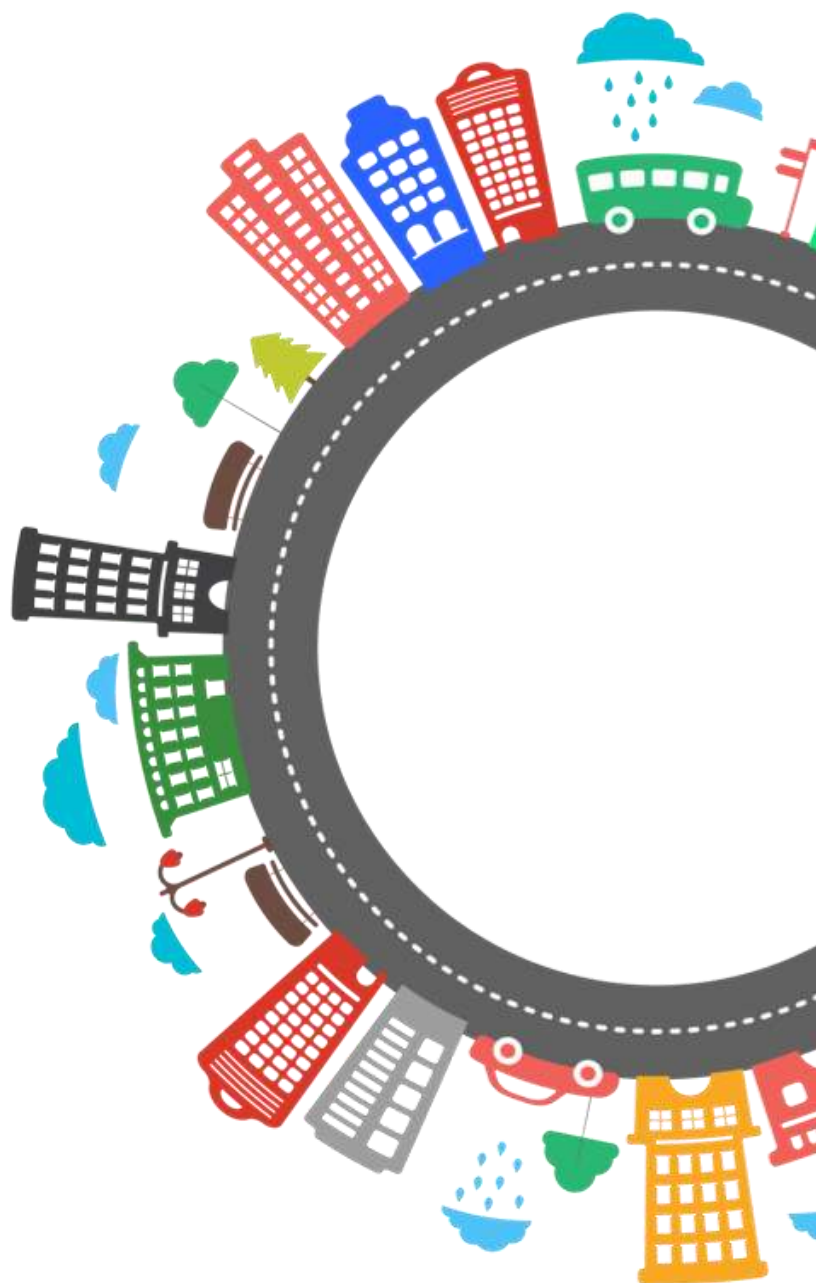




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fabulaCPlus
Circular Economy applied to Fabula Project Framework

CiCLE MANUAL



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INTRODUCTION

Introduction by the Rector of the University of Naples "Suor Orsola Benincasa", Professor Lucio d'Alessandro.

"I'd like to contribute with great interest to introducing the extraordinary research work of this international partnership of the Erasmus+ KA2 "Circular Economy applied to FABULA Project Framework – FABULA C-PLUS" project, code 2020-1-IT02-KA201-079244, which in recent months has questioned the value of teaching professionalism through international educational meetings, the exchange of good practices, teaching methodologies and pedagogical visions. The theme of teaching professionalism has been close to my heart for my whole life: from when I was Dean of the Faculty of Primary Education, up to the last dialectical battles that I tried to conduct also in the press. When it comes to teaching professionalism, it is necessary to overcome the minimalist conception of the set of skills that distinguishes teacher training from that of graduates. The Italian teaching systems are calibrated on the commitment that a student is able to successfully sustain. The work of culture and knowledge lies in the concentration and intensity with which one dedicates oneself to them. The Italian model of a non-centrifugal university education has allowed our graduates to be highly sought after abroad and for pedagogical and didactic contributions to cross Italian borders, to contaminate, merge, enrich and modify themselves with good practices and pedagogical concepts of the rest of Europe (and beyond). Therefore, the "brain drain" is also the signal of a centred and competitive system on an international level. It follows that adding the path for teachers to already structured training itineraries risks eroding this model, generating a perception of marginality and accessories. Instead, it would be better to have a dedicated and intensive post-graduate year, that can take into account the panorama of "digital humanism", in which the teacher wonders what this era entails for the neuronal and cognitive processes of the new generations. Teaching professionalism is synonymous with quality training and this is not acquired through the purchase of compulsory or expendable qualifications for the purposes of rankings, provided by diverse actors with competitive mechanisms and for profit-making purposes, far from the cultural, educational and social purposes of which Universities are inspired. It would be appropriate to link the accreditation of institutions to the centres provided for by the PNRR, i.e. the three Teaching and learning centres (Tlc) which will be built through university networks and intended to improve digital skills, to activate paths for future teachers, guaranteeing high quality and solidity.

As regards the crisis of "the school", to weakening credit and the aura of the central institution for every State that looks to its future, one must respond by avoiding giving in to the pressure of the changes that affect knowledge, professions and institutions, to also preserve the moral strength of a disseminated model that touches reality in its entirety, creating with his or her Bildung the conditions for a man or woman to know how to be a man or woman at every, individual, social, economic level. The school is the most authentic keystone of a democratic system that allows for a meaningful community and produces professionalism, skills and knowledge that can also be spent in a technical and technological direction, but at the same time it is essential that teacher training never stops forming the person. The human being is able to have an overall view, an ability to question and provide feedback on knowledge, to arouse an authentic thirst for knowledge in learners."

1. PARTNERS INVOLVED

Istituto Suor Orsola Benincasa (ITALY)

The Istituto Suor Orsola Benincasa is heir to a centuries-old educational tradition.

The Schools of the Institute provide a unit based training programme that covers the entire cycle of studies. Its work plan is based not only on horizontal student development, but also vertical and allows, through research and exchange of experience and knowledge, it to plan and implement the piloting of updated teaching and learning methods that are attentive to the continuous changes of cognitive and learning processes.

CONFORM S.c.a.r.l (ITALY)

CONFORM – Consulenza, Formazione e Management S.c.a.r.l. has been working for more than 20 years at national and international level. It promotes and develops important research projects and training plans with innovative formats and solutions in the classroom, experiential learning and e-learning. It provides consultancy and technical assistance to businesses and the Public Sector, with the support of experienced staff and a consolidated team of trainers, consultants, professionals, managers and entrepreneurs all who bear successful experiences.

REGIONE CAMPANIA (ITALY)

The Campania Region – Department of Education, Social and Youth Policies is institutionally responsible for programming, management and control of educational and training plans expressed by the local system, with consultative and propulsive responsibilities, as it:

- integrates its action into the framework of educational policies at national and international level,
- coordinates education policies and promotes school-work relationships;
- plans, directs and controls the implementation of a strategy at territorial educational system level, defining long-term objectives to improve the level of supply;
- verifies and governs in order to detect the efficiency of the educational institutions and to assess the degree of implementation of the plan for education supply

102 DIMOTIKO SCHOLEIO ATHINON (GREECE)

102 Dimotiko Scholeio Athinon was established in 1955. It is an All-day Public Primary School located near the centre of Athens with about 250 students, aged 6 to 12, attending. Our aim is to raise awareness on various topics concerning climate change, energy saving as well as sustainability and to enable our students to better understand and address environmental issues impacting the local, national or even international community.

AKMH (GREECE)

AKMI VET Institute was founded back in 1989 and today it is one of the leading Vocational Training Institutes in Greece providing post-secondary education, with more than 37.500 m2 of infrastructure in various cities in Greece, including one of the most highly profiled Campuses in

the Country. Every year, approx. 14,000+ active students are enrolled with the aim to study one of the 107 specialties, in more than 340 laboratories offered in 6 cities across Greece. AKMI hopes that with proper education, the youth can become productive, scientific-oriented, broad-minded, and ideal citizens of the society as the society is significantly influenced by this category of people.

Colegio Caude (SPAIN)

Colegio Caude arises from the common of a group of professionals' effort whose project, the main objective is to get all students of our Centre to achieve comprehensive development as a person, offering a quality education that encompasses human, and academic training with non-denominational character, within the democratic principles of respect and tolerance.

FEI (SPAIN)

The company Formación y Education Integral (FEI) was established on 10th October 1997, gathering a team of experts in administration and training coming from Training Centres. The foundational mission is the design, the planning and the implementation of initiatives in the fields of training, technological dissemination activities and participation in projects oriented to the education in the personal, professional and corporate fields.

2. OBJECTIVE

The participation in the Erasmus+ Programme for teachers and educators is a valuable opportunity to reopen the debate about the work of teachers. Within the **Erasmus+ KA2 "Circular Economy applied to FABULA Project Framework – FABULA C-PLUS" project, code 2020-1-IT02-KA201-079244** during the international Learning Teaching and Training Activity, the contribution from the teachers involved has been very significant since, each with their own particularity, they have all worked together pooling their experiences and professional background. Together they have tried to build an "ideal teacher model" capable of playing the role of mediator of culture, contents and methods and, above all, an encouraging, reassuring and motivating "presence" for the learners.

As reflected in this document, during the meetings held, issues such as the existence of different types of students (the visual learner, the listener or the kinaesthetic learner), the importance of focusing our efforts on promoting a teaching-learning method based on feedback and circularity, the need to promote an education based on emotions that is also oriented towards the development and expression of creativity, were put on the table. The importance of language as a vehicle that makes it possible for "magic" to happen inside and outside the heads of our students was also raised, and all this taking into account the opportunities that physical spaces offer us, not only for what they are, but for what we can transform them into.

This manual aims to serve as a guide to orient teachers in the operational steps necessary to EVOLVE TOWARDS THE ROLE OF FACILITATOR. The approach taken by our teachers will enable children to participate in a practical and entrepreneurial experience in which they are allowed to develop ideas that will be transformed into actions through teamwork and sharing of experiences. The aim is to maximise "learning by doing", putting ideas into practice and producing tangible outcomes.

From the experience of our teachers, we promote the use of multiple recycled materials with "zero environmental impact" that stimulate the imagination of young people, encouraging them

to search for and propose new Re-CICLE ideas, approached as emerging business opportunities within a circular economy framework.

Finally, the manual includes an example of "best practices" which includes three examples of different initiatives through which the three schools involved in the Fabula C-Plus Project put into practice the essence of circularity defended in the Project and which we hope will serve as a guide to other teachers.

The methodological basis of the Manual will refer to the following key concepts:

- **Simplification:** The teacher as a facilitator is able to alternate teaching with learning, managing to modulate different moments and phases of teaching and relationships with the class, following a *fil rouge* that sees him or her, in turn, as a "guide" of the class and "being guided" by the same. As well as technically managing his or her own subject, he or she works on himself or herself to work on his or her relationship with the learners, in order to increase the effectiveness of communication, group dynamics and consequently the learning for the class.
- **Trends:** allow room for creativity, for solving real tasks, but also have the children apply their own movements.
- **Language:** to discover children's vocabulary in order to learn about the reality around them.
- **Skills:** understood as behavioural qualities between autonomy and relationships to aim at the growth of students' personalities through the development of their personal attitudes.
- **Methods:** process and care of the educational process without neglecting the specific end product necessary for motivation and self-evaluation.
- **Knowledge:** disciplines and transversal meeting points to establish horizontal/vertical and collaborative curriculum linked to disciplinary laboratory work (workshops), but also to citizenship skills linked to the culture of recycling and reuse.
- **Discovery and research:** through observation and research, as well as experimentation and discovery, children will be able to experience new ways of immersive, real and virtual discovery, as well as become researchers, "craftsmen" and obtain "hands-on" knowledge.
- **Techniques and tools:** craftsmanship and technology - the use of multiple recycled materials with no environmental impact will stimulate the imagination of young people in the search for and proposal of new "Re-CICLE" ideas.
- **Materials:** The use of multiple recycled materials with zero environmental impact will stimulate the imagination of young people in the search for and proposal of new "Re-CICLE" ideas.

3. TEACHER AS A MENTOR

In the broader sense of the word, "mentoring" refers to the relationship established between a person with greater experience in a given field (mentor) and another with less, or no experience (mentored) with the objective of facilitating and developing their competencies and socialization, thus, increasing their chances of success in the task to be performed.

Therefore, taking this concept to the field of education, the teacher has ceased to be the figure of the expert who "turns" all his/her knowledge on the student, to become a companion of the latter in his or her learning process, serving, in some cases, as the child's teacher, but in others, as the child's apprentice. This is why, in today's school, we speak of the "teaching-learning" process as a circular relationship in which the roles between the teacher and the pupil feedback and exchange one another. In today's school, the relationship between teacher and learner must be one of shared reflection and dialogue where there is room for the development of each and every person involved in the process¹.

Each student is unique and, of course, today we know that we cannot pretend to have a one-way and stagnant school in which all children follow a single learning path. Every day that we face the classroom we have to be aware of who we have in front of us, and simultaneously, students that we can call "visual learners", children who are very influenced by the visual memory of what they see, but who share space and time with others that we can describe as "audible learners" who are, clearly, listeners. People who are good listeners are traditionally considered ideal learners. And we often forget a third model of learners, the so-called "kinaesthetic learners" who, if the vital moment of movement is deducted, suffer more than other learners.

Keeping these three broad categories in mind can help as a starting point for teachers, but it is just that, a starting point. The "giant" of digitalization, as well as the new climate imposed by today and its speed of technological implementation, has resulted in more and more children who are confused and lost. As teachers, we must be prepared to detect these children, to listen to all our students and to teach them, not only to cross bridges of knowledge (as Kazan Jacques used to say), but to build others on their own. Bridges that will surely take us to places we teachers could never have imagined.

Mentor teachers must, therefore, be people who not only know how to be great listeners, but who also know how to trigger positive dynamics among their students, motivating them with their answers and making themselves "present" for their students. If we succeed in creating this work climate in the classroom, students will reach out to us to let us accompany them along the exciting path that is school².

4. PEDAGOGICAL CRAFTSMANSHIP. MOTIVATION

There is a proverb that says that *a child will learn where he or she is taught with love*. So, the emotional dimension is fundamental in learning, especially in childhood, but also throughout life, because when you study what you love, you can produce something nice and learn. So motivation is an essential dimension in childhood. That is why, in classroom teaching as a laboratory, also called active school, or "learning by doing", labels change as well as imposed limits and concepts, but what does not change is the child's perception of the need to know.

In the Fabula C-Plus project we used waste that was apparently unappetizing to stimulate the children's thirst for knowledge and tried to activate the virtuous mechanism as opposed to the vicious mechanism of mere repetition. This was done in many ways and the teachers'

¹ Speech by Pilar González, a teacher from Colegio Caude.

² Speech by Patricia Gimeno, a teacher from Colegio Caude.

testimonies are significant from this point of view. We have art teachers within the institute who, through recycled materials, create beautiful and fun things, create games; we have a teacher who creates syllabaries, phonetic games, cards with recycled materials, which are useful to memorize the language but also to work on grammar and phonology.

5. TIME AND SPACE AS A LEARNING TOOL.

In a significant intertwining of methodologies and contents, perhaps the two fundamental thematic nuclei that can be outlined are time and space.

When looking at the dimension of circularity, we do not only intend it as an economic opportunity, but it is a way of making children revisit the sense of circularity, historical awareness, the sense and feeling of time and temporality in a hyper-digitized era characterized by a very strong technical acceleration, which is an artificial element in the life of children, sometimes even to the detriment of their interior times.

So, the reflection on circularity was an opportunity to recuperate that beautiful feeling and sense of time that also reverberates in the beauty and poetry of the changing seasons, with the opportunity perhaps to see the trees in the gardens, in the way that you can experience school time in a different way, therefore, with reflections with circle time, but also with moments of creative hiatus of pauses and boredom before looking for the next idea and above all reflecting on circularity was an opportunity to make children understand the circularities and phases of their own lives.

For example, it is fundamental to create some stepping stones of dialogue between the elderly and children, who in some way, represent the boundaries of each community; the elderly, above all the guiding profiles of grandparents³, are some of the custodians of an immense, symbolic-cultural heritage, as well as emotional, from whom, sometimes, the post-modern lifestyle conditions end up with uprooting children. And, therefore, circularity is a virtuous theme to create a new, less accelerated, more aware pedagogy that would also trigger sub-themes such as care of things that are recuperated rather than destroyed and thrown away; so the child who was being prepared to be an active citizen to be not only a buyer in the future, a passive element of a market, but also a person who could trigger something with a creative idea.

The other decisive theme that is necessarily intertwined with time, which is also something abstract, is the thematic core of space.

To link space and time is, undeniably, a tool that we can use to teach children the sense of circularity in a transversal and multifaceted way. Schools can make use of the particularities that our facilities offer us, helping children to "travel" through the places we have, or to transform what we have into other magical spaces to which learners can travel with their imagination⁴.

³ Cfr. Mascher Mattia, *Guida galattica per nonni e nonne del terzo millennio: come affrontare le sfide del futuro insieme ai nipoti*, San Paolo Edizioni, Cinisello Balsamo, 2021.

⁴ An example of a practice in this sense is found in the particular use of the irregularity of the Suor Orsola building. The teachers there help the children to understand how the whole citadel, all this large building, was a learning space and a sort of large, virtual notebook to which children can enter and exit, also writing their learning story.

6. THE BODY AS A LEARNING TOOL.

There are three main types of learners.

There are visual, auditory and kinaesthetic learners. Visual Learners are those that need to see pictures and graphs to visualize. Auditory Learners are those who need to hear the information. Finally, Kinesthetic Learners are those who need to engage in an activity in order to grasp a concept.

There is no learning if there isn't an experiment first. With the term "experiment" we mean: experiencing, acting and manipulating. For example, the C.A.S.A.F method, created by Borzacchelli Francesca, a teacher of Suor Orsola Benincasa Institute⁵ and wants to change the teaching idea: from a top-down teaching method to a bottom-up method. It consists of:

- content presentation (through individual/points-based team games);
- administration and free handling (to let the children have fun, before the beginning of the activity);
- structured phase (here indications are given to correctly manipulate);
- action;
- formalisation of contents.

So, teachers should make a concerted effort to adopt the three different methodologies because that really appeals to the students and then they want immediate gratification, immediate satisfaction, and they have it.

A good idea is to have a plenary session at the beginning to catch their attention. You then provide them with the concept. The conclusion has to prove to you as a teacher, that every child, independently of whether they're a high achiever, a low achiever or a middle achiever has got the main point. Every high achiever has also had something to challenge them, the middle achievers have the satisfaction of learning something new, and the low achievers have grasped the main point.

A good teacher also has to be aware of the psychology of learning and the psychology inside that student, and has to manage their behaviour. Every class is different and has students who are shy and retired, a class clown, some have dyslexia, dyspraxia or are ADHD. So, the teacher has to be a manager and cater to all of these needs. At the same time, he or she has to keep the class engaged and focused, interested and at peace.

If students learn to trust their teachers, they take that responsibility, they suddenly feel empowered and their self-confidence grows. Watching that growth is very satisfying and rewarding, not only for them, but also for the teacher.

<<The use of diverse and creative teaching methodologies such as music, songs, yoga or mindfulness nurtures every child because every human being is multifaceted and needs to nurture not only their intellectual facet⁶>>.

⁵ This method was invented by the teacher Francesca Borzacchelli. She showed to the partners through videos and pictures some real, concrete and manipulating activities in which children were involved.

⁶ Su Bowerman, a teacher of the Suor Orsola Benincasa Institute.

7. LANGUAGE AS CIRCULAR MAGIC

Language can be developed now, in this instant, but it can travel in time. It can happen somewhere else while you are still here. This is a magical thing. It involves imagination, so it is very motivating if teachers use it in an effective way to develop learning. These are the main points to encourage in children's language. For example, through reading.

<< Inge Feltrinelli used to say that reading is a revolutionary act: instilling love for it, to digital generations, is an act of love. Since the first texts addressed, I have transferred to them the competence of understanding the text as a universal key to face any action of everyday life. Understanding what we eat, the instructions for a new video game, the program of a trip. In one word: everyday life. A book is a window on the world, a mirror in which to look for a little bit of oneself.⁷ >>

It is very evident when they speak openly. You could have short interviews with them to see how they talk about the world and how they answer some questions.

The beauty of language lies in the amazing things it can unleash, in its being so incredibly multi-faceted. An anecdote might clarify this aspect, and the title of this anecdote might be “white socks tell the truth”. Once upon a time, there was a little girl who refused to wear her slippers. One day, when her mother complained about the state of her white socks, and to the question “What on earth have you been doing to your socks?”, she replied “White Socks don’t lie!”. Through language, in her own way, she answered her mother’s question in a creative, imaginative way; here lies the magic of circularity in language, that can merge space and time to describe the world⁸.

8. ENCHANTING CHILDREN WITH KNOWLEDGE

Literature has been used as a method to transmit the values of creating useful things, ideas, visions and services within the Fabula C-Plus Project. The enthusiasm of being a teacher, love of teaching, the real knowledge of one's own teaching and curiosity are the keys to a meaningful teaching, which instils in the students not only notional and pragmatic knowledge (know what and know how), but also that value, so that everyone can be citizens and show solidarity to face the challenges of tomorrow with love, respect and curiosity, as reported by the testimony of Armida Vigliar, a teacher of the Suor Orsola Benincasa Institute:

“The pillars of my teaching are love and respect. Love, because without love there is no knowledge, without love school life would be sterile, life would be sterile. Respect, because the teacher must respect the personality, the emotions, the times of the children, but, at the same time, they must learn to

⁷ Speech by Francesca Buono, a teacher of the Suor Orsola Benincasa Institute.

⁸ Speech by Prof. Castellano Clelia, Rector's Delegate for the scientific-didactic quality of the schools of the Institute including Suor Orsola Benincasa and professor of *Sociology of Education and the Family* and *Social Studies on Early Childhood*, at the University of Suor Orsola Benincasa.

respect everything around them. So how can you do this? We must lead by example. When primary school begins, I always have the class find three words written on the blackboard in large letters, words that I define "the keys" to life: love, respect, curiosity. I explain to the children that love is the driver of life, that everything starts from it and that you live life in the name of love, you live a wonderful life. But love cannot be without respect. If I love my land, I respect it, I don't pollute it. If I love others, I respect them, I don't offend them. If I love myself, I respect myself, I take care of myself, I spend all my strength on building my future. Here curiosity comes into play. Being curious, asking questions, taking an interest in the world around us allows us to be an integral, active part of society and not amoebas, "flat", amorphous people who undergo life, do not live it. [...] Every student knows that he or she can express himself or herself freely with me and will never be judged or mortified. In fact, we often have a lesson that we call an inverted lesson, during which the pupil becomes a teacher and explains the new topic to the class. This type of lesson makes everyone emotionally proud and the result is always excellent."

Another crucial skill to be developed by the children is the work *with* and *on* the child's spontaneous attention, as mentioned by Francesca De Angelis, another teacher of the Suor Orsola Benincasa Institute:

"The cornerstone of my approach to teaching primary school children is to work with and on the child's spontaneous attention. The delicate phase of 6-12 years, involves the construction of the individual's intelligence. The magical stimulus of curiosity is the counsel that nourishes their growth and exploration, no longer merely sensorial, as in previous years, but now accompanied by reasoning, in turn guided by logic as well as by imagination. It must be understood that genuine interest cannot be forced but only stimulated. Education must aim at the development of individuality, that is, of individual intelligences. In order to develop in a healthy way, these, need two ingredients. On the one hand curiosity and, therefore, the spontaneous attention mentioned above will determine the "I want to understand/know". On the other hand, only the daily construction of self-esteem in the child allows the passage from wanting to understand/know to I can/am capable of understanding/known. I think it is my job to bring these two ingredients into a classroom. Then for the rest, the children put their finger in the pie!"

9. EXPRESSING EMOTIONS

At present, there are many studies that support the importance of emotional education in schools, based, among other theories, on Gardner's theory of multiple intelligences⁹. Today, we

⁹ Gardner, H (1995) Estructura de la Mente: la teoría de las inteligencias múltiples. México FCE. 312. pp

know that "academic intelligence" is not enough to achieve professional success. It is not necessarily those children who raise their hands first in class to answer our questions who are the most intelligent, but experience is showing that it is precisely those children who cultivate human relationships and those who know the mechanisms that move people. In other words, those who are more interested in people than in other things.

So, what is emotional education? According to authors such as Goleman¹⁰, emotional education must be understood as a continuous and permanent educational process that enables students to identify and express their own emotions and those of others, so that they can adopt behaviors that take into account the principles of prevention and human development.

Emotional education must be understood, therefore, under a life cycle approach. Working and cultivating it in our students under the perspective of circularity, so present in our project, is essential, because the emotional state of people clearly affects our behaviors, in the same way that certain actions have a clear emotional implication.

Teaching about emotions involves helping students not only to identify their feelings and emotions, but also to know how to control their expression and not to repress them (especially when it comes to negative emotions, which are usually more difficult to communicate in a respectful manner).

All teachers should begin by teaching a broad emotional vocabulary and try to help students look inside themselves often to discover what their emotional states are and why they are triggered.

Lessons on emotions can be carried out in any subject. They could arise naturally in a Natural Science class, in History or even in reading time. One example is Madame Karin, a teacher of the Suor Orsola Benincasa Institute, who teaches French through emotions. She always begins her classes with a presentation in which she asks each child what his or her name is and how he or she is doing, an emotional and didactic exchange that becomes a ritual. She then gives each student a card made from used cardboard with a picture of a familiar character glued on it, reflecting different feelings and expressions that the children have to detect, analyse and sometimes reproduce.

10. THE MANY FACES OF CREATIVITY

In such a changing society as the current one, it seems clear to assume that schools have to prepare our children to live, or "survive", in an environment where everything has accelerated. Now it seems that life happens very fast, what is new today, in a very short time will be obsolete and will give way to the next thing to come. Achieving the status of novelty is as complicated as it is ephemeral.

¹⁰ Goleman, Daniel. *Inteligencia Emocional*. Ed kairós (2001)

Therefore, if we assume that, as teachers, we teach in a society where change, transformation and evolution are, and will be, the hallmark of identity, it is inevitable to assume that one of the pillars on which we have to train our students has to do, precisely, with what is the most valuable resource for this task of transformation and change: creativity.

Based on the premise that the value of creativity lies precisely in the characteristics of the creative act itself: the assumption of risk, commitment, decision, action, change, challenge, challenge, contribution of value, social contribution and the drive for improvement, we will conclude that educating in creativity means educating to strengthen our children's character, emotions and intelligence.

Many profiles of creative people, many fields in which to develop creativity, and many different ways to do it. Within our Fabula C-PLUS project, we have tried to make room for the child's artistic expression by leaving spaces for the creation of new materials from other used ones, for example. However, as teachers, we should not circumscribe creative expression to a single workspace. It is important that we extrapolate creative expressions to the different environments in which children develop.

Frequently, the reality of schools, the stress of evaluations, the pressure of textbooks, the demands of wanting to obtain good results in competencies... make us lose sight of the opportunities that the classroom offers us and we focus more on "what" to teach, forgetting the "how" to do it. The starting point to motivate students to be part of a teaching-learning process based on creativity lies in a teacher who is able to do it.

We should overcome the fear of making mistakes, both teachers and students. Creativity allows us to have a flexible and transforming attitude that proposes to break down walls or barriers to build new ones.

One way to bring creativity into the classroom is, for example, by using different materials for our classes. At primary school or a preschool, cardboard is very important. Boxes can easily be recycled by turning them inside out, gluing them back together again with hot glue. Toilet rolls can be used too. Making a cardboard 3D model of a city with all different kinds of buildings, bridges, hospitals, children can draw as well. At the end of the year the children can take the part they have made and they can take it home with them¹¹.

¹¹ Examples given by the preschool team of teacher from Caude.

11. WHAT SOFT SKILLS SHOULD A TEACHER/FACILITATOR HAVE?

The FABULA C-Plus partnership has drawn up a grid of ideal soft skills and qualities that the teacher/facilitator should cultivate to allow students to bloom.

empathy	care/interest for your students	promoting resilience	tolerance	team working
active listening	dedication	unleashing your uniqueness	respect	abnegation
patience	approachability	acceptance	generosity	kindness
curiosity	open minded	thinking out of the box	creativity	
thirst for knowledge	constant personal and scientific development	coherence	managing instructional (sound) environment	charismatic
critical thinking	crisis management	inspirational		
impartiality	joyful/playful	open to change	communicative	flexibility
problem solving	lifelong learning	adaptability	decision making	

These skills will make their teaching activity much more effective.

FROM THEORY TO PRACTICE

This section of the manual serves to help teachers put into practice some of the ideas used by other learning “facilitators”. The idea is to make the students protagonists and creators of their own learning, able to “immerse themselves” in the situation, facing and solving real tasks. To do this, it is necessary to overturn the traditional linear teaching methodology, from the chair to the desk that welcomes new teaching methodologies, through which the skills of each learner can emerge, can be developed, expanded and enriched. Here is an example of possible methodologies:

Before starting

CIRCLE TIME - The participants end in a circle, with a conductor who has the role of directing and coordinating the debate within a set time limit. The succession of interventions in the order of the circle must be strictly respected. The conductor assumes the role of privileged interlocutor in asking questions or providing answers. Circle time facilitates and develops circular communication, favours self-knowledge, promotes the free and active expression of ideas, opinions, feelings and personal experiences and, finally, creates a climate of serenity and sharing facilitating the establishment of any new working group or preliminary to any subsequent activity. It could be used to insert the topics/units/modules that will be treated, in order to bring out the founding nuclei on which we will work.

To work

FLIPPED CLASSROOM - The didactic approach of the "inverted teaching" type is to ensure that children can study before taking lessons in class, including through videos. It may seem trivial, but this approach, by flexibly assigning the knowledge transmission phase to other times and spaces, allows you to "free" an incredible amount of time in the classroom and, therefore, to be able to take greater care of the moment of real, meaningful learning, with the support of a teacher-facilitator. The flipped classroom consists, in fact, of reversing the place where you take lessons (at home instead of at school) with the place where you study and do your homework (at school and not at home). The basic idea is that the lesson becomes homework while the time in the classroom is used for collaborative activities, experiences, debates and workshops. In this context, the teacher becomes a guide, a kind of "mentor", the director of the pedagogical action. At home, videos and other e-learning resources are widely used as content to be studied, while in the classroom students experiment, collaborate, carry out laboratory activities. In a didactic approach of this type, in which the student is asked to personally take charge of his or her own learning process, the student "learns to learn" and becomes more easily an "active" person. Let us remember, however, that being "active" is an option of the ego and also requires the student to take himself or herself seriously, get involved, let himself or herself be challenged, and be able to restart in the event of a mistake.

COOPERATIVE LEARNING - Cooperative learning allows the "common construction" of "objects", procedures, concepts. It is not just "working in a group": it is not enough to organize the class into groups to create the conditions for effective collaboration and good learning. It is aimed at the class as a set of people who collaborate, in view of a common result, working in small groups. Its founding principles are: - positive interdependence in the group - personal responsibility - face-to-face promotional interaction - importance of social skills - control or review (reflection) of the work done together - individual and group evaluation.

EAS METHOD - That is, for minimal units. Here in three words what the EAS (Episodes of Located Learning) methodology is. And having to add a detail, attention falls on the S of the acronym which stands for "located". Episodes of situated learning, contextualized, focused on a specific problem, on a practice that involves a real didactic action. The phases of the EAS methodology:

- **PREPARATORY PHASE:** the teacher prepares an introductory moment that serves as a conceptual framework to thus stimulate the pupil's epistemic curiosity. Through a CONCEPTUAL MAP, a SHORT VIDEO or a short MULTIMEDIA PRESENTATION.
- **OPERATIVE PHASE:** the class carries out an individual or group micro-activity in which it produces an artifact. At this stage, the teacher must be good at finding the suitable technological tools to achieve the goal he or she has set himself or herself. Work in groups can be conducted according to the principles of cooperative learning, to promote their effectiveness.
- **RESTRUCTURING PHASE:** it is the debriefing. Teachers and students carry out metacognitive reflections on what emerged and on how it was operated. The teacher concludes the EAS with a short lesson in which he or she summarizes the key concepts, provides indications for study and further insights. The EAS methodology is linked to the practice of didactic mediation and to the teacher facilitator that we talked about previously.

For pupils with SEN (Special Educational Needs), in difficulty or in need of support

PEER EDUCATION - It is a methodology that is spreading above all for the prevention of risky behaviours, as it actively involves children directly in the school context, with the aim of modifying specific behaviours and developing life skills, i.e. daily life necessary so that each of us can also be well mentally. In this educational methodology, peers are models for the acquisition of knowledge and skills of various kinds and to modify behaviours and attitudes, generally related to "feeling good", effective models to an extent often equivalent to professionals in the sector. The peer is not a professor, he or she is not an expert in precise scientific knowledge, but he or she knows how to manage relationships: his or her role is of mediation and that is why he or she is perceived as part of the group. The peer educator is an ordinary child, with a greater awareness of the communication processes that occur in the peer group. One of the strengths of peer education is the reactivation of socialization within the class group. The peer alone does not transform anything, but is a stimulus for participation: the class, during the interventions, is involved and encouraged in the elaboration of experiences. Peer education, for example, gives adolescents the opportunity to find a space where they can talk about themselves and compare their experiences as an "equal". It makes life slowly enter the school: it is the peers who transmit and share experiences, doubts and uncertainties with their peers. The children involved have the perception of living a moment of informal life within the normal course of teaching.

A MILLION DREAMS FOR CIRCULAR BUSINESS: SOME PRACTICES

If you ask a pupil or pupils in a class to define the word environment using the brainstorming technique, they will suggest words such as: "nature", "forest", "plants", "animals", "house", "sky", "water", "air", "sun", etc. These words, each of which is interdependent and interrelated to the other, form a global picture of the world we live in. A world that is slowly being destroyed, degraded and is decaying, rocking every one of its components. A world in need of rebirth, which in biology means: 'the regeneration of an organism that has been damaged or mutilated'. How much damage or mutilation has our planet suffered?

It is, therefore, imperative that we as teachers promote issues such as recycling, circular economy, etc. to our students to motivate them to act in a protective way towards the planet.

The environmental problems of the planet are many and an important part of the solution lies in environmental education. Through experiential activities, students learn to cooperate and realise that the environment is a complex entity to which they themselves belong. As a result, the environmental problems and malfunctions concern them, since they will play a decisive role in solving them. The aim is to cultivate responsible citizens of tomorrow who will think that the issues of nature are their own. Through hands-on workshops they will learn (information) and feel (awareness) so as to act (problem solving). The key words for the environmental problem are: reduce, reuse, recycle.

For a greener, sustainable society, it is not enough to change consumption habits on an individual level but on a collective level where everyone acts as a multiplier in their family, neighbourhood, etc. By learning to be active within these small social cells, each one of us becomes a valuable part of the global consciousness for the future of the planet.

In the future, the planet will be in the hands of today's children. They need to be educated to build a better and more sustainable world. We are recycling more and more, but it is not enough.

It is important to make children aware of the need to follow a series of basic principles:

- Consume responsibly: buy the essential foodstuffs and opt for sustainable production.
- Reduce, reuse and recycle: reduce the amount of waste, recycle it and try to give it a second chance.
- Encourage self-consumption: grow food, either in the home garden or in an urban garden.
- Switch to fair trade: doing so protects the environment and boosts the development of small producers.
- Move in a sustainable way: travel by public transport, use the bicycle and walk whenever possible.

If we want a more sustainable planet, it is essential to follow the 3R rule, a proposal for responsible consumption popularized by the NGO Greenpeace:

- Reduce: we must minimize our impact on the environment by producing less waste (plastics, nuclear waste, CO2 emissions, etc.).
- Reuse: we must get used to prolonging the useful life of objects and materials by giving them a second chance.

- Recycle: when you can neither reduce your amount of waste nor reuse it for a new use, opt for recycling.

To teach recycling at an early age is essential for children to acquire this habit and practice it throughout their lives.

With FABULA C+ we intend to do our bit in raising awareness of the importance of recycling, based on a circular principle (vicious-virtuous circle) on which we support our proposal.

The circular economy is based on a system of resource utilization where the reduction of elements takes precedence, which is why it is presented as an alternative to the current model of production and consumption. This is because all manufacturing processes of goods or services involve an environmental cost, not only when the product is produced, but also once its life cycle is over. To minimize this cost, the circular economy advocates the optimization of materials and waste, extending their useful life.

This is how six areas of work are developed:

- | | |
|---------------|--------------|
| 1. Food | 4. Clothing |
| 2. Composting | 5. Oil |
| 3. Wood | 6. Medicines |

How can we recycle at schools?

According to the "Recycle your centre" manual of Ecoembes, a non-profit organization that takes care of the environment through recycling and eco-design of light household packaging in Spain, we can start with waste garbage cans.

Blue waste garbage bins

It is recommended to have two small cardboard boxes in the classrooms to collect the paper used in the classrooms. Reusable paper will be deposited in one of them, and recyclable paper in the other.



In the



playgrounds and in the dining room it is not recommended to install blue garbage cans, since the little cardboard packaging waste will be dirty and should be deposited in the waste container.

Yellow garbage bins

Breakfasts are usually held in the courtyard, so it is important to place the yellow garbage cans in this area. Also in the dining room, for the collection of containers generated with dessert. In the corridors, some garbage cans can be placed as a token. The idea is to save time for the cleaning staff and to save on garbage bags. Using recycled material for the elaboration of different handicrafts is also feasible and economical.

It is also possible to place a deposit for the recycling of batteries.

SOME EXAMPLES OF PRACTICES FROM OUR PARTNERS

COLEGIO CAUDE

Among other actions, **Colegio Caude** participates in the Circulation project¹².

“Circulization” is a multidisciplinary school project on environmental awareness, commitment and continuity (action) in our community. Students and teachers of Secondary Education are involved in the project.

Some of the actions that students carry out during PHASE I of the project:

- Perform surveys in order to know the level of awareness, commitment and action in their environment using the three generations (grandparents, parents and friends).
- Elaborate posters to teach the students of the Infant Education Stage and the first years of the Primary Education Stage which waste should be thrown in the plastic container (yellow) and which ones should be thrown in the paper and cardboard container (blue).
- Design a logo for the project.

PHASE II

Among other actions, the information obtained through the Phase I survey will be used by the students to reinforce their knowledge of the usefulness of statistics, environmental economics and to reflect on sustainable development.

In addition, the best papers will be chosen to be presented to the "Incubator of surveys and experiments" contest organized by the Faculty of Statistics of the Complutense University of Madrid.

PHASE III

Performing field work - selective paper collection from classrooms for reuse or recycling, by groups to carry out surveillance patrols in the dining room to check the correct use of plastic and organic containers, control the correct use of water in common areas, control in the courtyards of the new garbage cans to check the correct separation of plastic and organic waste by their classmates, conduct campaigns on healthy habits in primary school classes (preparation of talks).

¹² Project “Circulizate” started in 2018 and in which the whole school is involved.

<https://colegiocaude.com/circulizate-nuestro-proyecto-aprendizaje-por-servicio-hacia-la-sostenibilidad/>

102 DIMOTIKO SCHOLEIO ATHINON

102 Dimotiko Scholeio Athinon participates in various actions which promote recycling, volunteering, responsibility, sustainability and circularity. It is a member of Ellinika Aefifora Scholeia (Greek Sustainable Schools) and they have been working together so as to transform the school to become a learning environment where pupils, teachers, parents and staff work together so as to become active citizens who can tackle the diverse environmental and social problems and shape a sustainable future for everyone.

The project consists of various steps which enable the school community to actively participate and make decisions that affect not only them as individuals but the local community as well, turning the young learners into proponents of sustainability.

The first step is to present the project to the school community which is usually done by a teacher.

The second step is to form the Working Team which consists of the teachers who participate in the project, the head teacher, pupils acting as representatives (mostly from 5th and 6th grade), one or more parents from the parents' association and other staff (cleaners, person responsible for the school canteen etc.)

The Working Team decides on which 3 pillars they are going to work on since there are 8 of them, and more specifically Democracy and Participation, fostering learning, Promoting Arts and Culture, Saving Energy/ Transport policy, Sustainable building and school yard, saving resources, Promoting Health at school, From Local to Global Scale. Then the 3 choices are announced to the pupils and they are asked to participate in small research groups who will, in turn, become the ones who are going to implement the proposals.

Once the research has been conducted the pupils, supported by their teachers, recommend actions that will turn their school into a sustainable one.

The Working Team develops the Action Plan, prepares a schedule and sees to it that the deadlines for the implementation are kept. Additionally, a diary of all actions is kept.

For the last two years the school has chosen to work on the following 3 Pillars: Democracy and Participation, Sustainable building and school yard and Saving resources.

Through this project the pupils have become responsible consumers who care about the environment at a local, national and even international level. They have more awareness and have informed their peers and their families; they have become researchers and have also come up with viable solutions. Since the implementation of the project, all the pupils have become more active and involved in matters that affect their school life, their family life and the environment they live in. In cooperation with the whole school community, they have saved valuable resources. One example is the amount of paper the school used to use. They have suggested that all communication with the parents is done by e-mail. Paper that has been printed on one side is reused and if it can't be used any more, it is recycled. Water is saved and small-scale gardens have been made. Batteries are recycled to save valuable resources.

Another initiative that has been taken was to reduce food waste at school and then at home. A lot of the food of the school meals ends up in the garbage bin. They identified the problem, they conducted surveys at home and school and they organized a campaign to inform everyone about this problem and to find solutions. One of the solutions they offered was to give the food that

was not wanted to people in need or to an Old People's Home. Finally, they have decided to start composting to reduce the amount of waste and to close the CIRCLE and make something useful for the school garden and maybe in future to sell it to anyone who needs composting for their plants. This last idea was the product of their engagement with the FABULA C+ project.

ISOB

Another example of an initiative based on the concepts and best practices contained in this manual is offered by the **Suor Orsola Benincasa school** which, as part of the Fabula C-Plus Project, set out to build a book with the students of their school.

They decided to build a book because a book consists of words. So, working on language is very important. Language is the means through which it is possible to seize time and space and we can describe space. Children can imagine, through their words, to be in another space. This is also why they chose **Alice in Wonderland**. The fact that the main character falls is an excellent metaphor of how we are thrown into life, into an emotion, into abandoning our childhood.

In times of augmented reality, digital books and video games it was nice to rediscover the beauty of a book also created by children, but a hyper-book in the sense that it could be extended to many experiential moments in their school life. They chose to revisit the classic of Alice in Wonderland and starting from this book, they then asked each child to write on their own object what their "Wonderland" was. So, each child has his or her own cushion which is very soft. They also reflected on the beauty of being ready to hug a cushion, for each one to have their own cushion and to be seated comfortably, "happy bottoms, happy children", they said jokingly with the teachers and then they explained to them how a new object could be created from a sentence, from the imagination, from a piece of fantasy. This is because, from creativity, that is also the basis of a good market, it is not only the creation and in this case circularity of something useful which is precious, but also something beautiful. They have introduced the concept of time, space and beauty into children's lives, so that, putting these three ideas side by side transversely, they could make children think and allow them to become in the future, hopefully better, and not mere users and recipients of messages or goods, but producers of goods, services, ideas and visions.

One of the pedagogical issues that should not be underestimated in the contemporary world, especially in times of strong digitization and especially in urban contexts, filled with background buzzes and digital noises, in which learners are immersed for most of the day, concerns pollution and the sophistication of the sound field. Cities have always been noisy; there is even talk of "sound field pollution" already at the time of the industrial revolution in the large English suburbs, caused by the excessive noise of industrial machinery. Now, there is a new disturbance to the possible concentration of children, given by the sounds and adverts of digital devices, to which they themselves tend to expose themselves. Today, more than in the past, Maria Montessori's lesson about "the conquest of silence" is relevant and crucial again: in the classroom or in contexts suitable for interacting with children, Montessori used to invite them to listen to the noise of the world in a different way and to be silent for that noise to reach them¹³. This silence is a counteraction, an almost revolutionary act, which destabilizes the ordinary, made up of noises, virtual worlds and augmented realities, that distracts and destabilizes, and does not induce metacognition in children, that reflection that only "thoughtful silence" can instil. Certainly when we talk about infantile thinking and reasoning, it must be understood, before the age of seven, in a pre-logical sense. However, in the old cycles of

¹³ Montessori M., L'autoeducazione, Garzanti, Milano, 2018.

Montessori M., Il segreto dell'infanzia, Garzanti, Milano, 2013.

education, when children joined first grade at the age of six and a half, the Montessori lesson is very fitting because, in the phase in which the child's logical-formal¹⁴ thought is structured, it is necessary to teach him or her the richness of silence, which is also a lesson in identity ethics, because without silence one cannot listen to others and, if you do not do this, you cannot learn. Taking possession of something that you do not have yet, of the unknown, is not possible without silence. Hence, a whole series of games such as the marching in silence, a game dedicated to listening to the sound of the wind, birdsong ...

According to the 1991 Italian Guidelines for Kindergarten¹⁵, the kindergarten becomes a school in which the child is valued in a specific educational path, aimed at enhancing all his or her rights, needs and potential. Chapter 4 of the Guidelines lists the distinctive features of those who work in educational services. The teacher must have a playful and joyful approach to support their curiosity, common discovery, their sense of tension and wonder.

CONCLUSION

We would like to thank all the educators and staff working in the Erasmus+ KA2 “Circular Economy applied to FABULA Project Framework – FABULA C-PLUS” project, code 2020-1-IT02-KA201-079244 who have participated in drawing up this manual. E

We hope that this manual can be an inspiration for others working in similar fields. **TEACHER FACILITATORS** have the role of teaching, guiding and nurturing the future generations of mankind to respect others and the environment and in these complicated post-Covid 19, war-torn times this is a fundamental task to guarantee our future.

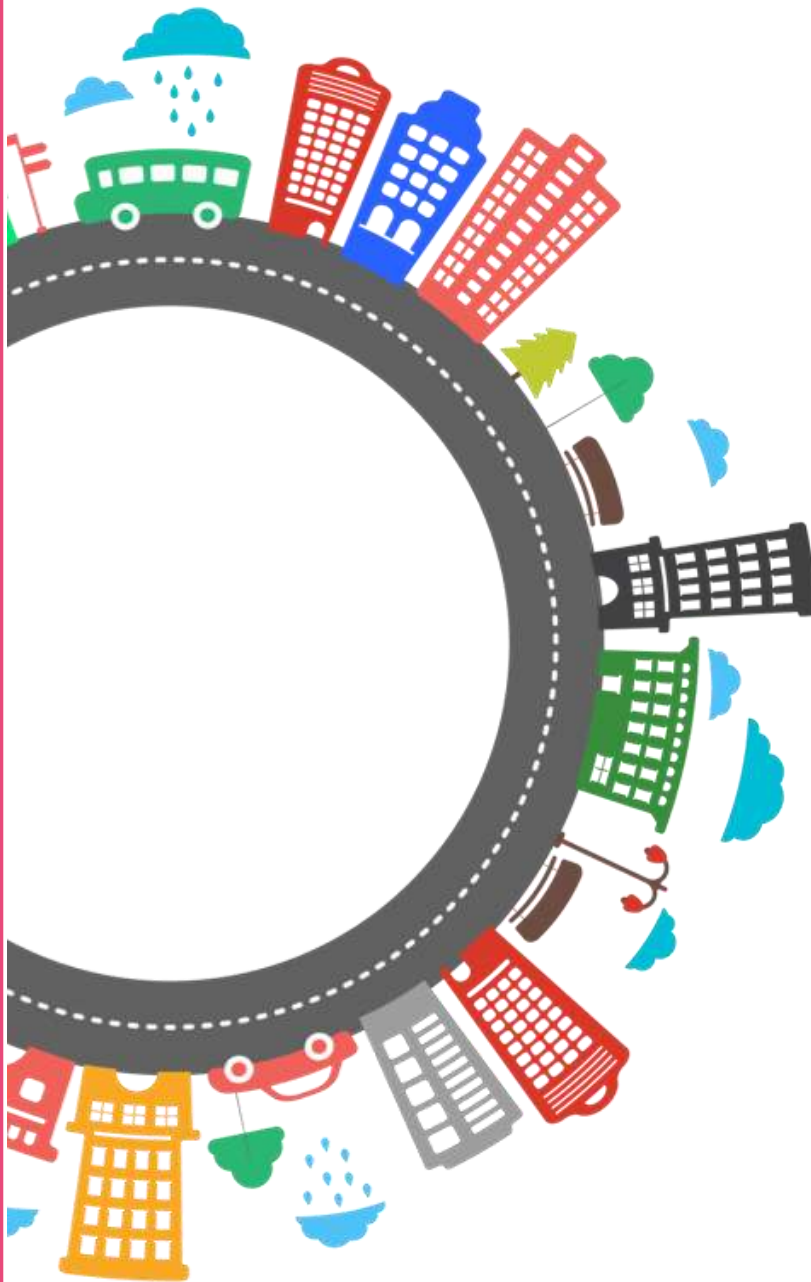
¹⁴ Piaget J., Lo sviluppo mentale del bambino ed altri studi di psicologia, Einaudi, Torino, 2001.

¹⁵ <https://www.istruzione.it/sistema-integrato-06/allegati/Documento%20base%20Orientamenti%20nazionali%20per%20i%20servizi%20educativi%20per%20l'infanzia.pdf>



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