societies to be prepared to promote the social changes that are necessary in order to guarantee the common good and global justice, from a position and an awareness of critical global citizenship. The capacities and skills needed to understand political, social, and economic phenomena should be developed and strengthened through education; however, on many occasions, the critical dimension is not materialized in the teaching-learning processes, largely due to the limitations of educational systems, which establish a curriculum focused on knowledge and objectives rather than on processes and on the strengthening of transversal competences.

Despite the most recent efforts to reorient educational systems from a more competency approach and focused on the development of skills for life, there is still a long way to go when we talk about the development and strengthening of critical capacities and skills, necessary to understand the world as a whole and to act in favour of social justice, although it is also necessary to point out that the attention that this dimension of education receives is diverse depending on the countries and regions of the world and it also changes according to the educational model (we cannot generalize, since traditional educational models currently persist at the same time that alternative and innovative educational models emerge with increasing force).

Critical skills permit looking into the past, present, and future and allow new generations to understand and breakthrough in an increasingly diverse, more interconnected and more globalized world, but also in an increasingly unequal world. For this reason, promoting the development of critical skills must be a priority of educational systems, to allow students to be able to identify and analyse local and global problems and their causes, understand the interconnections between underlying social and economic inequalities and the consequences and impacts on the planet of the current development model, both locally and globally. The goal must be always for students to cultivate that critical spirit which allows them to position themselves as transforming agents of social reality, based on global justice and Human Rights.

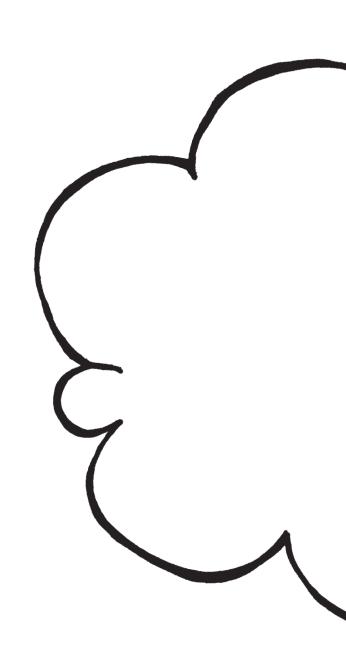
This guide aims to be a resource for teachers who wish to deepen educational strategies and incorporate the critical dimension in teaching-learning processes from a Global Citizenship Education approach aimed at social transformation.

The guide is organized into three main sections: first, the theoretical framework in which the relationship between critical skills for the understanding, analysis and transformation of global reality is presented. Secondly, the role of critical skills in the construction of Global Citizenship from the elementary pillars of education is concretized. Finally, some examples of pedagogical methodologies are described to promote the development of critical skills for Global Citizenship.

This guide is part of a set of four guides aimed at the European educational community, within the framework of the Project «Transformative Educational Methods for Social Inclusion and Global Citizenship» funded by the Erasmus+ Programme of the European Union and under the leadership of the NGOs InteRed Foundation (Spain), Südwind (Austria) and CESIE (Italy). To learn more about the theoretical and conceptual foundation that the three organizations have built as a theoretical framework for our dissertations and proposals, we recommend reading the macro document¹ that constitutes the umbrella of the TEMSIC Project.



^{1.} Available at: https://transformative-edu.eu/en/about/ and https://www.intered.org/es/recursos/metodos-educativos-transformadores-para-la-inclusion-social-y-la-ciudadania-global-marco





1.1. Global reality and strengthening of critical skills

Understanding global reality and issues is essential to consolidate more just, egalitarian, and sustainable societies. Today's citizens interact in an **increasingly connected and globalized context**. In order to face the challenges that this entails, people need to develop a whole set of competences, including critical thinking, communication, and teamwork, which allow them understanding reality, understanding other people, promoting intercultural dialogue, being able to analyse global problems and inequalities and to identify the interconnections between local problems and global problems, as well as their common causes.

Modern societies are described as societies based on respect and tolerance in diversity that promote a unique sense of global citizenship. The concept of **global citizenship** implies a greater openness to other people, a sense of global communion and, therefore, a shared responsibility, not only of a social nature in itself, but also of a socio-economic and environmental nature.² Sustainable development includes several aspects (in relation to gender equality; the reduction of inequalities, hunger and poverty, the promotion of more sustainable and environmentally friendly models of life, the improvement of health systems and labour sectors, a universal access to inclusive quality education...) in order to ensure equal opportunities and rights for all people, and to make a universal call for action to end poverty, protect the planet and ensure that by 2030 all people enjoy peace and prosperity (UNDP, 2015).

But what is the perception of citizenship today? To assess this, a global survey was launched in 2016³ to understand whether citizens perceive themselves from this global perspective. In response, approximately 49% of people surveyed in 14 tracking countries see themselves more as world citizens than as citizens of their country. On the other hand, more than half of the people surveyed did not think this way.

Through **critical thinking** and related skills, people acquire a greater awareness of global issues and also develop **autonomous thinking** that allows them to exercise an **active role** in society, as well as to participate in **decision-making processes**. In this sense, **Global Citizenship Education** that promotes that all people develop their global awareness and global competences, considering the cognitive and socio-emotional aspects in the teaching-learning processes, will promote, not only a greater preparation for coexistence in a more diverse world and key skills for work, but also the construction of a global citizenship capable of **understanding**, **adapting**, **and transforming the local and global reality**.

^{4.} PISA: Global Competence Framework: https://www.oecd.org/pisa/innovation/global-competence/



^{2.} In response to social, economic and environmental challenges, the United Nations presented in 2015 the 17 Sustainable Development Goals (SDGs), which recognized that all cultures and civilizations can contribute and are crucial factors for sustainable development. https://www.undp.org/sustainable-development-goals

^{3. «}The 2016 GSS Sustainability Leaders» Survey: https://globescan.com/the-2016-gss-sustainability-leaders-report/



But some **barriers** to global citizenship still exist related to education. According to the UNESCO, there are 5 main barriers:



The school education system

Which should include a greater openness to global questions, in order to prepare students and make them active citizens capable of acting in a cross-border society



The school curricula

Which lack a focus on global citizenship, and should pay more attention to the needs of the most marginalised people



Teachers' capacity

As teachers miss competences to deal with interculturality and they need to support more the disadvantaged students and implement non-discriminatory learning processes at school



The focus on values

Students need to learn at school not only the school subjects but also all those values, such as tolerance and respect for others which will allow them to act as responsible citizens both in society and at school, also avoiding all those discriminatory phenomena and/or bullying



The leadership on global citizenship

In order to create a new generation of global citizens we must not only focus on respect and tolerance for the others, but also foster the development of the so-called 21st century skills⁵. Public aid and a common leadership on global citizenship are therefore necessary

^{5.} https://www.battelleforkids.org/networks/p21



In order to guide the world's education systems to be able to ensure the development of global skills, the UNESCO in 2014⁶ presented the following **keys**:

- Future education must ensure access to education for all and combat discrimination in education (including gender-based discrimination), to ensure full access to educational opportunities for all.
- The development priorities of future education should reflect the important socio-economic and demographic transformations, in order to give students the opportunity to face the problems and opportunities of the new societies.
- Future education must be integrated and in line with the **Sustainable Development Goals**, so that students acquire all the skills and attitudes to live in global society and fight for it.

Another factor of great importance to be able to launch educational processes that promote global citizenship, is to **understand how youth see the world today**. An example of this is the Global Citizenship Survey aimed at Generation Z⁷ «What do the world's youth think and feel?» which was carried out in 2017 by the Varkey Foundation and involved nearly 20,000 young people born between 1995 and 2001 from 20 countries around the world. Some interesting results of this survey reflected **the problems of the global reality from the youth's perspective**:⁸

- 67% answered that they consider it important for youth to contribute to global society, although the values they identify as most important are usually family and the closest environment
- In terms of **gender equality**, despite the general tendency to defend equality, it is striking that 11% answered that women should not have the same rights as men
- In relation to their **interest in politics**, only 3% indicated it as an element perceived as a priority for their local reality
- In terms of interculturality and inclusion, most stressed that governments must make greater efforts to manage and solve the multiple crises that cause millions of people to become displaced and refugees, but at the same time, they also agreed that the requirements and procedures for access to legality in host countries must be tightened
- 19% identified education as a key factor that can promote the unity of humanity
- Last but not least, the survey reflects a disturbing reality: young people have a negative outlook on the future and believe that the world is becoming a worse place to live

^{8.} The list of countries that were part of the study is composed of: South Africa, Nigeria, Argentina, Brazil, Japan, Indonesia, India, South Korea, China, Turkey, Israel, New Zealand, Australia, Canada, United States of America, Russia, Italy, Germany, France and the United Kingdom.



^{6.} https://www.battelleforkids.org/networks/p21

^{7.} The online dictionary Merriam Webster describes Generation Z as the generation of people born in the late 1990s and early 2000s, frequently described as a more educated, well-behaved, stressed and depressed generation compared to previous ones, whose lives are marked by a strong digital component



It is necessary to understand the global reality from the new generations' perspective. All the above shows us that today's youth are not disconnected from global problems, on the contrary, they are immersed in the dynamics that mark the international scenario and that question the capitalist-neo-liberal development model. The youth themselves are able to identify these dynamics and to discern among themselves if the efforts that are being made from the institutions are sufficient and adequate or not, but they need to reinforce their knowledge on these issues and strengthen their critical skills to understand them and act coherently.

1.2. Critical thinking as an educational transversal competence for global citizenship: What do we mean by critical thinking and how to approach it in the classroom?

Critical learning is generally adopted and integrated into teaching-learning processes to encourage students to explore contemporary and historical phenomena, compare events and develop autonomous and independent opinions. The objective is for students to develop, according to their age and stage of development, critical thinking skills that allow them to create a critical understanding of the world, including the analysis of issues such as social and economic inequalities, gender inequalities, global justice, social participation, environmental sustainability, as well as understanding the main social, economic, and political processes that occur on a local and global scale (and their interconnections).

Critical thinking is considered one of the main 21st century skills, needed by the modern society and considered to be a useful tool to enable individuals:

- Being curious and asking questions
- Being analytical, critical in their reasoning, aware of their own abilities (self-awareness)
- Communicate with others
- Cooperate with others, as a part of a community, a group, a team
- Develop problem-solving skills alone, as individuals and/or in cooperation with others.

Critical thinking skills and their relevance in the educational process have been reflected in a wide range of international, regional, and national instruments and regulatory frameworks. Examples of this are the Recommendation on Key Competences for Lifelong Learning (European Union, 2018)⁹, The European Skills Agenda (2016)¹⁰, The European Digital Competence Framework for Citizens – DigComp

^{9.} Declares that skills such as critical thinking, creative thinking, problem solving, teamwork, communication and other interpersonal skills are key competencies for ensuring personal fulfillment, health, employability and the social inclusion.

10. Highlights the importance of transversal competences which people can apply to all spheres of life, from fostering personal development to actively participating in society, and identifies critical thinking, problem-solving skills and interpersonal skills among them.



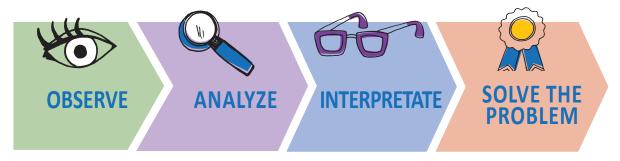


(2016)¹¹, The EntreComp - entrepreneurship competence (2016)¹² and the Sustainable Development Goal 4 as a fundamental part of the 2030 Agenda¹³, among others.

In educational institutions, through the direct observation of a phenomenon and / or the analysis of a specific problem, students develop the ability to think critically and, at the same time, experiment and draw conclusions adaptable to different contexts and situations of real life. In this way, students learn to analyse a situation and choose the best solution to solve it and / or deal with it. The phenomena to be addressed from the educational practice can be linked to global problems and issues that concern the new generations, such as those exposed in the previous section. In this way, students will have the opportunity to investigate, analyse and position themselves critically around issues that concern them as a global citizenship.

Critical thinking skills are best revealed in the way we explore and analyse local and global phenomena, as well as in the way we discuss when we debate issues. Therefore, for students to develop critical skills they need multiple opportunities to practice as, debating and building original arguments, for example by using experiential methods through workshops (learning by doing and working with other people), laboratories, and service-learning experiences in real-life situations, among others. In this way, students will be able to configure strategies to be implemented in real-life situations and to be applied in different situations (metacognition).

Critical thinking can be considered as a **transversal competence** that is found in interdisciplinary and multidisciplinary contexts (at work, at school, in interpersonal relationships, in participation in society, in interaction with the context and the environment, etc.) and that people put into practice in multiple situations and moments of our daily lives. The outline of critical thinking usually follows the following steps:



^{11.} Notes that digital competences and the so-called «basic skills in information and communication technologies» are fundamental to understand, learn and act actively in favor of a global society, so Critical thinking should also be promoted using digital technologies, as technology can critically influence the way we think and act.

^{13.} SDG 4 aims to: «by 2030, ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all and all» and its 4.7 target states: «By 2030, ensure that all students acquire the knowledge and skills necessary to promote sustainable development, including through education for sustainable development and learning styles. sustainable lives, human rights, gender equality, the promotion of a culture of peace and non-violence, global citizenship and the appreciation of cultural diversity and the contribution of culture to sustainable development.»



^{12.} It understands critical thinking, creative thinking, interpersonal skills, management, participation and teamwork skills as elements of the entrepreneurial spirit (understood as the ability to turn ideas into actions).



According to Awan, Peeven and Abiodullah (2018) we can identify 5 elements of critical thinking that are characteristic of an active and responsible global citizenship:

- Spirit to resolve conflicts by listening to others
- Ability to provide well-reasoned conclusions and solutions. Highlighting the importance of critically argue and debate before to find conclusions and come up with solutions.
- Ability to think open minded within alternative systems of thought
- Good communication with others to find solutions for complex problems
- Ability to active participating in public life

Critical Thinking therefore increases self-awareness and allows one's thinking skills, in order to be an autonomous, critical, and independent person, able to understand contemporary phenomena and to mature greater reflection, and greater openness to the world and to others. It also allows to avoid any prejudices, acquire a sense of common and collective identity, which will therefore allow us to act not only for individual but for collective interests too.

For the teaching practice, the following **contents** are some fundamental elements to promote the development of critical thinking skills in students from a global citizenship approach:

- Knowledge of contemporary and historical phenomena and ability to gather information (e.g. using technological tools, internet and the media, investigation skills)
- Knowledge of national and global governance systems (including knowledge about related issues: trade, migration, environment, media, international organizations, political and economic alliances, public and private sectors, civil society...)
- Knowledge of global problems that affect all people and countries (environment, rights, universal values, socio-economic and gender inequalities...)
- Knowledge of the different levels of identity, ethnic and cultural diversity

1.3. Critical thinking to build global citizenship

While the global reality that characterizes our epoch (and that is nothing more than the result of the development model that has marked the passage of the centuries, from imperialism, through colonialism and up to contemporary capitalism) there are many local, national, regional, and international / multilateral efforts aimed at reversing inequalities and injustice.

The last major international commitment to promote a more just and equitable development model for people and more respectful of the environment is the United Nations Sustainable Development Goals (SDGs) Agenda.



However, the commitment of the SDGs goes beyond the initiatives, actions, obligations, and legislations of the States: it is a **commitment of a personal and collective nature**, since it requires people positioning as **agents for change and social transformation**. It is here that the importance of developing the capacities, skills, attitudes, and values related to critical thinking emerges, since only by positioning ourselves as a global and critical citizenship can we become agents for change and transformation of the local and global reality.

According to the United Nations, global citizenship refers to «the belief that people are members of multiple, diverse, local and non-local networks rather than individual actors belonging to isolated societies.» Global citizenship allows people to feel part of a larger society, beyond national borders and beyond national citizenship, recognizing and understanding the existence of multiple identities, people, cultures, languages, and religions in the world. But critical global citizenship demands to go beyond understanding the diversity of the world, and requires the development of skills such as those detailed below:



- Develop skills such as critical thinking to better and critically understand the world and other people.
- Develop skills linked to social responsibility, including respect for human rights and social justice.
- Develop skills such as decision making; while developing a broad understanding of global governance systems, rights, and responsibilities, both nationally and internationally.
- Develop and internalize the values of equality¹⁴ and social justice¹⁵
- Develop the feeling of belonging to a global community, respecting public goods and natural resources as common goods that belong to all humanity, and, consequently, adopt more sustainable and respectful habits and lifestyles with the planet.

In this context, education is constituted as a channel for the new generations to develop «global skills» and their awareness of global citizenship, fostering both cognitive and socio-emotional skills that allow them to be able to face the complex global reality and become agents for change and

^{14.} **Equality:** the right to equal treatment requires that all persons be treated equally before the law without discrimination, as recognized in article 2 of the Universal Declaration of Human Rights - UDHR (United Nations General Assembly, 1948)

^{15.} **Social Justice:** According to the United Nations (2017) « We promote social justice when we remove the barriers people face because of their gender, age, race, ethnicity, religion, culture or disability.». Social justice is strongly associated with equality to be able to make fair decisions considering the same treatments and the same rights for all people



transformation from their local realities, through engaging in participatory decision-making processes and working for peace and prosperity for all people, considering all complex economic, sociocultural, political and environmental issues.

Education must fully assume its leading role and help people forge more just, peaceful, tolerant, inclusive, and equitable societies. It must provide people with the knowledge, skills, and values they need to cooperate and solve jointly the interconnected problems of the 21st century. All of the above constitute some of the reasons for the ed standing of Global Citizenship Education.

1.4. Digitalization and critical thinking

Nowadays, the rise of information and communication technologies, as well as the digitization of information has allowed a greater knowledge and awareness of the new generations about problems of a global nature, of sociocultural, political, or economic or environmental nuance. Access to information on a global scale occurs largely through new information technologies and the internet, however, it is necessary for citizens to develop the critical skills necessary to evaluate the veracity of information, the credibility of sources and to identify fake news, among others.

In this context, education plays a key role in the promotion of digital citizenship¹⁶, which aims to make people able to manage digital tools and, at the same time, acquire social skills related to the ability to protect themselves but also respect other people in the use of these technologies. Therefore, when it comes to proposing processes for the development of critical skills in the classroom that go hand in hand with the use of digital tools, the strengthening of the following skills in students should be pursued:

Competent and positive engagement with digital technologies and data (create, publish, work, share, socialize, research, play, communicate and learn) Active and responsible participation (values, skills, attitudes, knowledge, and critical understanding) in communities (local, national, global) at all levels (political, economic, social, cultural, and intercultural)

Participation in a dual process of lifelong learning (in formal, informal, and non-formal settings) and continuously upholding human dignity and all associated human rights

Digital education allows citizens to manage digital tools and, at the same time, acquire social skills related to the ability to protect themselves but also respect other people:

- Be able to use media and social media responsibly
- Be able to use digital tools interchangeably and know how to protect ourselves from damage on the web

^{16.} According to the European Plan of Digital Education 2021-2027: https://ec.europa.eu/education/education-in-the-eu/digital-education-action-plan en



- Respect specific rules of online behaviour
- Be responsible citizens, able to use the media and technology

In school, digital education allows students to use technology **not only as passive users**, but as a tool for active learning and understanding of global problems, having a safer and more critical use of new technologies and digital technologies, tools, as well as a responsible use of digital communication, channels including the main common social networks.

Technology-based learning can empower students and promote new and innovative learning experiences, while recreating dynamic learning environments and activities. Additionally, digital technology can enable students to learn, work, socialize, and interact with their peers and the entire community, even remotely.

Digital technologies can help reduce the student gap and make education more accessible to all, while promoting the social inclusion of disadvantaged and vulnerable students. According to the European Commission (2013) «The potential benefits of the digital revolution in education are manifold: people can easily seek and acquire knowledge from sources other than their teachers and institutions, often for free; New groups of students can be reached because learning is no longer limited to specific class times or methods and can be personalized; new education providers emerge; teachers can easily share and create content with colleagues and students from different countries; and a much wider range of educational resources is accessible. Open technologies allow everyone to learn, anywhere, at any time, through any device, with the support of anyone.»

However, it is not only about strengthening the critical skills of students for a responsible use of new technologies: it is necessary to make a critical analysis of both the benefits of new technologies and their possible risks and opt for a responsible use of them in the classroom.

Information technologies have represented a great opening of mind for today's young generations, as well as a new opportunity for inclusion. Where travel is not possible, technologies have allowed greater exchange between young people from different countries. Many of the cultural prejudices and stere-otypes have been countered by a greater knowledge of other cultures and by the cultural influences we receive thanks to the use of new technologies. Digitalization (through new technologies and social media) if used in the right way can be the vehicle for a culture of tolerance, information, and the fight against racial hatred, especially towards those small communities and minorities often alienated and excluded from social debates. Thanks to Internet, these small communities and minorities acquire a new importance at a global level, in terms of social participation and through online visibility and global media campaigns, reaching thousands of users and followers around the world.

Sometimes, however, the opposite effect can occur. Digitalization can also create new risks and obstacles, such as cyber violence and virtual sexual violence, including among youth. To avoid this, digital citizenship must be promoted inside and outside schools, in order to allow young people to manage digital tools and, at the same time, acquire social skills related to the ability to protect themselves (from the dangers of the network) but also respect others, when they are online. In this regard, UNESCO promotes greater awareness of the measures that can be taken to counter and mitigate disinformation¹⁷,

^{17.} UNESCO promotes open education resources (OERs), fact-checker networks, media and information literacy resources to counter the spread of disinformation, the use of digital technologies such as artificial intelligence in response to the crisis, as well as highlighting the importance of documentary heritage in past efforts to fight pandemics. https://es.unesco.org/covid19/communicationinformationresponse



incitement to hatred¹⁸ and racism¹⁹ in our world. In this sense, new technologies can certainly help the process of integration and intercultural knowledge, while at the same time involving more and more young people and making them think and act critically towards others.

Digital education can also be a barrier in terms of educational inclusion. Although specific digital strategies have been put in place in EU countries to ensure continuity of learning²⁰, gaps remain in access to digital devices and distance learning, especially for pupils from most vulnerable groups, for example those who live in rural areas and/or face socio-economic disadvantages, including the risk of dropping out of school (OECD, 2020). This, combined with the closure of schools (due to the pandemic for example), not only limited children's learning opportunities, but also isolated them and affected their social relationships, putting them at risk of greater losses (in terms of cohesion and social inclusion) and socio-economic isolation. To address this trend, schools and teachers need to establish flexible learning to make education more inclusive and more student-centred.



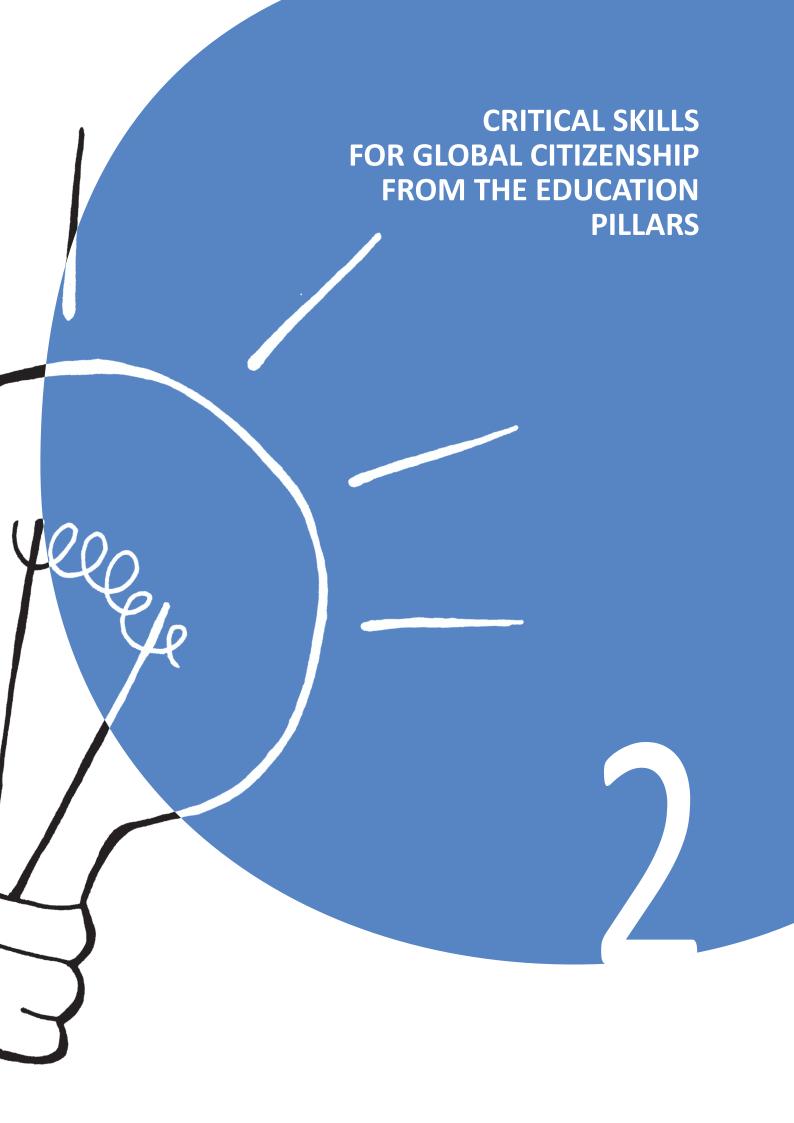
^{20.} European Plan of Digital Education Action 2018; European Plan of Digital Education Action 2021-2027



^{18.} The strategy and action plan of the United Nations for the fight against hate speech: https://www.un.org/en/genocideprevention/documents/advising-and-mobilizing/Action_plan_on_hate_speech_EN.pdf

^{19.} UNESCO's global call against racism: https://en.unesco.org/news/global-call-against-racism





ritical Thinking is strongly interconnected with many cognitive, emotional, interpersonal, and intrapersonal skills that must be managed by citizens in modern global society. As mentioned above, the process scheme for the development and strengthening of students' critical skills is generally composed of the following main elements: Observe, Analyze, Interpretate, Solve the problem

Through this work scheme and according to the theoretical analysis carried out by Cangalaya (2020) the development of **critical thinking skills** is promoted, which are:

> Seeks that those who are part of the argumentative discussion expose their points of view from a specific situation. Each person must defend the position he exposes through arguments, with the aim of persuading his interlocutor, always maintaining a coherence of thought.

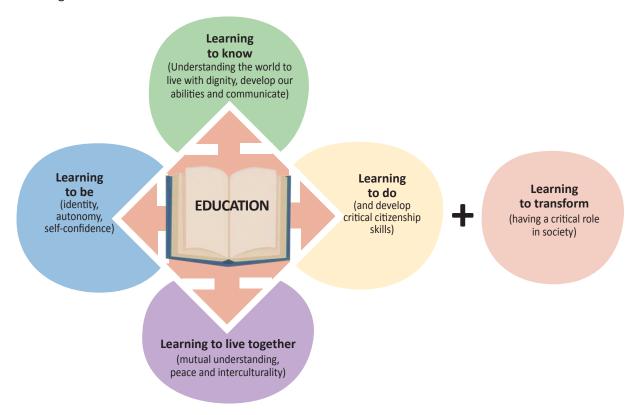
2. Analysis The intrinsic ability of thought to extract the parts of a whole, allowing to clearly establish the cause-effect relationships between them. This allows a deeper knowledge of the phenomenon to be achieved and will serve to lay the foundations for an understanding at more complex levels.

It's necessary to make the right decisions in the face of the situations that people face throughout their lives.

When a problem appears, people set out to achieve a goal, despite not knowing in advance how to achieve it Achieving the goal requires combining some skills, 3. Problem sing such as perception, analysis and understanding to look for solutions that can meet the goal.

Tracking progress in the development of critical thinking skills in students is difficult. In general, the main standardized tests can be classified into: a) attitudinal questionnaires, focusing on observation and dialogue with students through the use of questionnaires and tests; b) performance-based questionnaires, which are mainly based on observation and which can provide more information not only on the products of learning, but also on the learning process itself. The difficulty in implementing these types of tests and measuring the development of critical skills demands that these skills be addressed in a procedural, integrated, and systemic way throughout the different educational stages.

In the following sections we will see how critical skills are developed and strengthened in a systemic way and adapted to the different stages of student development. We will take as a reference structure the 4 Pillars of Education according to Jacques Delors²¹ learning to know; learning to be; learning to do; learning to live together, and we will add a fifth pillar for the construction of a critical global citizenship: learning to transform.



2.1. Learning to know

Increasing our knowledge is what allows us to better understand the multiple facets of the context, favours the awakening of intellectual curiosity, stimulates the critical sense and allows us to decipher reality, acquiring at the same time an autonomy of judgment. It is a process that never ends and can be nourished by all kinds of experiences. Learning to know means, in the first place, learning to learn, exercising attention, memory and thought (Delors, 1996).

^{21. «}The four pillars of education» in Education holds a treasure. Report to UNESCO of the International Commission on Education for the Twenty-first Century led by Jacques Delors: https://unesdoc.unesco.org/ark:/48223/pf0000102734?posIn-Set=8&queryId=fdce52d4-96d3-4d97-9679-c3467dfb7628





Some recommendations for teachers to promote students' critical understanding of the environment, and therefore, **learning to learn critically**, are:

- Put at the centre of the teaching-learning processes the socio-emotional component of education (this is especially relevant in younger students), to promote that students develop themselves from the awareness of who I am? what is the place I occupy in the world? and how to manage the emotions that I live and experience in the day to day, with me and with other people?²²
- Promote the exercise and cultivation of memory to be able to identify false information or contradict denialist or hate speeches.
- Guide processes so that students can **articulate concrete and abstract** elements to be able to imagine beyond what is visible at first sight.
- In older students, promote activities to recognize and make visible the existing **power dynamics and inequalities** in the local environment, which helps to extrapolate this knowledge and imagine how these dynamics and inequalities also occur at the global level.

2.2. Learning to be

Education must contribute to the global development of each person: body and mind, intelligence, sensitivity, aesthetic sense, individual and collective responsibility, spirituality, and global citizenship. This development of the human being, which happens throughout life, is a dialectical process that begins with self-knowledge and increasingly opens to relationships with other people. (Delors, 1996).

^{22.} To learn more about the social-emotional approach, we recommend reading the *«Transformative Educational Action: Socioemotional Education Resources for Global Citizenship»* guide of the TEMSIC Project, available at: https://transformative-edu.eu/en/about/ and https://www.intered.org/es/recursos/accion-educativa-transformadora-educacion-socioemocional-para-la-ciudadania-global





Learning to be in today's global reality requires knowing what this global reality looks like. We need to understand our own place in the world by **understanding the global reality that surrounds us**. This allows us to develop the intellectual reference points we need in order to understand critically the world.

To promote students learning to be critical citizens from their early years, teachers must consider:

- Promote spaces for discovery, analysis, and reflection in the classroom, progressively, depending on the age and abilities of the students. In the early years, discovery will be the protagonist. As students get older, analysis and reflection on reality will allow them to learn to be in an interconnected, unequal, diverse world, learn to be in a digitized world, learn to be in a world with very limited natural resources... And develop responsible, committed, and coherent personal and collective behaviours.
- Make available to students all possible opportunities for individual and collective discovery and experimentation. (See methodologies in section 3 of this guide).
- Encourage the development of critical **global identities through imagination and creativity**, experimenting through aesthetic, arts, sports, sciences, cultural and social phenomena.

2.3. Learning to do

Direct experience and experiential learning through «reflection on doing» are very important in fostering critical learning. The **discovery process** is important for learning, along with **active and cooperative experimentation** by students. Therefore, teachers should consider:

- The importance of creating positive environments for learning where students can experiment autonomously, together with their peers learning to effectively manage time, information and implement the activity on their own.
- In experiential learning, teachers will not have direct control, the focus is on **interactions** between students and their **self-organization**.
- The task of teachers is to stimulate the **creativity** of their students through workshops and experiential activities and following pedagogical approaches such as, for example, Montessori²³ and Reggio Emilia²⁴, thus developing cognitive and socio-emotional aspects of the students. In section 3 of this guide, we propose some examples of critical pedagogical methodologies based on experiential methods.

^{24.} Reggio Emilia Approach: https://www.reggiochildren.it/en/reggio-emilia-approach/



^{23.} American Montessori Society: https://amshq.org/About-Montessori/What-Is-Montessori

2.4. Learning to live together

In the section dedicated to *learning to be*, we presented the importance of learning to be being aware of the global reality and its dynamics. This challenges us to learn to live together in a world marked by these dynamics.

Delors (1996) pointed out that to learn to *live together* it is not enough to organize contact and communication between members of different groups. Conversely, if these groups compete with each other or are not in an equitable position in the common space, this type of contact can aggravate latent tensions and degenerate into conflicts. To avoid this, it is necessary to promote educational contexts which allow students to understand and value other people, respecting diversity.

a. The discovery of one's own biases and privileges:

To understand other people in their entirety, we must be able to recognize, in the first place, our biases and privileges which define power relations. An example of structure to deconstruct these relationships is the one formulated by French psychologist Margalit Cohen-Emerique to deal with so-called *cultural shock*, starting by eliminating our «cultural glasses,» which can negatively influence the way we perceive, understand, and interact with other cultures and people. Taking it as a reference, we find three fundamental elements:

Decentring

Taking a «step back» toward greater cultural neutrality, in order to understand how our own values, norms, expectations, practices, in short, our cultural frame of reference can influence interaction and plays a role in the culture shock experience.

Knowing the different frames of reference of other people

Understood as the ways in which people perceive the world and its environment.

Negotiation

To overcome culture shock, we must begin by rethinking the very concept of culture, where culture is not an objective fact but a combination of elements including relationships between people over time and which is strongly influenced by the social, environmental, economic context where we act and live.

In this sense, the teaching-learning processes must incorporate the necessary elements so that students know how to understand the various frames of reference, for example through:

^{25.} According to the French psychologist Margalit Cohen-Emerique, a «culture shock» is the emotional and cognitive experience lived by a person when they meet other people considered as «different», due to their different culture and origins. Therefore, the person tends to develop emotions such as incomprehension, fear or surprise. A «frame of reference» is how people perceive the world and the environment. A student's frame of reference, for example, comes from: family, teaching staff, peer group, own life experience, culture, education, media... All this, to explain that we cannot understand and interpret the world objectively, since each person is influenced by their own background and life experience, as well as by their own «cultural glasses».





- Exploring values and norms of other cultures
- Going beyond stereotypes and prejudices
- Understanding the diversity of forms that rationality takes according to each culture
- Identifying and analysing in one's own skin the existence of sexist, racist, colonialist, homophobic thoughts, prejudices, and attitudes... that are usually part of us due to the socialization processes that we live since childhood.

b. Discovering other people and other identities

Education has the mission and objective of pursuing the common good; to achieve this it must also promote the development of skills and attitudes that facilitate openness to other people²⁶:

Democratic attitude: shared power (opposed to domination and concentration of power).

Attitude of global justice: from the awareness of individual and social responsibility and socioeconomic and gender inequalities that mark power relations.

Skills to promote the active participation of all people.

Skills to cooperate peacefully.

Attitude of putting in positive value individual and collective diversity.

Capacity for awareness/self-awareness, in particular self-confidence to learn to communicate, interact with others and express feelings and emotions.

Attitude of social commitment: helping other people, recognizing their needs, identifying their strengths and being able to see the world through their eyes, recognizing and dismantling own privileges and biases.

Attitude of respect and care towards the environment: principle of responsibility and sustainability, to protect the well-being of the planet and of all people.

^{26.} Extracted from Reciprocal Maieutic Approach (RMA), understood as a methodology which allows people to share different points of view, learn and communicate with others, while respecting their diversity and their sociocultural background, as well as their opinions. At the same time, it allows people to cooperate with others, reinforce the sense of belonging to a group and participate actively in society.



To promote the development of these skills, teachers can take as a reference the following orientations:²⁷

- Sensitize students to their own cultural identity and other existing cultural identities
- Promote interaction with students from diverse cultures
- Create bridges and instruments of collaboration between different cultural identities
- Promote trust and the establishment of positive relationships based on trust, respect, and mutual understanding
- Promote effective ways to resolve conflicts, as a result of misunderstandings and lack of communication among students

Finally, in relation to concepts, attitudes, and skills of teachers, we propose the following:

- Knowing the concept of human rights and cultural diversity; incorporating representation of cultural diversity using narratives, materials, characters, and stories
- Being aware of the different cultural needs within the classroom
- Supporting student interaction through teamwork
- Using the school as a centre for social and cultural activities, as a space for inclusion
- Using the school as a centre for the promotion of intercultural dialogue
- Allowing students to understand and value diversity through experiential activities, such as visits to museums, historical sites, etc., but also organizing debates and conferences with people representing various socio-cultural communities

2.5. Learning to transform

The transformative component is elementary from a Global Citizenship Education perspective. We find its foundation for example in the theories of Paulo Freire (1970) as a promoter of the «pedagogy of the oppressed» from the currents of critical pedagogy, whose objective is the emancipation of oppression through the awakening of critical consciousness. Therefore, we consider the transformative component as an essential part of critical thinking, as the horizon any critical educational practice should walk towards.

^{27.} I'Taking as a reference The «Guidelines for Intercultural Education» (UNESCO, 2006). UNESCO highlights how intercultural education, based on mutual understanding and tolerance, can be a response to the challenge of providing quality education, focusing on the full development of humanity. personality and strengthening of respect for human rights and fundamental freedoms, in line with the values of the Universal Declaration of Human Rights (1948)





The ultimate goal of a critical education must be building a global citizenship with the capacities to convert its ideas and inspirations into concrete actions that transform the global reality in an active, inclusive, fair, and responsible way with people and with the planet. These are common goals that need to be addressed together, not in isolation. Therefore, the methodologies we propose in the classroom must:

- Include motivating projects that allow students to escape the routine
- Promote the approach to differences and conflicts and extract significant lessons from these processes
- Value the points of convergence above separating aspects, for example through sports and cultural activities, social activities: renovation of neighbourhoods, helping the most vulnerable groups in the community, humanitarian action, solidarity service between generations, etc.
- The potential of common goals is multiplied when the entire educational community is involved, including families, social organizations, neighbourhood businesses...

In these processes the emphasis is on the ability to act, to turn ideas into action. In this sense, we can take as inspiration entrepreneurial education,²⁸ which seeks that students develop the skills and mentality to be able to turn creative ideas into entrepreneurial actions. It is a key competence for all students, which supports personal development, active citizenship, and social inclusion. This type of experiential and cooperative learning will promote in students the development of essential skills for social transformationle²⁹:



Personal competences

Creativity, critical thinking (also ethical and sustainable thinking), problem solving, positive and proactive behaviours; search for opportunities (analysing the needs and challenges to be faced) and implementation of initiatives. assuming responsibility for actions and taking risks, leadership, learning through experience.



Social competences

Teamwork (including attention to interculturality and respect for others), listening, communication, problem solving.

^{29.} Taking as a reference the competence structure of the European Framework for Business Competition (2016), which understands entrepreneurial competence as the set of knowledge, attitudes and skills to transform thought into action, Adopting a creative spirit (realizing innovation, getting new ideas), critical (discovering opportunities, reasoning, taking risks, solving a problem) and collaborative (communicating and working with others).



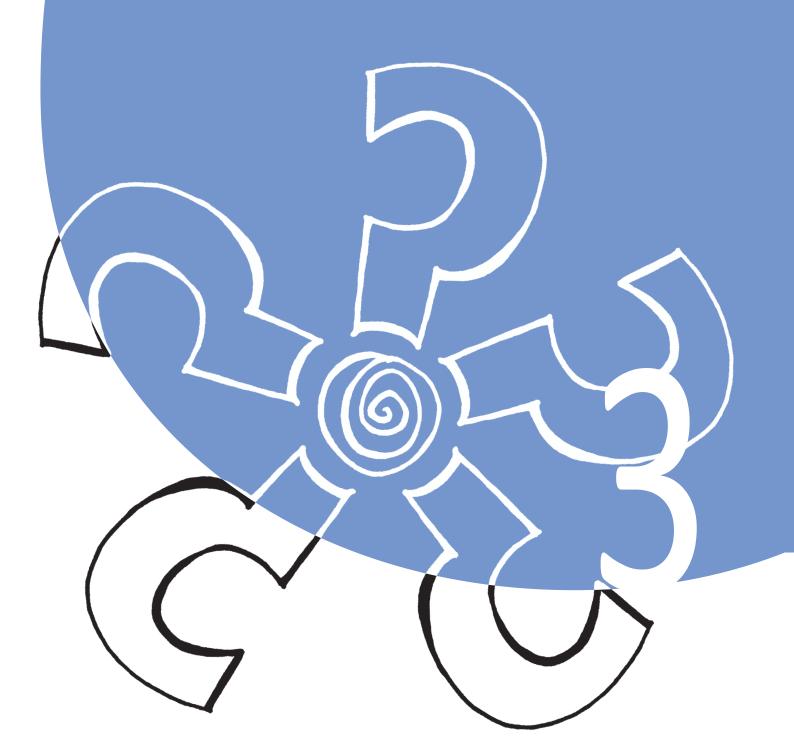
^{28.} Report Eurydice 2016 «The Education for entrepreneurship at school in Europe».



Organizational skills

Project development, organization, resource planning, time management, knowledge on how to improve collective and cooperative dynamics, etc.

DEVELOPING STUDENTS'
CRITICAL THINKING SKILLS
FOR GLOBAL CITIZENSHIP:
PEDAGOGICAL METHODS



Skills such as critical thinking, creative thinking, problem solving, teamwork, communication and other interpersonal skills are key competences that all people must acquire (throughout life), in order to ensure personal fulfilment, health, employability and social inclusion.³⁰

This section will present a compilation of some pedagogical methods that promote the development and strengthening of critical skills in students, necessary to **understand the world and to transform global reality**. In this way, we provide some guidelines so that teachers who consult this guide can deepen to a greater or lesser extent for the implementation of the methodologies presented below. The presented methodologies allow us to diversify thinking, from the most traditional to the most novel, creative and abstract, so that students are able to seek critical but also creative solutions to the problems of the world.

3.1. Research-based learning

One of the main pedagogical approaches to work on the development of critical thinking skills is «Research-Based Learning» which motivates students to seek relevant information and data about a given phenomenon through research experience. In this way, students develop their curiosity and exploration skills, while exploring a topic or problem and looking for solutions.

This approach is mainly based on students taking a «researching» role, in which they have to develop a «research plan» and for this they have to collect all the materials to carry out the research and analyse / solve a problem.

The following are some of the main types of research-based learning, according to the goal of the learning experience:

- Project-based learning: students work on the development of a final report, product, or artifact.
- **Problem-based learning:** students work on the analysis of a phenomenon and the possible way to solve it.
- **Learning through decision:** students analyse the situation and the process behind making the most appropriate decision.

^{30.} European Union Recommendation on the Key Competences Framework for Lifelong Learning (2018): https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&from=SV





Among other skills that are promoted through research-based learning are: curiosity, the ability to explore, questioning, criticism and creativity, cooperation and assertive communication, autonomy and self-directed learning, the ability to reflect and learn through trial and error.

As for the structure of research-based learning processes, we could describe it as follows:

- Observation
- Questions and hypotheses
- Investigate
- Evaluation of the hypothesis
- Test
- Confirmation or rejection of the hypothesis
- Presentation of the results

For these methodologies to be successful and promote the development of critical skills in students, teachers must consider three dimensions of learning: emotional, motivational and sensitivity:



Emotions

Positive emotions foster learning experiences and are an integral part of learning.



Motivation

Personal interests and intrinsic motivation for successful learning experiences. Motivation is greatest when students play an active role in deciding what to learn and the goal they want to achieve, so that experiential learning can foster motivation.



Sensitivity

Being sensitive to individual differences and needs within the group.

In research-based learning, the role of teachers is not to impart knowledge, instructions, and correct learning strategies (as in the traditional teaching model), but their main function is to mainly trigger the curiosity of students to improve the configuration of their own learning and objectives. The teacher will not lead the experimentation but will guide the students in the reflection on their own learning and their ability to carry out their process without any external influence. The teaching staff will provide space, time, and support to the students.



3.2. Creating thinking

Creating thinking is a means for the development of critical skills, as we need both innovation/creativity and critical logic/reasoning in all areas of learning, resulting in creativity being a complementary element to the strengthening of critical skills. In this sense, creativity is understood as a process that involves the generation of ideas, which implies the ability to think differently, without limits and get out «of the box» through fantasy and imagination, with the aim of solving a problem creatively.

Creating thinking is more related to the ability to generate new and/or innovative ideas, contributing to the strengthening of critical thinking skills, such as:

- Ability to generate new ideas: creating thinking is first and foremost a mental process to generate innovative ideas
- Ability to use imagination and «think imaginatively»
- Ability to develop an open and flexible mind
- Ability to generate creative processes for reasoning (thus, it can be combined with critical thinking and more generally, with the ability to reason about local and global reality)
- Ability to identify connections between different ideas: elementary to understand the interconnections between local and global phenomena (also related to critical thinking)
- Ability to generate new solutions and approaches, but also creativity when addressing solutions. In that case, we talk about the «creative problem-solving approach» which is a methodology to solve a problem in creative and innovative ways. The creative problem-solving approach usually relies on collaboration to solve the problem in a cooperative way but looking for «out of the box» solutions.
- Ability to apply creative thinking to everyday life

Some clues to promote the development of creative skills in students from the teaching role are:

- Dedicating time and space from work in the classroom to the search for creative solutions to problems and topics addressed in the classroom.
- Promoting democratic and participatory spaces in which there is no room for mistakes, but the variety of creative solutions is celebrated, however «crazy» they may seem.
- Promoting that students put into practice their creative proposals in the face of problems addressed in the school institution.
- Incorporating creativity when handling conflict situations in the classroom.





An example of an activity to enhance critical thinking through creative thinking is «The Capture System» based on the **«6 Hats to Think»**, a role-playing model created by Edward de Bono in 1986 and that can be played in a group. Each hat indicates a piece of paper or a way of thinking that can be easily put on or removed.

Each of the 6 hats has a different meaning and model of thinking:

- White: represents objective thinking: analysing the fact and how to achieve it, feasibility
- **Red:** represents emotional thinking: sensations, feelings
- Yellow: represents opportunities and optimistic vision
- **Green:** represents creative thinking itself: generating new ideas and getting out of the box
- Black: represents pessimism: difficulties, problems, risks
- Blue: for structured thinking: the ability to supervise, lead and process control ability

To each of the hats, we can associate some guiding questions, so that the students can analyse the situation and develop the different types of thinking (which are associated with the different hats and their colours). Some guiding questions could be:

- a) What do we know about this object? What is it for? (associated with the white hat)
- b) What does this object make us feel? What emotions does it give us? (associated with the red hat)
- c) What are the good qualities of this object and why? (associated with the yellow hat)
- d) What are the negative aspects of this object and why? (associated with the black hat)
- e) What other things could the object be? How can we redesign it and give it other functions? (associated with the green hat)?

To conclude, this parallel way of thinking about the «6 Hats to Think» will allow students to generate new ideas and concepts together and collaboratively.

3.3. Art-based learning

Music and the arts can foster the development of students' cognitive and critical skills, as engaging with the arts also helps students develop empathic intelligence, which improves their emotional engagement, commitment, and performance (OECD, 2019). As a result, teachers should integrate the arts into their teaching plans while addressing all content areas, including social studies and science subjects.

The integration of the Arts is generally conceived as a «practical skill», since it does not refer to the ability to perform manual tasks, but to the ability to use and integrate the Arts into the educational curriculum, in ways that contribute to fostering creativity and innovation, as well as fostering the cognitive and socio-emotional skills of students.



Practical thinking and crafts as part of the integration of Arts into educational practice can be useful to increase imagination and creativity in students, through the design of a tangible product. In addition, handmade products and creations are tangible expression of a process, which includes both critical and creative thinking, as well as a learning outcome. Of course, the use of different colours, materials, shapes, etc. can boost the imagination and inspire new ideas, while assigning different meanings, feelings, emotions, etc.

There are many ways to encourage students to work on their creativity and creative reasoning using the Arts. Some strategies are:



In addition, all types of arts can be used in school to foster cognitive and socioemotional skills. The visual arts are only part of it; hay other forms of arts such as music that allow students to work and improve active listening, to then be used in entrepreneurship and also transferred to the development of management and cooperation.

^{32.} In the frame of the TEMSIC Project the guide «Transformative Educational Action: Game-based educational resources for Global Citizenship» has been developed. Available at: https://transformative-edu.eu/en/about/ and https://www.intered.org/es/recursos/accion-educativa-transformadora-contribuciones-desde-el-juego-educativo-para-la-ciudadania



^{31.} One demonstration of the famous multicolored mosaics of Piet Mondrian can be seen in: https://www.descubrirelarte.es/wp-content/uploads/2020/11/Composicion-con-amarillo-rojo-negro-azul-y-gris-por-Piet-Mondrian-1920-oleo-sobre-lienzo-595-x-595-cm-La-Haya-Gemeentemuseum..jpg



3.4. Design Thinking

Design training is a very useful method in education, as it increases students' ability to solve a problem in a creative and innovative way.

Itis based on the principles of «strategic design» and the development of creative ideas that need to be tested to verify their validity. It is important to improve students' creative approaches in a flexible way and can be applied in an interdisciplinary way.

There are 5 stages in Design Thinking:33



Empathise

Try to understand, using an empathetic approach and observing but also exchanging with other people, to highlight all facets of the problem that we must solve



Define

Take up all the information collected during the empathy phase, to identify and define the central problem



Ideate

Start generating ideas thinking about innovative solutions to solve the problem. It's important to brainstorm and get as many ideas as possible.



Make

Generate a prototype (an idea or a product, physical or virtual/digital) that can be tested within the classroom (within the work group) and subsequently, presented to the rest of the students



Test

The test phase allows you to check how the students feel and if the prototype / innovative solution meets the needs.

^{33.} Defined by the «Hasso-Plattner Institute of Design» (Stanford University, USA)



Design thinking can be used to solve complex contemporary problems and respond to global challenges. The structure would be the same: 1) empathise with the stakeholders affected by a problem; 2) elaborate the specific problem to be solved (define), 3) create innovative solutions (ideate), 4) make the artifacts (prototype), 5) receive feedback on these artefacts, involving the stakeholders for whom the solution is designed (test). At school level, students can be involved in the analysis of a contemporary phenomenon though design thinking (for instance: ideate a small system to save water and avoid water waste), thus working out solutions as a group and while empathising with the others.

Among the benefits of Design Thinking for students are:

- Helps students develop a better understanding of the world
- Allows students to gain experience in independent and self-directed learning
- Helps students observe and obtain innovative ideas and solutions
- Helps students develop empathy
- Helps students actively contribute to solving a problem in a cooperative way

3.5. «Tinkering»

«Tinkering» is a very innovative learning method based on the creation of objects using different materials. It is often associated with the handling of digital technologies and small technological and/or electronic devices to be combined with simple materials such as papers, wooden pieces, metal wires, plastic wraps (including recycled ones), in order to create innovative and fun products, while combining both creativity and critical thinking skills.

The pedagogical reference of this approach is *Constructivism* which argues that at the centre of the learning process must be the learner him/herself, the students in this case.

«Tinkering» activities are structured in the form of workshops and laboratories for students, based mainly on experiential learning techniques (EPALE, 2017). In particular, «Tinkering» is used to promote learning of STEM subjects³⁴ among children and young people through the stimulation of problem-solving skills and following the philosophy of: *«learning by doing»; «learning to do it yourself» and «learning to do it with others»*.

«Tinkering» represents an efficient interdisciplinary and multidisciplinary approach in which science and technologies can be integrated to achieve a pedagogical and learning purpose in school. By experimenting and learning by doing, students can also integrate their preliminary skills into fields such as mathematics, technology, and robotics.

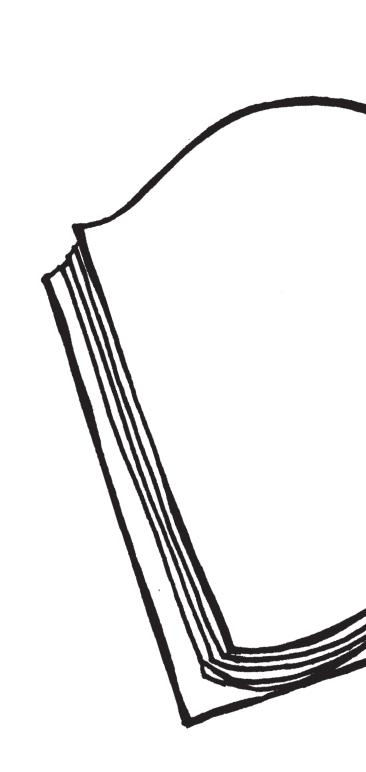
The «Tinkering» approach consists of the following elements:

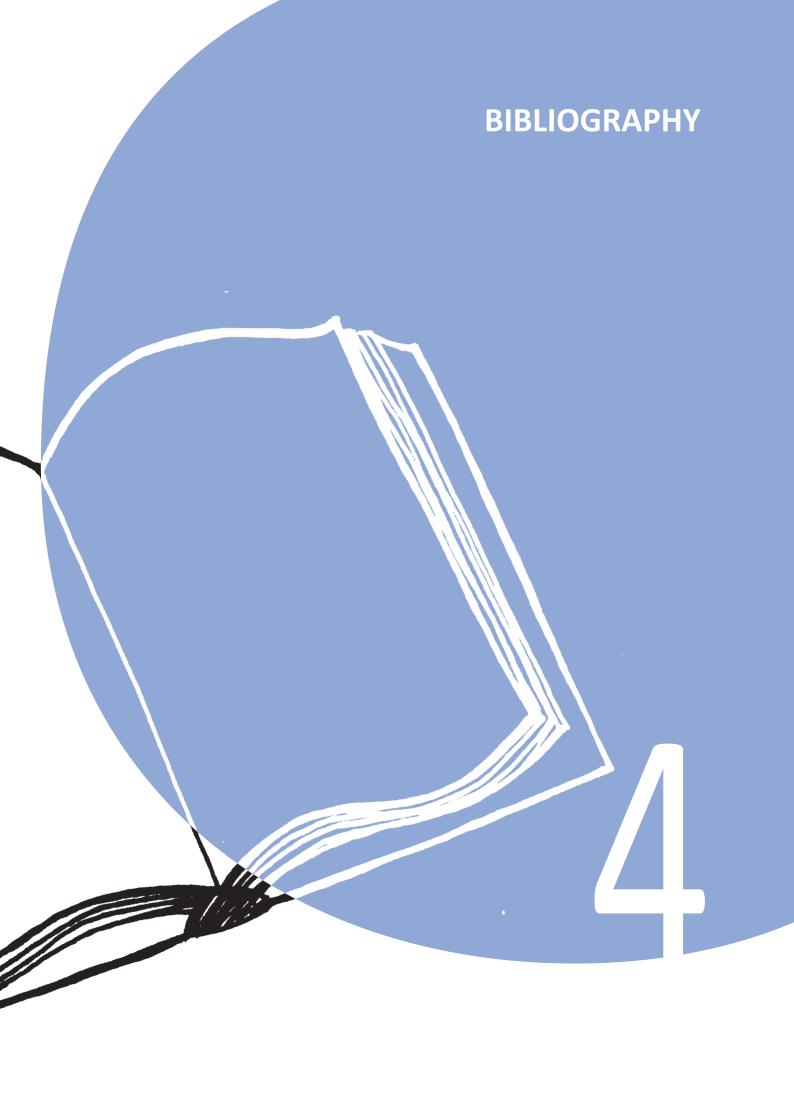
^{34.} The English acronym «STEM» stands for Sciences, Technologies, Engineering and Mathematics



- Hands-on experience with everyday objects
- Learning through the research-based approach
- Learn through critical thinking and seek solutions
- Creativity and innovation

These are just some examples of methodologies that can be addressed in the classroom to favour the processes of development and strengthening of critical skills in students. Through this compilation we wanted to present some that we consider interesting and useful, and that can be approached from an education for Global Citizenship approach. Of course, the implementation of these methodologies requires linking them with the contents and priority themes of the ECG to build a transformative educational practice. That is why we also recommend consulting and reading the rest of the materials developed within the framework of this project, for a more complete and transformative approach.





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Authorship: Laura La Scala (CESIE)
In consortium with: Südwind, Foundation
English translation: Laura La Scala (CESIE)
Pesign and layout: Rosy Botero
ISBN: 978-84-121198-9-3
Publication year: 2022
Published by: Fundación InteRed

C/ Alameda, 22. 28014 Madrid - Spain







