

CHALLENGING EDUCATION: FEELINGS AND NATURE
IN ACTIVE PEDAGOGY

The project "OUTLEARN IT!" has been cofunded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the Servicio Español para la Internacionalización de la Educación (SEPIE). Neither the European Union nor SEPIE can be held responsible for them.



**Co-funded by
the European Union**

Active and green pedagogies through OUTdoor LEARNing
2021-1-ES01-KA220-SCH-000034503



AUTHORSHIP:

CEIP Eleuterio Pérez
CLAP Educación Activa S.L. – Brand: amiga.eco
Fundación de la Comunitat Valenciana para una economía baja en carbón
Hogskulen pa Vestlandet (HVL)
IC Fregene Passoscuro
Lorenzo Filippi, in collaboration with Treecanopy
Vsl Lauko Darzelis

12/2022

Creative Commons no comercial, ShareAlike (CC BY-NC-SA)

INTRODUCTION

This book aims to inspire educators to think differently about education and how to organise lessons. It draws on both theoretical perspectives and the authors' extensive personal experiences from active -, green pedagogy, and outdoor education.

In this book, we focus on children in their first stages of education, approximately 3-11 years old. The intended audience is teachers in schools and kindergartens, policymakers, owners, and others interested in children's learning. Thus, we have attempted to make complex concepts and theories graspable.

We do not provide a prescriptive approach for teachers to follow because our readers are located in different educational systems and cultural contexts. The differences make it impossible to provide one 'recipe' that is sensitive to the different educational systems, teaching cultures and children. Rather than a 'book of recipes', this book is meant as an inspirational companion to think differently about education and educational practice. Thus, teachers and other educators have to apply the content to their cultural and physical context and their pupils.

BACKGROUND

The COVID-19 pandemic and the ongoing Climate Crisis remind us that the future is uncertain. With this in mind, it becomes essential that children learn how to take initiatives, adapt to changes, be creative, and participate in society. It is not enough that they only learn 'narrow' academic skills.

Our impression is that the Covid-19 pandemic resulted in an increased interest in using outdoor spaces, including nature, for educational purposes. Learning when interacting with the content in real-world situations may also enhance children's learning because they engage with the content using their senses in a relevant context. Thus, the children create more pegs to put the knowledge on. Additionally, it inevitably results in children moving, which has various health benefits. For example, movement strengthens the immune system, and reduces the risk for cardiovascular diseases, depression, and high blood pressure.

Our impression is that the Climate Crisis has reminded many that humans are one of many inhabitants of this planet and are tightly entangled with nature. Humans being entangled with nature means that our actions have consequences for the environment, including nature, and that environmental changes have consequences for humans. For example, fish and plants may die if humans dam up a river. On the other side, humans are affected by environmental changes such as increased temperatures and lack of rain.

The understanding of the reciprocal human-nature relationship is one foundation of this book and the authors' professional work. Many argue that experiences in and with nature are essential for developing environmentally friendly values. Hopefully, children may learn to care for nature and later protect our planet during this time of changing climate and destruction of nature.

No one knows what the future will hold and what competencies, skills and values future citizens should have. Our approach in this book is that education should also be about creating ways for children to develop as environmentally friendly, creative, and critical thinkers who participate in society. Children are at the centre of education in all stages. The ambition with this book is to explore what active pedagogies may be and how they may be a part of a pedagogical praxis.

MAIN AUTHORS

The authors of this book have different backgrounds. We come from different countries, cultures, and practices, and have different educations. The differences provide this book with overlapping perspectives on how to facilitate children's learning.

Tom Lund is an assistant professor at the Western Norway University of Applied Sciences. His research interests include pedagogy in Outdoor Education and Physical Education. Tom is currently researching a PhD-project investigating environmental attitudes among students. Additionally, he teaches Outdoor Education and Nordic Friluftsliv to international students.

Jostein Rønning Sanderud, PhD, is an assistant professor at the Western Norway University of Applied Sciences. His research interests include children's experiences during self-governed play in natural environments and the importance of movements, bodies, and autonomy for children's growth. He is currently teaching at the Bachelor's programmes in 'Preschool Teacher Education' and 'Outdoor Studies' and the Master's programme in 'Sport Sciences'.

Lorenzo Filippi, born in Naples (Italy) is a Development Coach and Behavioural Therapist. After a considerable time spent working in an Information Technology Corporation, he decided to significantly change personal and professional perspectives, and headed towards Education, Outdoor Education, development consultancy, personal and organisational Coaching, and sustainable growth. Along with several seminar courses on Outdoor education held across the world, Lorenzo is also co-founder of "Asilo nel Bosco" in Rome, Italy (2014), and co-founder of International Federation of Forest Kindergarten (with Petra Jager, 2015).

Petra Jager, born in Flensburg (Germany), has an outstanding track record in Education and teaching in Forest Kindergartens. In 1993 Petra founded and led what became one of the most important Forest Kindergartens in northern Germany. Since then, she has continued to be a pioneer in the field of Forest Kindergarten in Germany and internationally, and is highly recognised as a key professional in this field. Her many roles include: teacher and leader at Flensburg FK, advisor for Kindergarten in Germany, involved in starting up several Kindergartens across Europe and Far East. Petra is also a systemic Consultant.

Elena Archilés is an educational consultant and Teacher Training Programme coordinator. She is the co-founder of Amiga.eco where she helps public schools move into educational models that are more connected with life. In Amiga.eco she is also responsible for the pedagogical aspects of playground transformations and rewilding. She is also the founder of *Naturea*, a service centred in outdoor learning and emotional support of children aged 3-11. Elena graduated in translation and interpretation, followed by a UK postgraduate degree in education. She worked at a public school in London for 7 years (QTS: 0336237). She continued her training in areas such as outdoor

learning, the design of educational spaces, supporting children emotionally in education, Gestalt therapy or Nonviolent Communication.

COLLABORATORS

Here is a short overview of the people who contributed to the revision, formatting, visual image, design of the cover, coordination of the authors and timings, proofreading, assuring the environmental approach of the content, and publication and editing of this book:

Beatriz Callau, a primary school teacher at the Eleuterio Pérez Primary and Elementary school in Spain. She has worked in public schools for 18 years and has trained in green pedagogy and emotional education.

Mzeona Chkheidze, from Lauko darželis ir mokykla. She is an English and art teacher from the outdoor primary school in Lithuania.

Nicolás Garzón, from Amiga.eco. He is a civil engineer, specialist in rewilding school playgrounds and creating learning spaces in unused plots of land and open spaces.

Laura Romano, from IC Fregene-Passoscuro in Italy. Laura is an English teacher in secondary school and she has been teaching for nearly twenty years.

Lucía Toledo, from the Low Carbon Economy Foundation in Spain. She is a project manager and expert in environment education.

Maja Zimmermann, an assistant professor at the Western Norway University of Applied Sciences. She currently leads the bachelor programme 'Nature based tourism and nature guiding', which uses experiential approaches to teach outdoor leadership and nature guiding. She has a master in Transcultural European Outdoor Studies.

Ingrida Zalaliene, from Lauko darželis ir mokykla. She is a Lithuanian language teacher from the outdoor primary school in Lithuania.

STRUCTURE OF THE BOOK

The book is structured around three chapters where the first chapter lays out a theoretical groundwork and the subsequent chapters are primarily based on the authors' extensive experience with creating educational situations for children in different contexts.

In Chapter 1, Tom Lund and Jostein Rønning Sanderud outline the dominant educational rhetoric in European educational systems that emphasise learning of narrow academic skills through goal-oriented learning over values and attitudes such as environmentally friendly attitudes. Later, Professor Gert Biesta's concept of 'subjectification' is presented as a way to challenge goal-oriented learning. 'Subjectification' is the process of shaping children into citizens who know how to manage and participate in society and how to relate to, for example, other people and the environment with certain values. Secondly, we present experiential learning as a way children learn through active engagement with the world. Finally, we present the holistic model, 'the Didactical Relationship Model', as a way teachers may facilitate learning. The model displays that planning for teaching is complex and several factors need to be considered.

In Chapter 2, Lorenzo Filippi and Petra Jager draw on their extensive experiences with outdoor education. The chapter, titled "Green pedagogies", sheds light on green pedagogies and, most importantly, provides hints and suggestions on some peculiarities of this pedagogy. They refer to "the World as Our Classroom" in the first subchapter. In the second subchapter further insights about space, boundaries, play, and imagination and other factors are depicted. The final part represents a "Call for action" indicating how important Outdoor Education is for sustainable development, for the Earth, and for the entire human race.

In Chapter 3, Elena Archilés combines theoretical aspects with her own educational experience, both as a teacher and as a consultant. She will talk about what factors should be taken into account when accompanying children to ensure they grow up into confident, accountable and assertive adults. She raises the question of whether praise is one of those factors. In the second subchapter the concept of non-punitive education is introduced. Here Elena analyses the importance of establishing clear boundaries in creating appropriate learning environments, which means avoiding bribes, rewards, threats, or punishments of any kind. The final subchapter is dedicated to the importance of accepting the entire range of emotions. Here Elena reflects on the importance of listening non-judgmentally to children's expressions of feeling, questions the idea of 'good' and 'bad' feelings, and looks at how communication plays a key part in establishing strong bonds with children.

Personal pronouns in the different chapters refer to the author(s) of the chapter.

ACKNOWLEDGEMENTS

This book is the result of the project "OUTLEARN IT!". The project is funded by Erasmus+ and aims to inspire educators to think broadly about education, including ways to use the outdoors to promote sustainable development.

This eBook is the first of two project results of the OUTLEARN IT project. The second project result is the creation of didactic units, which will facilitate the practical implementation of green and active pedagogies in outdoor learning for teachers in the first cycle of primary education. If you find the eBook theoretical and are keen to see examples of these theories in practice, you will find more information about the didactic units on the project website www.outlearn.eu.

OUTLEARN IT was initiated by the Low Carbon Economy Foundation together with Clap Educación Activa (involving its brand Amiga.eco). From there, different organisations joined the team: Lorenzo Filippo (part of the project Treecanopy), the outdoor kindergarten in Lithuania "VšĮ Lauko darželis", the Western Norway University of Applied Sciences, and the schools CEIP Eleuterio Pérez, in Spain and IC Fregene Passoscuro, in Italy.

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

The pictures used in this book (not including pictures where another source is cited) belong to Waldkindergarten Flensburg e. V. and Asilo nel Bosco Ostia antica. They have been used with permission. We have the proper authorisation from parents/guardians to use the pictures in which children appear.

OUTLINE

INTRODUCTION	4
BACKGROUND	5
MAIN AUTHORS	6
COLLABORATORS	8
STRUCTURE OF THE BOOK	9
ACKNOWLEDGEMENTS	10
OUTLINE	11
1. ACTIVE PEDAGOGIES AND EXPERIENTIAL LEARNING	13
1.1. Too much focus on 'learning' in schools and kindergartens?	14
1.1.1. Education should also be about shaping tomorrow's citizens	15
1.1.2. 'Subjectification' and 'experiential learning' as alternative approaches to education	16
1.2. Different forms of learning.....	18
1.2.1. The learning as acquisition metaphor	19
1.2.2. The learning as participation metaphor	21
1.3. One way to plan for children's learning: The Didactical Relationships Model	23
1.3.1. Framework of factors	24
1.3.2. Goals.....	24
1.3.3. Content.....	25
1.3.4. The Learner's Profile.....	25
1.3.5. Methods	26
1.3.6. Assessment	26
1.4. Summary.....	27
1.5. Further reading.....	28
2. GREEN PEDAGOGIES	30
2.1. "The world is our classroom".....	32
2.1.1. Anticipation for learning	32
2.1.2. Evolution and learning	34
2.1.3. Do we really need a book for our day at school?	34
2.1.4. Feeling and learning in nature	37
2.1.5. A real-life case: The Waldkindergarten Flensburg ("A report by a former headmaster) ...	37
2.2. "School in nature or nature in school".....	38
2.2.1. Space	38
2.2.2. Toolbox for being outdoors	40
2.2.3. Play and imagination.....	41
2.2.4. Silence and noise.....	43
2.2.5. Learning by experiencing nature's boundaries	44
2.2.6. Inclusion in nature education concepts.....	45
2.2.7. Meaningfulness for what has been learned	46
2.2.8. How do we feel as adults	47
2.2.9. "Watering the seeds"	48

2.2.10.	A report by a former headmaster	50
2.2.11.	Bridging across	52
2.3.	Catastrophic approaches will not save our planet.....	53
2.3.1.	Outdoor Education and SDG (Sustainable Development Goals)	53
2.3.2.	The Earth's health is our duty, our responsibility; understand it is something everyone should do and it's in our DNA	55
2.3.3.	Linear vs Circular economy	55
2.3.4.	Outdoor Education improves environmental attitudes	57
2.4.	Conclusion and take-home message	60
3.	THE IMPORTANCE OF CONNECTING WITH CHILDREN IN A LEARNING ENVIRONMENT	64
3.1.	Do children need praise to build healthy self-esteem?.....	65
3.1.1.	Illumination	67
3.1.2.	Colours.....	67
3.1.3.	Furniture distribution	67
3.1.4.	Identity.....	67
3.1.5.	Structure, flexibility and order	68
3.1.6.	Polysensory spaces	68
3.1.7.	Austerity	68
3.1.8.	Autonomy	68
3.2.	Non-punitive education	71
3.3.	Communicating from the heart and accepting the whole range of emotions	76
3.3.1.	Speak in the first person	76
3.3.2.	Non-Violent Communication (NVC)	80
3.4.	Expressing our needs	84
3.5.	Further reading.....	87
4.	CONCLUDING COMMENTS	90

1. ACTIVE PEDAGOGIES AND EXPERIENTIAL LEARNING

CHAPTER 1

Tom Lund and Jostein Rønning Sanderud

This chapter addresses a growing concern among scholars and teachers in Europe about what constitutes 'good education'. Questions are raised about what may be included in 'good education': including how children learn, whether classrooms are the best scenario for learning and what the role of the teacher should be in the learning processes.

In chapter 1.1., we problematise the concept of 'learning'. What may the concept mean in an educational context? We outline the dominant educational rhetoric in European educational systems conceptualised as 'learnification'. The rhetoric emphasises 'more' goal-oriented learning of measurable learning content over questions about what and how to achieve it and what consequences it may have. Later in the chapter, we will present Professor Gert Biesta's concept of 'subjectification' and the pedagogical approach 'experiential learning' as a way to challenge goal-oriented learning. 'Subjectification' differs from perspectives with a one-sided focus on goal-oriented learning. Instead, 'subjectification' is a process of shaping children into citizens who know how to manage and participate in society, what objects to choose and use in different situations, and how to relate to other people and non-human forms of life in, for example, sustainable ways. Gert Biesta is a renowned Professor of Public Education at Mynooth University, Ireland and Professor of Educational Theory and Pedagogy at the University of Edinburgh, UK. The section builds mainly on Biesta's ideas.

In chapter 1.2., we review different ways in which children learn. To make the landscape of learning theories more graspable, we present two metaphors representing two groups of learning theories: 'Learning as acquisition' and 'Learning as participation'. We emphasise 'learning as participation'. In this metaphor, children learn in interplays with their social and physical environments. Within this group, we find 'experiential learning'. 'Experiential learning' represents an alternative approach to learning that differs from the emphasis on goal-oriented learning because in 'Experiential learning', it is important that children actively 'do' things to learn.

In chapter 1.3., we present a holistic way teachers may facilitate learning by introducing "the Didactic Relational Model" which is a commonly used model in Norwegian Teacher education.

1.1. TOO MUCH FOCUS ON 'LEARNING' IN SCHOOLS AND KINDERGARTENS?

An increasing number of researchers fear that humanistic values, such as autonomy, integrity, and critical analytical thinking, seem to be little prioritised in children's education in European educational systems. One main reason is that education policies are largely inspired by neo-liberal marketisation ideals and thus emphasise narrow and measurable learning goals over humanistic values.

Kindergartens and schools have historically had different roles in different countries. The meaning and function of education is always shaped in a cultural and historical context by how policymakers, owners, teachers, and students act, teach and steer kindergartens and schools (Willbergh, 2015). However, teachers, scholars and politicians in different countries are still ambivalent about how kindergartens relate to school and the purpose of schools and education in general. Today, one dominant rhetoric in educational politics in many European countries follows a free-market logic centring on what (economic) profit the society may gain from investments in education. The logic is based on the 'Heckman curve' by James Heckman, a Nobel Prize winner in economics. It displays how investments in the early years will give more profit in terms of human capital than investments in elders (The Heckman Equation Project, 2019). Human capital is perceived as citizens who possess skills to produce and invent (for e.g., the industry) to increase the nations' gross domestic product (GDP). Thus, education becomes central for improving a wide range of sectors in society and may thus be narrowed to serve industrial concerns over democratic and humanistic values such as democratic, critical, and creative citizens (Biesta, 2006).

A combination of the 'Heckman curve' and political fear of low scores on comparative student assessment studies in schools, such as Trends In International Mathematics And Science Study (TIMSS) and Programme for International Student Assessment (PISA), have led to an increased focus on 'learning' in many schools and kindergartens, what Biesta conceptualises as 'learnification'. Comparative student assessment studies are one example of how governments steer schools and kindergartens to improve children's learning outcomes through checking and accounting for the practices of teachers. The logic here is that governments want to control teachers and schools in order to make sure they get the best possible return on their investments in education.

A consequence is that many pedagogues in, for example, kindergartens in Norway, have been instructed to use standardised learning programs, such as the behaviouristic 'The Incredible Years' (Pettersvold & Østrem, 2018). Behaviouristic programs focus on changing children's behaviour through rewarding behaviour that is valued by the teacher (see chapter 3 for a discussion on reward strategies). For example, by giving children a 'star-sticker' if they sit still or perform well. The idea here is that children would like to have more 'stars' and thus they will work hard to achieve a new 'star'. The implementation of standardised learning programs indicates that policymakers and owners want to control schools and kindergartens by boundarying teachers' space to make professional judgments and initiatives by instructing them to use learning programs (Biesta, 2010). At the same time, governmental testing, comparisons of children's knowledge, and owners' control over teachers' practices lead

to repetition and standardisation of teaching rather than promoting teachers' local initiatives and professional judgement.

Within this instrumental understanding of education, the scores on different tests determine the school's and kindergarten's success. It is also a way for schools, kindergartens and nations to compete by comparing the results. One result is the questions about 'what' to learn and 'why' to educate are overrun by emphasising how children may learn 'more' and 'better' abstract academic knowledge to score best on later tests. One result is that many schools and kindergartens emphasise teaching methods that make children sit still behind a desk and listen or read about the subject. For example, children read about nature indoors or they calculate the circumference of a printed circle in a book in order to score the best possible on a later test because it is perceived as the most 'effective'.

In the classroom, it is easy for teachers to control what children do and presumably what they learn by acquiring knowledge by reading textbooks and listening to the teacher. In this book, we will present other approaches to teaching that we believe display a breadth in ways to teach. Biesta (2010) claims that the one-sided focus on more learning is directionless without a specification 'what' education should be and 'why' we have an education.

In Biesta's (2016) view, education should address society's current and future challenges. For example, the climate and ecological crises and ways to deal with 'fake news'. There is a need for a systemic change in education to meet contemporary societal challenges that a neo-liberal education cannot facilitate.

1.1.1. EDUCATION SHOULD ALSO BE ABOUT SHAPING TOMORROW'S CITIZENS

Although researchers are concerned about the 'learnification' of schools and kindergartens, various pedagogical initiatives have different approaches to what children should learn. For example, in chapter 2 you can read about Forest-kindergartens. Another example is the Nordic kindergarten tradition. Here learning through social situations, such as during self-governed play, is emphasised. Children are often at the centre of the lessons because teachers follow children's interests and initiatives when intuitively creating learning situations.

One way of challenging the 'learnification' is to regard children's learning as an active and creative process founded on children's embodied and sensory experiences with their surroundings. In other words: children learn through experiences by using their bodies in physical and sensory interactions with features of the environment. The interaction may generate different skills and understandings than prescribed learning programs may do. For example, when playing with sticks children sense the weight and balance of the stick. They can feel the roughness or smoothness of the "bark". If they try to bend it, they experience the flexibility the stick has until it may break. Together, these sensory experiences fill the stick with meaning. Thus, the stick becomes something more than 'just a stick', but a stick with certain qualities that may be used - or not used - in their play. When children construct a den as a part of their self-initiated play, they learn to cooperate by waiting for turns and adjusting their actions to other children's ideas and interests. These are important social skills. Further, they experience what stick

sizes can be placed in relation to other sticks and how the sticks together become a den. In the process, the children learn that they can influence their surroundings for their benefit. Social skills and knowing that their actions have influences are important insights for citizens. These situations are context sensitive because the sticks they choose result from the current play, what possibilities the different children 'see', and how the building grows. Thus, building a den will never be the same in different kindergartens or in different countries.

The insight is that children learn a broad range of values and skills from active interactions with environments and other children. A consequence is that teachers have to acknowledge children as individuals with personal needs, interests, and motivations (See also Chapter 3). Children are not machines who learn in equal ways, as the use of universal learning programs indirectly suggests. Thus, teachers cannot regard learning as mechanical input-outcome operations, but rather as relational interplays between children and their physical and social environments.

1.1.2. 'SUBJECTIFICATION' AND 'EXPERIENTIAL LEARNING' AS ALTERNATIVE

APPROACHES TO EDUCATION

Biesta argues that one important aim of schools and kindergarten should be to support and assist children to learn to function and act in society. The idea is at the core of his 'subjectification'. In this context, it means that the children should learn to take initiatives and act when they recognise, for example, injustice for other people or for life on the planet. It also means to take responsibility for themselves and the planet. To do so, education should embrace what Biesta refers to as all three domains of education: 'Qualification', 'Socialisation' and 'Subjectification'. The domains are overlapping and describe different aspects of education. This text will emphasise the domain of 'subjectification' because we believe that the domain is progressive and interesting for teachers.

QUALIFICATION: CREATING KNOWLEDGE

One important part of schooling, and an important justification for education, is that children acquire specific knowledge and skills that governments and teachers perceive as important. For example, children should learn how to multiply, name significant cities and animals, and learn about natural environments. In 'learnificated' education systems, there are narrow perceptions of what qualifications and contents children should learn. For example, calculating theoretically indoors is often perceived to be important to prepare children for tests rather than applying mathematics in real-world situations, such as learning to use the timetable of the local bus or estimate the effects of pollution in a local lake.

SOCIALISATION: LEARNING WAYS TO DO THINGS

However, according to Biesta, the creation of knowledge and skills holds certain ways of representing the world and presents what is considered to be valuable

knowledge and skills. When teachers and publishers select themes for children, they also present children with cultures, traditions, and practices, either explicitly or implicitly. All this impacts the student as an individual.

For example, teachers select which ecosystems and animals they emphasise, what the children learn about them and how they learn about them. Additionally, the subjects hold specific skills regarding what ecosystems are significant, and how to acquire knowledge about, e.g., photosynthesis.

SUBJECTIFICATION: MORE THAN ACADEMIC KNOWLEDGE

Children are autonomous, social and thinking persons¹ with their own will. However, they are also affected by social and cultural aspects. Thus, teachers' lessons will inevitably shape how children act as persons and affect what persons they are about to become. In this case, how children interact with their surroundings and care for the environment. Teaching is not only about what knowledge children learn. If we recognise children as active, competent and autonomous persons they should also be allowed to exist as such!

'Subjectification' is about shaping children into future citizens who actively participate in societies. Thus, 'subjectification' is more than the transmission and reproduction of skills and knowledge. For Biesta, a good education is about creating critical, creative, free-thinking citizens of tomorrow who hold skills, values, and initiatives which may take on tomorrow's societal challenges with the ability and initiative to meet or resist.

In other words: schools and kindergartens should create situations where children can make decisions, engage with uncertainty, and solve problems in relevant contexts. By doing so children may learn about making decisions, altering plans, and the problems they solve may have relevance for them in their everyday life. 'Subjectification' occurs, for example, when children participate in the local community.

Central for Biesta is that schools and kindergartens should provide children with some degree of freedom to exist as persons and to decide what actions to take or not take, for example, to solve problems posed by situations. Biesta's freedom is not complete freedom, but institutionalised freedom with the possibilities and boundaries existing within the school and society at large. This means that the activities/lessons teachers organise need to have time and space for children to create other directions and engage in other ways than those the teachers planned for.

Teachers may support and prepare the children to understand that they may be active participants in society by including freedom for children to act as persons, make decisions, and engage in real-world issues. For example, teachers may organise mathematics in the schoolyard. When calculating the surface area of the schoolyard children may learn in other ways than doing the same problem indoors. In the example, the children must cooperate to measure their schoolyard, they may have to discuss with each other to cope with obstacles, such as something hindering their measurement, or

¹ Biesta would use the concept of 'subjects'. However, we use 'persons' in this text for readability.

sudden changes in weather. At the same time, they work with the materials of the schoolyard by touching and moving across them. Thus, they may experience the width and breadth of it using their bodies while at the same time connecting that experience to abstract numbers and calculations. To put it simply, children may learn to relate to others and themselves through respect, participation, and critical thinking when living and acting in (social) situations. The point is that children must be given freedom in their education to make decisions, deal with challenges, and object if they experience injustice. Thus, they may be equipped to make environmentally friendly decisions, deal with local environmental challenges, and object if they experience injustice against the environment.

In order to shape children into citizens that are environmentally friendly, it is not enough for teachers to only focus on isolated knowledge (qualification). Rather, teachers need to have a critical gaze on what kind of persons the children are being shaped into during the lessons. It means that teachers need to think about what kind of cultures and values children are socialised into during teaching. For example, attitudes towards nature, climate and the environment.

'Subjectification' also highlights the significance of giving children opportunities to experience varied landscapes and different seasons and weather conditions when provision is made for children to go their own way and to be co-creators of their own knowledge. When moving and playing, children create understandings about what they can do and cannot do using their bodies, and what possibilities they have in influencing their social and physical surroundings (Sanderud et al, 2020). In this way, children may be shaped into citizens that take environmentally friendly actions.

The kind of knowledge children create by moving and sensing the learning content is difficult to quantify and standardise because it is personal and occurs in specific situations. It is impossible for teachers to 'secure' children's learning. Knowledge is created by acting in and with the environment by solving real-world problems in local contexts, rather than through individual cognitive learning 'about' the environment.

Biesta (2021) emphasises that children learn from participating in and experiencing social and material situations. The idea that experiences with "real" situations are central to how we make sense of the world is also acknowledged in different pedagogical approaches to learning.

1.2. DIFFERENT FORMS OF LEARNING

Children learn in different ways. We argue to include an active pedagogy where children create knowledge and experiences by engaging with the content they are supposed to learn about. For example, approaches where children are active participants in the learning process, rather than passive pupils who are supposed to absorb knowledge from the teachers like a sponge absorbs water. A change toward an 'active pedagogy' must be reflected in how teachers and the educational system think about learning because we believe that how teachers think and talk about learning influences their practice. Thus, it is important to think critically about how children learn.

There are many theories explaining how children learn. The theories represent different perspectives and conflicting explanations. However, the landscape of learning theories can be confusing and abstract. In an attempt to make the learning theories more understandable and practical, we group them into two metaphors: The 'learning as acquisition' and 'learning as participation' metaphors. This is, of course, an oversimplification of a complex field, but we believe it displays important differences in how children's learning is explained. We believe the metaphors provide important and practical understandings of two counterpoints of theories. There is not one single theory, or in this case group of theories, that is better. Rather, the group of theories presented here are supplementary to each other.

In short, '*learning as acquisition*' is often present in 'learnificated' schools and kindergartens. Here, knowledge is something children acquire by reproducing knowledge presented by the teacher. The approach is often cognitive-oriented and it is often characterised by the teachers explaining something and the student repeating it. The learner is perceived as a container to be filled with knowledge.

On the other hand, '*learning as participation*' is a metaphor for learning where the learner creates knowledge by engaging in a social context. At the same time the learners are also becoming members of a certain community. Thus, it may be found in educational systems that may foster subjectification among the students.

As a part of the 'learning as participation' metaphor, we will briefly discuss how 'experiential learning' may provide a core argument for making children participate in solving real-world problems, such as doing mathematics outdoors (see chapter 2 for examples).

1.2.1. THE LEARNING AS ACQUISITION METAPHOR

Acquisition means the 'act of obtaining'. This metaphor refers to children receiving knowledge through various means. As the teacher talks, or by reading a textbook, the child will acquire new knowledge and add it to what the student already knows. In this metaphor knowledge is accumulative, meaning that new knowledge builds on what the child already knows.

For example, many children begin to learn letters before they learn how to write words. Knowing how to multiply usually follows the knowledge of adding numbers in mathematics. The same applies to practical skills where orienteering using a map would follow knowledge about what the different symbols on the map represent in the landscape.

The acquisition metaphor for learning makes learning sound neat and tidy: Acquire one block of knowledge at a time, and soon the child will have all the knowledge they need. It is easy to measure and observe the learning that takes place in this metaphor as the school and teacher can perform tests to check if the children have acquired the required knowledge before proceeding to the next block of knowledge.

This metaphor is linked to what Biesta called "learnification" because the child learns to reproduce knowledge that the teacher and society as a whole already know: The child acquires knowledge, skills and competencies that the education system or the teacher has decided are important. Tools evaluating how much knowledge the children have acquired are frequently used to evaluate and rank students' learning. Learning seems to have a quantitative form in this metaphor where the aim of the learning process is to acquire as much knowledge as possible and then reproduce this knowledge when tested. When the children have the required knowledge, they graduate from school.

Sfar (1998) displays two main problems with the learning as acquisition metaphor. Firstly, the child is relatively passive in defining what to learn and is seldom involved in the learning process. For example, the metaphor may also apply to knowledge the children gain through experiential learning and practical work. However, when thinking of learning as acquisition the teacher will have clearly defined the area that the children are going to learn about and how he will assess their learning.

In this metaphor, the child has little influence on what is learned. Following the learning as acquisition metaphor, there is little adaptation to the individual child in regards to what the learning content should be. As such, the children do not get to be active in designing their own learning and education. This will mean that the teacher must spend much time making sense of the learning content and answering why the students should learn the content of the educational programmes.

The other problem Sfar (1998) points out is that the learning theories in the "learning as acquisition" metaphor do not sufficiently explain how children may learn something that the teachers do not already know. For example, the theories in the learning as acquisition metaphor have problems describing how a child may figure out original solutions to problems and adapt knowledge to new contexts. The child becomes passive in the sense that there is a right way to apply the knowledge they have acquired to a given problem. The acquisition metaphor is thus related to the 'learnification' tendency discussed earlier in this chapter.

When learning is perceived as merely acquisition of predefined content, education is reduced to a simple transfer of knowledge. The children are not learning to address problems they will face in an unknown future.

Let us use the UN's Education for Sustainable Development as an example. It is one of the biggest missions that schools and education systems are facing today. The world is facing climate and environmental changes at a rapid pace. Thus, the next generations will have to solve complex problems with unknown consequences. We believe that Education for Sustainable Development will be one of the biggest influences on how schools and education systems reform during the coming decades. The United Nations claim, in their strategy for education for sustainable development (UNECE, n.d.), that schools need to be more than a place children acquire knowledge to educate for sustainable development. Additionally, the schools should hold transformative educational programmes that make children change their own and society's values, because the way people apply knowledge is guided by their values. In other words: people's desire (or lack of desire) to make sustainable choices is a question

of values. Thus, the education and schools that aim to contribute to sustainable communities should be more than a place to reproduce knowledge.

It is tempting to oversimplify: Learning as acquisition can traditionally take the form of learning from books and from teachers. However, it may also be experiential and practical. So, let's not think of learning as acquisition as everything that happens in the classroom and as abstract teaching. It is essential at this stage to clarify that 'learning as acquisition' is an important aspect of education. However, the metaphor has become too dominant in western education. The dominance and one-sided ideas of learning as acquisition are linked to the 'learnification' in school that we discussed earlier in this chapter.

In the following, we will discuss learning as participation. Both of these metaphors should be present in schools and education systems because they complement each other. Children are better off in schools if we balance how we teach. If our practice can reflect a balance between these two ways of learning we believe schools could be an arena for students to blossom into citizens for positive change.

1.2.2. THE LEARNING AS PARTICIPATION METAPHOR

To participate means to take part in, for example, a group, a project or society. Learning as participation means taking part in something larger than oneself. This metaphor can be understood as a way of becoming a person and a citizen and is thus linked with Biesta's subjectification. We are aware that this might be a bit philosophical at the moment, but we still want to dwell some on how the "learning as the participation metaphor" is important in schools.

Wenger (2020) argues that taking part in social spaces and engaging in a joint practice is important for children's learning. According to Lave and Wenger (1991), a practice is what the group of children engage in. For example, in this case, solving a problem in groups or playing together. The learning space is the physical and social place the group engages in. The social group and learning space can take many forms, but for our purpose let us think of a school class. One result of the understanding that children learn from participation in social practices is that children should be regarded as active creators of knowledge.

Children are individually different. They have different experiences and interests. Thus, each child brings different experiences, meanings and engagements into the social spaces and joint practices. Hence, children can not be understood as uniform learning objects, but individuals that have their own intentions and meaning with their participation.

Learning happens all the time with the whole child. The bodily, cognitive, and social aspects of the child cannot be separated from each other. Learning is therefore closely related to identity making and participation in different communities and social spaces (Lave & Wegner, 1991). Learning is situated in the social and physical context that the child participates at the time. Learning is therefore a result of the practice that the child takes part in. In an educational context, this means that we must see learning not as acquiring a defined portion of knowledge, but as participation in learning

practices. Teachers should create situations where children act, play, and work in social groups.

Experiential learning is one approach that is a part of the learning as participation metaphor. Here, learning is understood as the process in which children create understandings and knowledge during experiential engagements in situations. They create understandings about themselves, environments, or subjects/themes decided by teachers. In this idea, the process of children's becoming and finding who they are and how the world works is at the forefront, meaning that the learner is actively taking part in their own learning process and education.

EXPERIENTIAL LEARNING

We argue that children can learn almost any of the school's subjects through experiential learning. Experiential learning is often associated with outdoor education, green pedagogies, and similar ideas.

Why should children learn to count and calculate by watching objects in a book instead of counting and calculating using objects in the "real" world? In that way children may engage using the entire body to touch, feel, and watch how the objects, for example, apples are like. How many are four apples? How different might apples be? These are examples of questions that may be answered by 'experiencing' in experiential learning. By experiencing the number 4 the children may get a more direct experience of the number four than what is possible by reading about it. By tasting and smelling apples in different shapes, colour and smells they fill the word with meaning by experiencing it in differently.

The core in experiential learning is that children learn about the world by partaking in it rather than reading about it. For example, by examining a local tree in its current habitat rather than reading about it. In this way children learn about the context the tree lives in by being a part of the same context.

Experiential learning may be summed up by the famous paraphrase of John Dewey: "learning by doing". When we think of experiential learning as learning by doing, many associate it with practical learning and some sort of activity as a tool for learning in school. In a school context, learning by doing will likely occur during field trips, lab experiments or physical activity in environments outside the classroom. We applaud practical and experiential learning like this in school as a method, a tool, in the teacher's arsenal to vary their lessons. Variation in learning environments and methods has several benefits for students learning.

However, this understanding of experiential learning builds on an understanding of learning as skills, knowledge, and competence that is acquired through experience with the world. Although the method of learning is different from what most school classes will engage in, the understanding of learning is the same. A traditional classroom session might have a teacher in front of the classroom that is transferring knowledge to

the children. In an experiential learning session, the students are encouraged to explore and be active in the learning process.²

1.3. ONE WAY TO PLAN FOR CHILDREN'S LEARNING: THE DIDACTICAL RELATIONSHIPS MODEL

Our ambition with this chapter is to provide teachers with tools to think with when planning lessons and to justify lessons that focus on the subjectification of children. Hopefully, insights from this chapter will contribute to teachers creating rich and diverse lessons that may inspire children. The Didactical Relationships Model (DRM) is a model to assist teachers in planning, conducting, and evaluating learning activities. It has a long history in Scandinavian education. Today, it is widely used in schools and kindergartens in Norway, especially in primary and upper secondary schools. It has been elaborated on by many scholars. This chapter relies on Brattenborg & Engebretsen (2007).

The idea of the model is that learning takes place within a myriad of different relationships that are crucial for children's learning. The six factors below have proved well-suited for planning education. The factors are closely twinned, as displayed in figure 1, meaning that changes in one factor will influence the others. Every factor may be the starting point for planning educational activities.

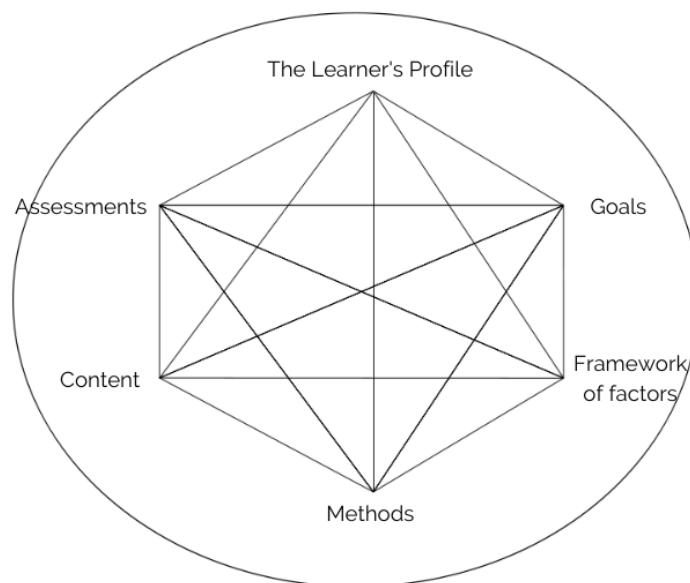


Figure 1: Displays the Didactical Relationships Model. Note that all factors are connected, indicating that they influence each other (My translation from Brattenborg & Engebretsen, 2007).

² Author's note: For those of you interested in this topic you can find useful insights in this book: Roberts, J. W. (2012). *Beyond Learning by Doing. Theoretical Currents in Experiential Educaiton*. Routledge.

The consequence is a holistic approach to planning for education. It represents a way of planning education that among other things considers the local environment, particular teacher and group of children.

The discussion of the factors below is based on our experiences with teachers- and kindergarten teacher students.

1.3.1. FRAMEWORK OF FACTORS

The framework of factors is all different factors that provide possibilities or limitations to children's learning. For example, the number of children, the number of educators (teachers/assistants), the location, available materials (e.g., magnifiers, ropes, books, etc.), available time, etc.

For example, a class of relatively few children makes it possible for the teacher to follow individual children up more closely during the activity than if there are many children. Additionally, it is easier for the teacher to get to know the different children's needs, knowledge, and interests in order to tailor the educational activities if there are fewer children in the class than many.

The leader's, colleagues', parent's, and children's attitudes to teaching and learning are also important for what possibilities the teacher has to create favourable learning conditions. Colleagues that are positive to, e.g., Experiential Education may be supportive and creative in planning a lesson. On the other hand, negative and non-supportive colleagues and leaders may make it even more difficult to initiate Experiential Education lessons.

At the same time, the teacher's values and attitudes toward the framework of factors are an important component. For example, does the teacher see mainly possibilities or limitations? What are his or her attitudes toward teaching? This, in turn, shapes how the teacher creates the lesson.

In the subsequent chapters of this e-book, we will see that the environment has a particular role in creating a framework for how and what children may learn. In chapter 2, we are introduced to how educational activities are created in a nearby forest. Here, the forest represents a framework with various objects to explore and play with that provide unique opportunities for educational activities.

In chapter 3, we see how the educational framework is changed when the objects and furniture in the classroom are replaced. In this way, the teachers create new ways for children to learn and grow than what was possible in the original classroom.

1.3.2. GOALS

Goals refer to the aims and desired outcome of the learning activity. Commonly, teachers start the design of activities by formulating the desired outcome. The goals may be short-term or long-term pointing at what the children are expected to have learned from a single class, a period of working on a project, or at the end of a semester.

Goals may also be oriented toward a process, for example, that the children are to solve a mathematical problem within a group or cooperate to create a den. Thus, the goals may relate to Biesta's qualification, socialisation, or subjectification. Qualification relates to mastering certain skills or knowledge. For example, calculating the square feet of an area or being able to knit functional knots to create a den. Socialisation relates to becoming included in a social community with certain traditions, actions, and ways of being. Thus, one goal may be that children will cooperate to create a den or calculate the square of the schoolyard.

Subjectification is about freedom and recognising that children are individuals with interests and initiatives. Here, Biesta points out education's role in shaping children into citizens of tomorrow that are critical and autonomous. In our case, it will include children with environmentally friendly attitudes. A consequence is that the teacher cannot emphasise skills and instruction exclusively. Rather, teachers must formulate goals related to children's subjectification. For example, that children are able to critically assess the method they used for building a den and how the den may influence the local nature.

1.3.3. CONTENT

The content and goal are two sides of the same issue. The content is referring to what is being taught. It may be a subject– for example, calculating the area of something, or a working method– for example, solving a problem in groups. Solving problems in a group is associated with 'subjectification' and experiential learning. The content is often defined by national curriculums and operationalised by teachers.

1.3.4. THE LEARNER'S PROFILE

The term "learner's profile" points to how the individual conditions for learning can vary a lot from child to child. The conditions are manifested in the values, skills, and knowledge a child brings into education. For example, children have different attitudes to school or kindergarten. They have different experiences of being outdoors that may include how to play and how to stay warm. Additionally, every child has individual interests, motivations and needs. It is essential for the teacher to know the children in their class in order to tailor the educational activities to the individual children's interests, skills and knowledge. This is a difficult task because one class consists of a myriad of different children.

Brattenborg & Engebretsen (2007) points out that children's capacities to use their bodies vary. In this case, it varies how they are able to move, balance, coordinate limbs and move in relation to others and the environment.

We, the authors of this eBook, believe children learn by touching, sensing, and moving in situations (see chapters 2 and 3). Thus, children's bodies are an essential part of how we create situations for learning. This entails facilitating learning that brings different shapes and functions of different bodies into focus. The result is that there will be variation in how comfortable, skilled, and experienced different children are in the

lessons. In turn, teachers need to determine the different levels of comfort and previous experiences as part of each “learner’s profile” of the children in the class.

Similarly, each teacher has different experiences, knowledge, and interests related to how they may create favourable learning situations– in other words, a unique “teacher’s profile”. For example, what teachers argue is a ‘good educational situation’ may vary from instructions in a classroom to experience-based, holistic education. Some ideas are presented in Chapters 2 and 3.

1.3.5. METHODS

The method encompasses *how* educators teach the content to children. For example, one way of working with the content is that the teachers speak about information and that the children ask questions. This is one of many ways for teachers to facilitate children’s learning of the content. However, children who are instructed by teachers using strict discipline may not learn to be curious and question authorities.

Other ways may be to provide children with space and time to follow their initiatives and interests in a varied environment. Thus, teachers also provide children with opportunities to explore and act as autonomous persons, which are important qualities for persons participating in a community.

A different approach (mentioned in chapter 2) is to take children’s initiatives as the starting point for designing the content of the lesson, often referred to as an inductive method. In this way, the teacher will build upon what the children already show interest in, strengthening the possibility that the children are motivated for the lessons and have ownership of it.

Methods that include children using their bodies to touch, shape, or move with the learning content, for instance by moving across the schoolyard in order to measure it, may provide a variety of different ways to approach the content.

There are, of course, no simple connections, but the examples above illustrate relations between the ways teachers organise the learning process and the ways children may be subjectified. In general, we believe that variations in the ways the learning process is organised are an important key to shaping children into autonomous and critical participants in society.

1.3.6. ASSESSMENT

Assessments refers to evaluation of both teaching and learning. It may take many forms. It may take the form of a test measuring what the children have learned during the course in order to compare the children. It may also take the form of a test where the teacher provides feedback on what the children need to learn more about so that the teacher and the student can emphasise it.

Seen in light of the mentioned metaphors on learning, it is essential that the assessment reflects the forms of knowledge that are emphasised, whether those be

specific objectives of knowledge or the child's values and interests. For example, if the aim is to change the child's attitudes toward the environment it is important to evaluate the child's attitudes toward the environment rather than measuring their environmental knowledge. However, it is difficult to quantify and compare goals such as well-being, caring about others and caring about the environment. The holistic and participatory approach to education sketched out in this chapter needs a holistic and qualitative approach to evaluation that takes the individual child and the local cultural context into consideration.

In addition, the teachers need to assess their lessons in order to improve them and get an impression about what children have learned during them. Assessment may include teachers critically reflecting about how the activity went in light of the factors above.

1.4. SUMMARY

The Didactical Relationships Model is a tool to assist teachers in planning, conducting, and evaluating learning activities. At least, in Scandinavian countries, the model has proved valuable to plan and evaluate for learning, because learning takes place within a myriad of different relationships. The model is not only suitable for traditional teaching in classrooms. We propose that it is useful in planning for participatory learning processes and subjectification, because it highlights that the assessment has to be seen in light of the goal of the teaching and the methods used. In other words: if the goal of the learning activity is to assist children in developing environmentally friendly attitudes, independence, and critical thinking, the methods used by the teacher have to promote the pupil's attitudes, independence and critical thinking. Furthermore, the assessment has to evaluate the same: the pupil's attitudes, independence and critical thinking. In this way, the model can encourage holistic thinking and prompt a kind of accountability self-check for teachers as they plan for participatory learning processes and subjectification.

1.5. FURTHER READING

This chapter is inspired by the literature below:

- Biesta, G. (2010). *Good education in an age of measurement: ethics, politics, democracy*. Routledge.
- Biesta, G. (2016). *The beautiful risk of education*. Routledge.
- Brattenborg, S. & Engebretsen, B. (2007). *Innføring i kroppsøvingsdidaktikk*. 2. ed. Høyskoleforlaget
- Gurholt, K. P., & Sanderud, J. R. (2016). Curious play: Children's exploration of nature. *Journal of Adventure Education and Outdoor Learning*, 16(4), 318-329. <https://doi.org/10.1080/14729679.2016.1162183>
- Lave, J. & Wenger, E. (1991) *Situated Learning: Legitimate Peripheral Participation*. Cambridge University Press
- Roberts, J. W. (2012). *Beyond Learning by Doing. Theoretical Currents in Experiential Education*. Routledge.
- Sanderud, J. R., Gurholt, K. P., & Moe, V. F. (2020). 'Winter children': An ethnographically inspired study of children being-and-becoming well-versed in snow and ice. *Sport, Education and Society*, 25(8), 960-971. <https://doi.org/10.1080/13573322.2019.1678124>
- Sfard, A. (1998). On Two Metaphors for Learning and the Dangers of Choosing Just One. *Educational researcher*, 27(2), 4-13. <https://doi.org/10.3102/0013189X027002004>
- Wenger, E. (2020). *Learning to make a difference: Value creation in social learning spaces*. Cambridge University Press

2. GREEN PEDAGOGIES

CHAPTER 2

Petra Jager and Lorenzo Filippi

The education in Nature as it is now conceived and perceived, goes back in the years and already in the '60s the good seed of it was firmly planted and rooted especially in Northern Europe (Scandinavian countries were definitely pioneering this philosophy). In this chapter we hope to shed light about green pedagogies and, most importantly, provide hints and suggestions specifically on some peculiarities of this pedagogy.

We will refer to the "world as our classroom" (Sub chapter 1), indicating some direct experience we witnessed and acted, both as teachers and as consultants. One of the most important assumptions we have always used in our Forest Kindergarten (FK) and primary schools is, in fact, that unnecessary limitations set by adults or caregivers, both physical and psychological, do not help and, instead, prevent healthy development in our children.

In Subchapter 2 we will go further on this track, providing some insights about space, boundaries, play and imagination and other factors which play a fundamental role in children's development especially when they are put in a wider perspective such as "lateral thinking".

The final part, subchapter 3, we'd like to see as a "call for action" for our own future and future generations: positive approach as a fundamental pillar to build up a conscience in our children which calls for sustainable development, care for Earth and ultimately for the entire human race. We would like to see interlock here on the way we accompany our children through their development and the care we should have for preserving and protecting the most important part of our lives: our planet Earth.

An important assumption about the content we will be portraying in this chapter: there is, in fact, a wide set of examples, mentioned and linked to Forest Kindergarten (pre-school stage) as basic reference to the Nature or Outdoor school. There are two basic reasons for that: firstly, we believe that a paradigm shift on Education should start at the earliest ages of schooling, thus Kindergarten, indeed. Secondly, significant experiences and expertise on Forest Kindergarten was brought in for this project (teachers, consultant) and therefore we deem significant take advantage of these real-life witnesses of these educational stages as fundamental prerequisites to target the primary school.

This chapter is divided in three subchapters that are:

THE WORLD IS OUR CLASSROOM

Analyse how nature is full of interconnected-learning opportunities. It will also highlight the value of using the school surroundings to enhance the children' learning experience.

SCHOOLS IN NATURE OR NATURE IN SCHOOLS

Talk about different possibilities to provide children with a close experience with nature. Analyse the positive impact that nature can have on children's healthy development.

CATASTROPHIC APPROACHES WILL NOT SAVE OUR PLANET

Reflect on how enjoying nature and being outdoors can help us have real earth lovers. Children are not emotionally prepared to protect something they do not really understand or love.

2.1. "THE WORLD IS OUR CLASSROOM"



2.1.1. ANTICIPATION FOR LEARNING

The anticipation is a journey into the imagination. Children are often guided in their play by knowing or dreaming something in the near future and this gives them the chance to feel anticipation. Anticipation is filled with good feelings and also connects with other companions. For many, anticipation is the most beautiful joy.

In fact, learning should always be accompanied by joy, feeling of adventure and motivation, thus outdoor experience leads back to human learning and Nature is full of these possibilities; you can discover, see and understand them. In daily life, children at Forest Kindergarten (FK) love the "welcome circle", a very common and widely used practice in many FK I have worked with, being used to start the day in the kindergarten.



Children know from there that a day full of new experiences or just fun is coming along and are very enthusiastic about it. We noticed, on the other hand, that sulking or sadness revealed at that stage are symptoms for something to be investigated. Most of the time, it turns out to be a simple “boring day” feeling, however circumstances as reported by parents are very important and regarded as points to be discussed. Another interesting aspect might be considered about anticipation, is the poll game used to ask “what is in today for us?”. It normally comes after the welcome circle and it is there along with imagination; a stage for anticipation is being set. This, in addition, may also be used as “to do” listing for the day and days to come, let alone the democracy game being played here i.e., “today we play as Jim suggests, tomorrow will be Tom’s turn”.



As an important reference and real-life experience, since Flensburg FK was established (back in mid 1990s), we have identified more than 40 locations in the forest where children feel as “their” spot where to go, play and stay for the day. More importantly, who spots those locations? Children, of course, and for each and every location, name was given to identify according either to the thought, inspiration or the game mostly played out there. Isn’t this amazing? Just imagine a typical day where the welcome circle is on, greetings are done and then comes the question “Where are we going to be today?” “Fair place!” or “thunder place” or any other out of the many places identified and classified. The identification of the places, the name attributed, the daily decision i.e., one rather than another, all of these make perfect sense when it comes to the imagination and the creation of the reality at that given moment. No wonder that very seldom the same place is chosen two or three days in a row: new feeling and sense

of respect to and for others' opinion make the choice a great exercise for imagination but also for the decision to be made according to the circle's willingness and desire.

2.1.2. EVOLUTION AND LEARNING

There is a potential misunderstanding about "evolution"; technology, for instance, has brought a significant improvement in the way that we live and often to our welfare; on the contrary, our needs and those of the children have not changed significantly. The environment (intended as a whole) significantly changed; our DNA, our biology lies still there, calling out loudly when we misinterpret the root and natural biological needs. In fact, technology, as an important aspect of evolution, is frequently brought as a point of discussion in our Forest Kindergarten. You don't want to bother 4-5-year-old children with discussion about cell phones or PCs, neither would they perceive it in their wholeness; interestingly enough, parents deal with passing over their insecurities as to how these devices should be managed and presented to their children. In all frankness, our experience is, most of the time, relatively easy because parents are often themselves aware of the potential risk connected to an "hyper-sensitization" (sort of over-response to determined stimuli) to technology. First and fundamental approach used in our premises is simply a no-need for it during our days in the forest (this goes entirely for the Preschool and very often for the primary school).

Evolution in technology, in its wider meaning and sense, should always abide in the natural meaning and sense of natural evolution; better yet, it should fit and serve the scope of the natural evolution; to this specific regard, deeper and interesting focus will be given in the Chapter 3, where in depth analysis is carried out on emotion development and its fundamental role in a healthy children's development.

2.1.3. DO WE REALLY NEED A BOOK FOR OUR DAY AT SCHOOL?

There are some concepts which we will be bringing up continuously throughout this book, competence being one of these. Even though this essay is primarily meant to address primary school, it is worth noticing that the Forest Kindergarten experience we are portraying here represents, in our opinion, a solid pillar and foundation to anticipate the next education and development stage of our children, indeed the primary school. With this in mind, the pictures hereafter show some examples as why and especially how nature, in its wholeness, may represent an endless library and information repository. "What's this Garden?"



Would the picture above inspire a sense of peace or tranquillity? Or any other nice and relaxing sensation? Yes, indeed; however, it might well be used as a book! "Pick one square and give it a name" "What these could be used for?" And you may go on with these lessons: math, gardening, language and so on. Book is the soil where rectangular squares and circles lying down can help teachers present mathematics as a great discipline to understand the universe and not to be feared as something difficult to learn. In addition to that, when children see colourful and real pictures, they would hardly fall in love with movies or cartoons on a computer.

Contrarily to a large part of adults, there is a great opportunity for children learning in nature or while playing, transforming what is thought to be a boring learning process into an exciting and joyful experience. Even better, the exact same scenario like trees, branches, or puddles, can represent a source for different disciplines or subjects to be learnt. Also, use of pens and paper in preschool should be limited and no wonder should be given when parents are concerned whether their children "will be prepared or not" for the future school track: they will come around seeing their children happy and emotionally healthy which in turn will bring them to be prepared on curricula matter, according to their own development stage.

At any rate, we do care about physics and, in fact, we help our children learn about the centre of gravity while they jump in the puddle. Again, think about yourself honestly and admit: any adult would rarely deliberately be walking onto a puddle and, if this happens, curse and fastidiousness will most probably arise, isn't it? And when you have different preferences, well there are plenty of alternatives.



Isn't it amazing how naturally and yet proficiently these children are using knives? In contrast to many traditional kindergartens, the viewpoint here is that there are no dangerous tools as such and children would very easily learn how to use them and avoid harming themselves and other kids.

In addition to traditional disciplines, such as Mathematics and Literacy, there are other important skills at play here: motorial capacity, coordination and attention. Everything and all of the above are fully and naturally integrated in a whole picture of learning, giving the chance to the children to accomplish their development exhaustively in relaxed and funny ways! When it comes to primary school, very interestingly, the kids show high interest and motivation when disciplines and arguments are carried out in a "holistic" and natural way compared to the traditional school. There are further references in this chapter about methodologies and contents for the primary school stage (3 to 13 years old) conveyed from a significant experience

in Rome, Italy (see paragraph below "How do we feel as adults"). As portrayed later, a group of home schoolers were included in a public primary school, sharing time and spaces with traditional classes. The results, as reported by the principal of the school herself and the teachers, were remarkably interesting, demonstrating how thoroughly and effectively the new paradigm of education can spread (see mentioned paragraph below for further information about the case).

2.1.4. FEELING AND LEARNING IN NATURE

In nature, feelings can be perceived more consciously and have more room to come out and be expressed through our behaviour. Where the feelings are in balance, you are motivated to learn and you are in a process between curiosity and thirst for knowledge.

Sensual perception and free play work successfully with regard to learning and have been so for thousands of years!

"Tell me and I forget, teach me and I may remember, involve me and I learn" (B. Franklin): this sentence (known quote since many years, actually) represents the paradigm which leads, inspires and ultimately teaches us, as teachers and parents, to live the education in nature. You may slightly change verbs however the core message stands: mnemonic, forceful or imposed teaching is a waste of time, to the best; at worst, turn the discipline or the argument being taught dreadful for the children! The Limbic System (most primitive part of the brain, in common with most of the animals) is the site of dopaminergic modulatory systems, responsible for the emotional processes and primarily involved in the memory and learning processes.

Pleasant emotions trigger, among other things, the dopamine circuit which in turn stimulates the synaptogenesis, base for memory consolidation. Far from being or pretending to be a neuroscience essay, we should (must) not ignore the very basic and elementary physiological processes which underlie the behaviour and the development of the children; it is up to us, teachers and parents therefore feeling the urge to comply and be true to human nature.

2.1.5. A REAL-LIFE CASE: THE WALDKINDERGARTEN FLENSBURG ("A REPORT BY A FORMER HEADMASTER")

In the following pages, we will use a real-life case of one of the most significant outdoor education projects in Europe: the Forest Kindergarten in Flensburg.

Forest Kindergarten in Flensburg was, in fact, the pioneer of outdoor education in Germany. It took five years for its founder, Petra Jager, to get through and have the forest Kindergarten established back in the '90's. Ever since, it became "THE" forest kindergarten in Germany, the North Star for everybody eager to learn about outdoor education. The basic and fundamental pillar of outdoor education are duly and

magnificently featured in the FK in Flensburg (picture above showing the “Flensburg FK Parliament”).

2.2. “SCHOOL IN NATURE OR NATURE IN SCHOOL”

2.2.1. SPACE

Having space to be a child, in the truest sense of the word. Space to move freely, space to laugh, cry, dance and dream. The children's natural urge to move can be lived out unhindered.



The relaxing environment of the forest strengthens the physical and mental health. In a very interesting book, “Educar en verde” by Heike Freire, there is a clear reference as to the impressive growing trend of psychosomatic illness such as asthma, diabetes, bulimia and anorexia. Those are predominantly environmental causes since the very beginning of our lives. The genetic causes have less impact, in comparison.

Our extensive anecdotal experience indicates that an average of four/five hours of fresh air a day strengthens the immune system and also means fewer infectious diseases, which are usually transmitted indoors. Now, you may want to challenge this as we do not refer to scientific data to prove this. However, out of the hundreds of parents we met so far and many years of real-life experience in Italy and Germany we can fairly account for quite a significant evidence of reduction of sickness such as flu and cold in FK compared with traditional indoor schools. (Comparisons have been made with traditional-indoor school matching absence days as reported respectively in the years 2014-2015 with a few schools in the municipality in Flensburg).

“Shall we stay indoors today?”



On the other hand, it is not rare that children ask to stay indoors (our "Storm house" in FK Flensburg). This should not sound as negative to any extent. As well as for boredom, children need warm relaxation and being indoors from time to time. Then again, indulging in such a request should not be a problem, nor seen as regression from the outdoor pleasure; this normally happens late in the day (end of day) and when it is particularly cold or rainy, so the point is that they are right. Being outside too much with cold and rain may bother you, after a while!



Still, as we used to say to parents concerned about cold weather and how this may affect their children's wellbeing: "there is no bad weather as such: only inappropriate clothes!"



As a more general and wider statement, the spatial dimension is key for our children's development; in fact, neuroscience supports and backs this up with many studies showing how depriving or drastically reducing the space available to children triggers undesired behaviours such as exaggerated anger and depression. For the latter, according to Richard Louv (see also the Heike Freire's book "Educar en verde"), preschool children in the USA might well represent in the near future the biggest potential group of antidepressant consumers! One of the aspects we regard in this area is the stimuli opportunities. As wide and big as it may be, a room represents by far a lesser field for children to tap into compared with a natural and open environment. Better yet, the options available during the day are virtually endless as they match at the same time with the opportunities for playing, which in turn represent a well of stimuli.

In chapter 3, we go into more detail about how to create indoor environments that, with obvious limitations, replicate these stimuli and feeling of wellbeing. Some of the interventions are, for instance, introducing nature into the classrooms.



2.2.2. TOOLBOX FOR BEING OUTDOORS

We would not miss the chance here to provide some practical hints as to what should be in teachers' toolkit when practising outdoor education. Far from being a

recipe or any sort of "must do" list, we hope the following considerations may help teachers contemplate what to take during any normal day of outdoor Kindergarten).

First aid (FA) kit. Might sound redundant or obvious, however band aid and basic disinfectants along with a piece of bandage should be considered as basic requirements for the FA kit, along with tweezers, in case they grab something with spines and physiological saline to rinse their eyes.

As a general suggestion, each teacher knowing their pupil, must be aware of any allergy (which is the most common problem may arise) or condition which should be taken care of and have medicament or remedy available (either with kid or with teacher).

Going to the amusement side, a rope and a knife are big friends (and tools) for outdoor time, giving at any time a chance to exercise fantasy and imagination playing along with them.

Bottle or reusable cans, as well as snacks, of course, are fundamental (glucose as well as water, is vital as long it is the "healthy" one, i.e., no snack or other refined sugar products). As far as clothes are concerned, it would also deserve a bit of attention: adequate for the weather and flexible as needed (wearing layers like an "onion"): light layers under warm layers in winter, fresh and natural fabric/textile in summer. As you may imagine these considerations, while generally and widely applicable, may vary depending on the region and not only by the season where your area is. Northern Europe is of course quite different from Spain or Italy when it comes to the equipment in general. This part is always subject to a great deal of interest when the most common and frequent concerns which may arise are covered during seminars about Outdoor Education.

2.2.3. PLAY AND IMAGINATION

The increase in safety and self-confidence is clearly reflected with increasing forest kindergarten stay. A tree that was still a motor challenge in spring serves as a lookout tower in autumn that is proudly conquered.

The picture below is a lovely family of little branches gathering together and put at rest by the author who shaped them!



The free play of children is one of the most important tasks for their development. In the forest there are an infinite number of possibilities for experience in order to stimulate the imagination and creativity of the children to a high degree.



In a sensory environment such as the forest, inner forces can be better perceived and tested. Without spatial restrictions, inner boundaries can be better experienced and expressed. Playing in nature makes strengths perceptible and boundaries more clearly experienced.

In addition to this, the so-called "flow state" is a very good sign; it is the mood and behaviour of a child so immersed and concentrated that they would barely listen to you or any other event happening around (sometimes happens to adults as well, thank God). Concentration, relaxing, meditation, observing; all of these are fundamental pillars for the best emotional and cognitive development of our children. Basically, it is just matter of perspective, as these children tell us in the pictures below:



2.2.4. SILENCE AND NOISE

There is no high noise level as in enclosed spaces.



Silence is unusual in today's world. It is of inestimable value, e.g., for the general differentiation of perception, the finding of stability through inner peace and the ability to concentrate. The forest is ideal to listen to and nature is directly experienced and understood, the careful handling of every kind of life is experienced and learned. The cycle of nature can be directly perceived and experienced sustainably. When we are out in the forest, it is quite common to listen to some level of noise and voices modulate themselves according to the children's needs or desires; you see children screaming, yelling or simply talking loudly and, after a while, with no imposition or request from adults, they start talking quietly. They are self-adjusting their voice according to the very specific moment they are in. Interestingly, very often the interests of the majority are respected by the others even if the latter are not interested in the matter of the time. Self-regulation, indeed.

2.2.5. LEARNING BY EXPERIENCING NATURE'S BOUNDARIES

Immediate experience, own experiences with all senses, instead of imposed/instructed projects, build up self-esteem and especially emotional stability. They are the best conditions for being constructive and creative later in society, as adults.

In the forest kindergarten, the children are more likely to experience the necessity of rules and boundaries, to recognize and understand their meaning, because they are connected to the immediate experience. Rules and boundaries can be reduced to a minimum; speaking of which:



These lovely persons in the picture above (incidentally leaders and teachers at FK Asilo nel Bosco in Rome) are wearing the shirt with the motto for the Asilo nel Bosco:

"In this small part of the world the following are NOT forbidden: playing football, jumping over hay stacks, climbing trees, laughing out loud, getting dirty, playing with water and puddles, and loud shouting".

A kindergarten without a door and walls also offers space for childlike aggression that can be lived out in an appropriate way. For example, a powerful blow with the stick on a tree stump can provide noticeable relief.

In addition, the way in which staff accompany the group is extremely important. Aspects like the use of adequate language or the acceptance of the whole range of feelings, which we develop further in chapter 3, give the opportunity to accompany the children in conflict situations appropriately and in peace, so that they can find self-reliant and constructive solutions in the dispute.

The forest offers a sanctuary from which the surrounding area can be experienced vividly and realistically. On the basis of security and safety, the children can discover the wider environment and live out their thirst for adventure.

2.2.6. INCLUSION IN NATURE EDUCATION CONCEPTS

Diversity is normal in nature and it should be the same for us.



Picture showing Seminar held by "Treecanopy" in Flensburg in July 2019

With their different needs, characteristics and abilities, children provide a variety of opportunities for joint learning processes. Every child finds their place in the forest and is not restricted by narrow spaces.

So, let's meet our children again in a child-friendly way and accompany them carefully into a self-determined and happy life by supporting them and being willing to learn from them. This allows the children to develop respect and empathy.

Diversity may cover different realms: gender, nationality, religion, politics, social, economics; and from each of the above you may derive different streams of behaviours and development.

In our FK (and we have personally witnessed many others), We attribute a great sense of importance to diversity. We do not teach diversity! We "simply" show to our children how normal and natural it is to accept diversity; actually, we show how diversity is an enrichment for everybody. Cooking different types of meals, according to different cultures, is a great way to explain and show the children why in the warm climate vegetables and fruits are largely present in that environment; in our FK we encourage different cultures to speak up about their habits, customs and traditions. A fundamental role is played here by the parents who not only participate actively and constantly in our FK's life and activities; they continue at home by making reference to what their children discovered at the FK.

2.2.7. *MEANINGFULNESS FOR WHAT HAS BEEN LEARNED*

Where meaningfulness for what has been learned is understood, children have the opportunity to see and learn the world with their urge to explore.

Children learn with their hands, they also “see” with their hands, by feeling, touching, exploring; emotional memory and cognitive realm will preserve what is learnt through a real and natural experience.

The body wants to be involved and climbing a tree is the best maths preparation; and running on natural ground gives signals to the nerves on the feet, shows a new path and warns the children of possible and potential challenges out there. In the forest, nothing is prepared: children decide by themselves how they want to move forward.



The emotional access to nature allows learning with all senses, in addition, the child can satisfy his need to ask questions and feel how great the importance is to see nature for what it is: a part of us. Learning with head, heart and hands can hardly be accomplished in a classroom with many students.

2.2.8. HOW DO WE FEEL AS ADULTS



We adults tend to think that learning is something that happens in a large room with many people sitting for hours on a chair, not as something pleasant and being

focused on when the session is going to end thinking. But how do we find our way out of the classroom?



How do we overcome all the hurdles, posed by the pressure to perform, comparative work, and demands of society and parents?

There are now many books about how to guide outdoor learning, how to teach school classes outside, and online courses and seminars. Many people set out to create this new adventure and venture. We already find great evaluations and reports about such projects and are curious how this great energy will continue to nourish and develop.

Sometimes even a small step outside and the idea of how to go outside is enough. A networking and exchange of experience of this institution is of great importance. Power of network, as for any other vision or dream, plays a fundamental role. Learning in community is also something natural, we learn and understand together for something that is deep within us, the closeness to nature and ourselves as a part of nature. As important as this, there is a concept we should never prescind from.

2.2.9. "WATERING THE SEEDS"

As said earlier, we also, as adults, feel the pressure of not being outdoors or in a healthy space long enough and struggle to find our "way out". There is, however, another aspect we, as adults, should pay attention to: how this philosophy should be disseminated or, better yet, how it should spread within schools and out to other schools and institutions devoted to education. As a matter of fact, our direct experience in Forest Kindergarten both in Italy and Germany turned out to be a significant and remarkable example for traditional schools at different grades (primary and secondary). In the "Asilo nel Bosco" in Rome the outdoor education philosophy has been applied successfully for a few years already. An increasing number of boys and girls spanning from 7 to 13 years old are joining the community and the trend is really impressive. The number in itself might not be a demonstration of success, some sceptics may observe; we ourselves would be also concerned by "self-referential" statements. When, however, several meetings and seminars are delivered and accomplished, this is a solid demonstration that the spreading of ideas has already started.

In Italy, right before COVID hit, there were some interactions and meetings with the central and local political institutions to show and present the outdoor school. Educators, Headmasters and school teachers participated and still are looking at the "Asilo nel Bosco" and other Kindergartens as an important paradigm shift in the field of Education. In the past years, we ran a very interesting project which may be seen as a wonderful mixing of experience. A group of parents running "Homeschooling" were able to "drag in" a public school into their experience. The group of kids and youth homeschoolers were in fact hosted by the public school for their lessons. As you may imagine, the result of this was first scepticism, curiosity and afterward interest from either other students and teachers. That period was really something extraordinarily impressive to many extents and when the school year came to end, the feeling and the relationship built upon that experience is something still impressed in all kids' minds from both sides!

As we use to say at every Seminar on this subject:

"Dear all, welcome to our outdoor education session. Before starting, please keep in mind one thing: this is not about children, or at least, not just about children; this is about us, as adults and the responsibility we all should bear toward the new generations. So, let's be open, let's be humble and let's look first at our own inner children and let them speak first!"

We do like this introduction and hopefully so do you.

2.2.10. *A REPORT BY A FORMER HEADMASTER*

Mr. Fokuhl³, a former headmaster and school counsellor from Flensburg, has written down his impression of a two-week visit to the Waldkindergarten Flensburg in 2017/2018. It spans the arc from school learning to how school can succeed in nature. A big thank you to Hans-Peter Fokuhl. Fair to note that this gentleman is really blunt and plain-spoken! It might be taking some minutes to read it all, but we deem it definitely worth it.

"WHERE DOES IT START IF YOU WANT TO SAVE THE WORLD? - THOUGHTS AND EXPERIENCES AFTER AN INTERNSHIP AT THE WALDKINDERGARTEN FLENSBURG.

By Hans-peter Fokuhl

Saving the world? This seems to have gone out of fashion and is just suitable as a motto for a Schlager text that subliminally elicits a smile from the listener. But to whom should we hang our hopes? The most important, democratically elected ruler of the world is in pathological conditions, the world's largest car company rewards its criminal ex-boss with 3100, - € daily pension, the crown of the German football world affords itself an ex knacki again as president and the Olympic idea is just betrayed in the executive floor for money. Is there even a will to save the world?

Politicians like to hold up the flag of human rights, talk about social justice and ultimately run after a global development that exposes them mainly as toothless water treads.

Furthermore, children have to breathe in the air impregnated by this exhaust gas, furthermore they are taught "life" in schools as if from the canned food until they have forgotten their own questions to the world. And the media and toy industry are bricking them up the last loophole from their own personality development to open up what is man's highest good: his freedom!

After 35 years of work as a teacher, headmaster and school counsellor, I have all this behind me as an "intern" for two weeks in the Flensburg Forest Kindergarten Marienhölzung, the oldest forest kindergarten in Germany: A quantum leap of the highest degree! Had I forgotten what life actually is? With momentum and an almost boundaryless desire to jump into the puddle that it just splashes! Again, and again! To wind through the narrow corridor under a spruce root and to feel reborn after surviving the "birth canal narrowness". To climb a fallen tree and to determine the balance on its upright root at

³ Hans-Peter Fokuhl has a professional biography worth reading, which was published in 2016 by Schneider Verlag under the title "Auf der Suche nach der sozialpädagogischen Schule", ISBN 9783834016218

the top like a king and to want to hug the whole world straight, to crawl after a small beetle on the forest floor and to fall in love with a contemplatively slowly creeping snail!

There is no need for toys – everything is already there! There is no need for an aquarium-equipped space in which everything has been filled according to didactic aspects of some clever people and "tidying up" becomes one of the most unpopular virtues. In this sense, one could come up with the idea of clearing a much-used, slanted trail between two campsites in the forest from the countless blackberry tendrils and thus freeing it from the ugly-annoying foot fishing! Yes, you could ..., but not either! What a school to take its steps mindfully! Isn't that a life school of the highest degree? Don't we stumble through life too much, fighting for our balance here and there? And finally, defeated by the daily grind, we just manage to consume a completely inconsequential thriller on TV in the evening – again nothing else than spooning out canned food without nutrients.

I make a big, fiery plea for the forest kindergarten! If I ever saw an education for freedom lived then here: Free and informal, the children find their play ideas, go after them alone, but mostly in groups. They organise themselves, resolve conflicts and find compromises. What creativity was revealed to me in the children's dealings with nature: sand, earth, branches, leaves, water. For the sceptic, who may have children's rooms overcrowded with toys or entire play batteries in kindergartens, it might be difficult to imagine what can be done with the objects only lying around in the forest! I watched it. Watching the children in the game would teach the sceptic. Some examples? In one day, mole cave passages were swept free on the forest floor; a grandiose system was created that resembled a labyrinth.

In it, of course, you had to move accordingly. There was also a chair made of branches for the grandmother mole. Cakes were painstakingly baked from different coloured earths, letters and words were laid out of rush stems and spruce cones, and a self-proclaimed "sports teacher" offered movement training for all those who had become cold.

The quite demanding work of educators is always to let the children live in their own impulses (!), to perceive them intensively and to provide help only when a situation that is unsolvable for the children arises! Children want to learn to read and calculate! If this desire is articulated in them, then to take action! This is a pedagogical principle that I have been able to observe here and which has always had a climate of joy of learning. In this way, schools could also succeed better ..."⁴

⁴ This text was shared with the permission of Waldkindergarten Flensburg and his author.

2.2.11. BRIDGING ACROSS

Fruits are ripe and ready for the community to harvest.

This sentence is very much appropriate when looking at another wonderful project being developed in Flensburg, Germany, which shows how ideas spread across different institutions and entities and start flourishing and paying off.

In a nutshell: the University Campus in Flensburg is hosting a Natural primary school! Read next the brief description of the project (as spelt out by Petra Jager), one of the most influential and competent teachers in Germany and Europe, founder of the very first Forest Kindergarten in Germany.

“The Flensburger Förde Nature School is an initiative of 12 committed groups composed of educators coming from parents and different levels of schools: Forest Kindergarten, Primary, Secondary and High School. The common point and shared vision across the group is the strong desire for all of them to make a real change into the traditional educational system and steering the traditional paradigm of education and its methodology to the Education in Nature (or outdoor) ones.

To accomplish this, the project plan to set up a primary school within a University, the EUF Campus; in this way while the primary school will benefit of sound and appropriate outdoor space, whilst the EUF University would take advantage studying and developing programs aimed at the qualification of teachers and study concerning the Education.

There are several studies confirming that natural environments i.e., outdoor, relaxation and use of imagination develop and promote cognitive, social and emotional skills and capabilities in children. To this regard, the project dwells in a location being sought for its peculiarity of natural environment and space. A connection to other learning locations and actors (cooperation partners) to support synergy effects is another important aspect being considered.

The EUF campus is an attractive location for the nature school: there are many opportunities to encounter nature. Also, the infrastructure of the Campus fits perfectly to the scope. The plan is to have the four years of elementary school covered and a total of around 65 to a maximum of 80 children in all subjects and discipline in accordance with the curriculum specifications. The cross-sectional task of all subject requirements education for sustainable development (ESD) is the linchpin for project- and process-based teaching in the nature primary school. The already existing cooperation between the department for general education of the EUF and the association Naturschule Flensburger Förde should be mutually (further) stimulated and expanded with the founding of the school on the campus of the EUF through in-depth joint activities.

The department for general education and the natural elementary school on campus are planning, among other things, the following connecting active elements with each other:

- Practical phases of the students of the subject teaching in the nature school
- Research-oriented theses by students of the Subject classes at the nature school (Bachelor and Master)
- Research by the teachers of subject teaching at the nature school - University events of the teachers of the nature school with students of subject teaching (workshops, modules)
- Joint (also international) congresses, meetings and Outdoor school training
- Instruction of students and teachers of general education in the Nature school (e.g., project-oriented as part of the modules)
- Joint publications on the outdoor school

After the successful start, medium to long-term cooperation with other EUF departments that train primary school teachers, is also being considered. The nature school on the EUF campus would be a great enrichment for the department for general education with one of the central tasks of professionalising the students at the EUF and at the same time increasing the attractiveness for applicants to study in Flensburg.

In addition to the main purpose of the projects, there are also some collateral positive aspects connected to the project: hopefully, the European University network might look at this project and expand it through their own countries:

"A campus school as a model school for education for sustainable development!". Incidentally, the Universities willing to pursue the same intent, would benefit from positive advertisement for their own benefit."

2.3. CATASTROPHIC APPROACHES WILL NOT SAVE OUR PLANET

2.3.1. OUTDOOR EDUCATION AND SDG (SUSTAINABLE DEVELOPMENT GOALS)

SDG (Sustainable Development Goals) is an exhaustive and thorough directive issued by UN in 2015 and it depicts 17 Goals to "provide a shared blueprint for peace and prosperity for people and the planet, now and into the future."⁵ Within the 17 goals, there is one specific one that addresses Education: the goal number 4. In the following lines though, we'd like to address as a general indication the benefits and the advantage we believe lies in the outdoor education with regard to development of environmental conscience and awareness.

A remarkable study jointly conducted in Canada by Elizabeth Y. S. Boileau, Ziad F. Dabaja, and Debra Harwood (who have backgrounds in, respectively: Environmental Education, PhD Education Studies and Doctor of Education), is very much related to the scope of this book, particularly to this chapter. In their study, the team placed some fundamental questions related to outdoor education with particular regard to Sustainability i.e.:

⁵ For further reference, here is the relevant documentation <https://sdgs.un.org/goals>.

“Are the social, economic and environmental issues of concern integrated within outdoor nature-based programming?”

Could immersive outdoor programs be a viable avenue for helping Canada to reach some of the global sustainable development goals?”

*Finally, adopting a critical lens on the SD goals more broadly, are there additional ways in which teaching and learning for sustainability can be implemented within Canadian nature-based programming?” Even though the study concerned Canada, it is fair to consider this geographic landscape as reliable as any other Western place, for that matter. In this context, the Canadian Team has depicted the “Early Childhood Education for Sustainability, ECEfS” as a warning because “many advocates agree that children, now and in the future, will bear the brunt of an unsustainable world (UNICEF, 2014) and “there is possibly no greater concern impacting on the lives of young children than the state of the environment and the equitable and sustainable use of its resources” (Elliott & Davis, 2009, p. 66). Like others, we support a view of children as competent and capable of engaging in learning for sustainability (Caiman & Lundegård, 2014; Holbrook, 2009; Gothenburg Environment Centre, 2010). And research has clear evidence of children engaging in learning for sustainability and acting upon that knowledge (e.g., Boyd, 2016; Harwood, 2019; Mackey, 2012). Yet, clear gaps in ECEfS curricula and pedagogies are persistent. Elliott et al. (2020) noted that multi-level systemic transformations are starting to take place in ECEfS around the world, although there remain significant challenges, such as moving beyond the assumption that playing outside in nature will automatically lead to developing a sustainable worldview (Elliott, 2017). As highlighted in *Researching Early Childhood Education for Sustainability: Challenging Assumptions and Orthodoxies* (Elliott et al, 2020), researchers in ECEfS (and we suggest educators as well) need to embrace a radical shift in how children are viewed and in what ways pedagogical approaches are transformed in early childhood education.*

Arguably, placing too much emphasis on concepts such as children's individual agency, environmental stewardship, nature play, as well as viewing children as developmentally immature and in need of protection from the complex problems of the world (such as, climate change) is boundarying and problematic. In fact, we, alongside Ärlemalm-Hagsér and Elliott (2020) and Engdahl, (2015), acknowledge that children are competent and capable of understanding and participating in complex issues affecting their lives; a stance that better supports the educational goal of helping to deconstruct and transform a worldview deeply entrenched in anthropocentrism.”

Hopefully, the document above adequately introduces the subject.

Living on an unbalanced planet equates to losing the past, our children's future and essential resources. Does it sound too much of a straightforward or harsh statement? Well, if it is so, take a moment to consider and ponder over some figures and facts such as the World Population growth curve, exploitation of natural resources, and unbalanced wealth distribution (1,1% of the world population detaining 45,8% of the

world's total wealth, according to Source Credit Suisse Global Wealth Databook 2021). Now that we hopefully have your attention, let us steer the matter toward the subject of this book; let's agree that some mindsets or behaviours such as:

- a) a catastrophic approach or mind set (i.e., whatever could possibly go wrong, it will)
 - b) a refusal to see where obsessive and compulsive patterns have brought humanity so far; and
 - c) continuing down paths which are undoubtedly self-destructive (pollution, biodiversity destruction, natural resources exploitation)
- are detrimental and ultimately despicable for nature and of course for humankind.

2.3.2. THE EARTH'S HEALTH IS OUR DUTY, OUR RESPONSIBILITY; UNDERSTAND IT

IS SOMETHING EVERYONE SHOULD DO AND IT'S IN OUR DNA

This book is a part of a wider project we all, as a team, embraced with enthusiasm and conviction. The same enthusiasm and conviction we spend every day in our lives and during the time with children, who are at the core of our professions. The children are the ones who firstly need to be preserved from being derailed from the natural path of their lives, from the natural path of human life. Our conviction, our belief is that enjoying being outdoors and in Nature, is a fundamental part for the children to be emotionally prepared to protect, preserve and live in perfect symbiosis with Nature.

With this in mind, we are strongly convinced that everything should start from a very early age, from the beginning of children's life. In order to smoothly and coherently engage this approach, we as parents and teachers, should represent the very first outpost within the society of this philosophy. Preschool age (3 to 6 on average) is definitely one of the most important life phases where some cognitive and emotional development and imprinting takes place in children's brains. Letting your children live this development stage in a poor, insufficient or degraded environment will lead you to potentially face and bear the responsibility of an unhappy, unstable and emotionally weak adult. Even though wealth and consolidated financial situations encourage and facilitate healthy development, they do not often equate "per se" to the sole condition for a biologically and emotionally healthy child, mind you.

The disadvantages and costs associated with failure in this regard are unimaginable: problematic adults, to say the least; unhappy persons and families; illness associated with psychosomatic causes far beyond any pessimistic expectation. While these represent some of the detrimental effects for the single person or family, they also weigh in for the entire community, bearing cost and tension within.

2.3.3. LINEAR VS CIRCULAR ECONOMY

I guess there are a lot of surprised faces here reading about something which may apparently not be tied directly with Education. But here is the point: we're talking here about Outdoor education in general and also how this philosophy has a huge impact on environmental conscience and awareness of our children. As you will see in

this paragraph, the comparison between these two types of economy indeed weighs definitely in this context.

Before getting into some specific examples and experience, let me share a general assumption on the argument: a huge debate exists among scientists, politicians and economists as to "which drives which"; an endless "The chicken or the egg—which one came first?" discussion aimed at feathering one's own nest. The point here, in our opinion, is that a circular approach should be taken in consideration instead of a linear one.

A circular approach is one which assumes that in a given system, no matter how big and complex it may be, every single action and deed brings consequences and results which should be taken into appropriate consideration. For any deviance or malfunction into the system, corrective, healing and mending actions and resources should be taken or found from within. In contrast, a linear approach often encourages an intake of resources from outside the system. These are additional provisions to the existing system which, in turn, wind up being depleted.

Trivial as it might sound, linear systems are often represented by a linear, growing segment pointing upward whilst, in turn, circular is being represented as a circle or circular shape.

Programmed obsolescence (PO) is one among many examples you may want to pick up: concept behind PO is that a cell phone or TV is not worth repairing after a lapse of time and it is rather more "economical" buy a new one (there is solid evidence as to how producers of technology and other commodities contain components which are designed to fail after a specific time frame). As consumer spending grows, so does the economy and ultimately the GDP – so recites the bible of capitalism and linear (exponential) growth.

The fallacy in this is right before our eyes: the Earth and its resources is a finite system, though many refuse to accept this. As the unlimited expansion of the globe and associated resources is impossible, we all have to face the consequences of and responsibilities for irreparable depletion of the Earth resources. To make matters worse, it is not only resource constraints which jeopardise the next generations' future; as a result of resources exploitation, an altered equilibrium is handing in the bill: flooding, hurricanes, rising temperatures, melting ice, just to mention a few of the most important consequences we are witnessing and enduring.

Real life experiences and examples in our FKs both in Germany and Italy show that our children demonstrate significant "sensitivity and care" for the environment. For instance, the use of recycled materials for daily housework and homework is embraced and promoted by the children. Already at this stage, children realise that it is totally pointless to pollute their space and environment with any waste, and they know that most of the daily deeds and actions can be accomplished while avoiding unnecessary waste. Parents transport their children to FK by bike, or when this is not possible, they car-share with other parents which shows a solid and lovely example of environmental care to their kids! You may see (not frequently though) plastic toys or "traditional" toys in the FK; they have been lying there for years and are being used until they totally

disintegrate. This instils the value of enjoying fewer, well-used toys rather than encouraging a yearning for new and upgraded items in children.

It is also for this reason that we, as part of the Education in Nature community, deem it very important to focus on what tools and resources should be used in order to live as consistently as possible with our biological constitution, our DNA.

In the next pages we will refer to the advantages of education in Nature with specific regard to the positive attitude that children develop toward the environment, and how this positively influences, according to our direct experience, the development of the children and the families who have chosen to embrace this philosophy.

2.3.4. OUTDOOR EDUCATION IMPROVES ENVIRONMENTAL ATTITUDES



In 1999, researchers Robin Mittelstaedt, Laura Sanker and Beth VanderVeer put 31 boys and 15 girls through a five day "biodiversity" program. They found that even already positive attitudes about Nature were improved as a result of the activities. The study bolsters existing findings from as far back as 1977 that have shown that an increase of knowledge causes changes in attitude, changing, in turn, behaviour, and resulting therefore in an increase of environmental awareness in the participants of the study.



There are plenty of similar studies and cases which show how education in Nature generates positive and healthy results in children. Undoubtedly, we should admit a potential bias due to our reference system: families and children who share our outdoor education philosophy represent what could be assessed as “predictable result”. Still, as long as long-term effects and results have shown improvements in behaviour and lifestyle, these might well be considered significant positive outcomes.

Some consistent results that Outdoor education can count as achievements include reduction of (abnormal) anger, improvement in sleeping disorders, and increasingly positive relationships with peers. Moreover, it has been shown and ascertained that: outdoor activities, in general, and a balanced natural lifestyle (i.e., regular physical activity, play, healthy food, relaxation and meditation) have direct and significant impact on hormone production, which promotes wellbeing and healthy condition. You might have heard about the suggestion “take your DOSE daily”, where DOSE actually stands for Dopamine, Oxytocin, Serotonin, Endorphins, all of these being produced at different stages in our body under relaxing, positive and ultimately natural exercise and situations.

What should also be considered, is that families approaching this philosophy can be grouped in different categories. Children with evidence of serious and certified illness or ailment, children with behavioural/relationship dysfunction (anger, isolation), and families who “simply” believe that outdoor education is the best way for their children to develop and discover the world. I would fairly state that these last are the most common companions in our journey, while the earlier categories normally approach outdoor education as a healthy and constructive addition to the medical treatment (not necessarily pharmacological).

As the benefits of outdoor education are increasingly being recognized and the market's demand increases, some impromptu teachers or consultants might 'jump on the wagon' and claim to provide improvised, offhand outdoor education offerings. This is not acceptable. We hold the basic, vital and fundamental assumption that education and children should be taken seriously, which means that under no circumstances impromptu teachers or consultants should take part in an education project (either outdoors or indoors). Instead, look for experienced teachers and consultants who have serious, well thought-out educational offerings. These leaders can mentor and train the newer teachers who are interested in gaining experience in outdoor education.

Back to our point: how and why should Outdoor education help and promote a more responsible approach to Earth and, more importantly, a constructive alternative to children learning and following the "catastrophic" approach which is totally useless to the cause of preserving the Earth?

There are different aspects which we deem should be considered, however for the sake of argument, two are definitely the most relevant:

1. Children learn from adults (caregivers mostly) behaviour. Strange as it may sound, behaviour does not always coincide with what adults say they do, even though a relation does exist.
2. Children (humans and primates) are biologically designed for loving their caregivers, just as parents are (biologically designed) for loving and protecting their offspring.

Keeping in mind and pondering these two points gives a sound and solid track as to what we as teachers and parents should do and should avoid in education. These two points bring some important considerations, both for parents and teachers; first consideration is about methodology and how it sensibly differs from the "traditional" one, meaning by this the indoor, common school (including preschool).

Traditional kindergarten (preschool age) often represents a sort of anteroom of the schooling path which aims at preparing the children for the next stage. When this is not the case, Kindergarten is the best option for babysitting. This should not be taken as an adversarial point; today life implies for a very large part of the population (especially in the Western countries) the need for a safe place to leave children while parents are at work.

However, for the sake of the discussion, we should note that this is a function of kindergarten. When the point of the competence and the "readiness" for the next school track is at hand, parents approaching Forest Kindergarten ask, among others questions: "Will my children be taught preliminary maths or writing, so the child will be ready when he/she moves to elementary (or whatever next grade school is)"? In all frankness, it is not easy to deal with this question; personally, I very much like other types of questions which can be easily answered on the spot, such as "where is the toilet" or "what about if it rains". The parents' concern about their children's readiness to move on in the school system is based on a very deep and emblematic conviction: cognitive development is given more value than emotional development. But is cognitive development more important than emotional development, or the way around? Here is the subtle discussion.

The developmental stage a child (as well as toddler or adolescent) is placed into should not be defined solely by society's requirements, but also by the individual child's readiness. It is absolutely right that culture and society weigh heavily in the development of children (and, by the way, all the other life phases). But in the end, the determinate for what developmental stage a child is in is the child themselves. To wrap this up: we are not the ecosystem: we are PART of it and as such we all should comprehend what is behind this and what our real role is in the ecosystem.

2.4. CONCLUSION AND TAKE-HOME MESSAGE

Our personal experience with Northern European countries and Mediterranean ones offers some interesting points for reflection about environmental conscience and overall awareness about environmental sustainability. It is no coincidence, in fact, that the most important and significant environmental movements and groups have roots in the Northern Countries i.e., Scandinavia, and Germany where Outdoor Education first flourished back in the 50's and 60's. It may still be considered an "egg and chicken" dilemma as to what came first; be as it may, it is clear that these countries showed and led the way to a great awareness on the matter. The Fridays for Future movement which raises great interest and attention around the matter is just the top of the iceberg. Hopefully these movements will continue growing and flourishing.

It is not easy to find an appropriate way or statement to conclude this short reflection about Environmental awareness in children. From our side, there is a strong and unavoidable conviction for the importance, better yet, the necessity for our new generations to grow up with an environmental conscience leading and showing the way to the future. Unfortunately, as per other matters, the "devil is in details". Part of the society, while acknowledging the critical conditions of our environment and in general of the Earth, refuses to convene about the root causes of it; others just believe that technology can substitute and suffice.



"When all the trees have been cut down, when all the animals have been hunted, when all the waters are polluted, when all the air is unsafe to breathe, only then will you discover you cannot eat money" (Native American prophecy).

Couldn't find a better though sharp concept to close this subject: we live in a finite system and despite the fact that we used to think that Earth and sky last forever, they don't. In a few billion years from now, the sun will be spent, worn-out. Until then, humans have the choice: we can either short-sightedly contribute to throwing the planet out of balance, at the expense of our own species as well as other life, or we can try to live in harmony with the Earth.

2.5. FURTHER READING

- Mittelstaedt, R., Sanker, L., & VanderVeer, B. (1999). Impact of a week-long experiential education program on environmental attitude and awareness. *Journal of Experiential Education*, 22(3), 138-148.
- Freire, H. (2011). *Educar en verde: Ideas para acercar a niños y niñas a la naturaleza*. Barcelona: Graó, 2011.
- Boileau, E., Dabaja, Z. F., & Harwood, D. (2021). Canadian Nature-Based Early Childhood Education and the UN 2030 Agenda for Sustainable Development: A Partial Alignment. *International Journal of Early Childhood Environmental Education*, 9(1), 77-93

3. THE IMPORTANCE OF CONNECTING WITH CHILDREN IN A LEARNING ENVIRONMENT

CHAPTER 3
Elena Archilés Rubert

This book intends to approach education from a more holistic perspective. Today, when questioning what the objectives of education should be, it is still common to find schools where the main focus, and practically the only one, is covering the National Curriculum contents.

This concern was very striking during the Covid situation that we have recently experienced, in which schools closed and it was intended that children continued with their schoolwork and their routine as normal. The main concern was to make sure that the school year was profitable, that children kept up with their tasks, and that all the planned contents were still being worked on, ensuring that this 'obstacle' affected our objectives as little as possible. But it turns out that this 'obstacle' was a global pandemic, something that we had not experienced before, something that was far away from normal, and children were no exception.

However, we wanted reality to adapt to the content and not the other way around. But shouldn't education be at the service of life? Because if this is the case, the first thing we should ask ourselves is what do we expect from life? What skills do we think are key to experiencing a fulfilling life? As discussed in Chapter 1.1, education policies have largely been inspired by neoliberal marketisation ideals and thus emphasise narrow and measurable learning goals over humanistic values.

And it is at this point, when diving into this philosophical reflection, that we encounter what we consider one of the strongest weaknesses of our educational system, the lack of support for children's emotional development.

Blinded by the curricular objective, many times we jump over conflicts, tantrums or crying as if it were an obstacle that prevents us from reaching the really important objective, which is to cover all the planned annual content. However, is this the sole objective of a 21st-century school?

Therefore, in this chapter, we are going to try to reflect on how we look at childhood and we will share some tools to accompany the child on their journey of self-knowledge from the heart.

3.1. DO CHILDREN NEED PRAISE TO BUILD HEALTHY SELF-ESTEEM?

'Well done! I'm so proud of you!'

'I'm delighted with all of you, today you have all completed the activity with no mistakes!'

'Today I am very happy because all of you have completed your homework! You might get a star by the end of today!'

These are some of the phrases that we can still hear in the classroom, in which the teacher, with the best of intentions, compliments the child so that they know that they have completed the task according to the teacher's expectations, thinking that by doing this they are improving their self-esteem and thus motivating them to want to continue learning. But really, does it work this way?

The Theory of Human Needs, proposed by the American psychologist Abraham Maslow (1908-1970), known as one of the founders and main exponents of Humanistic Psychology, postulates that the human being has a basic human tendency toward beneficial mental health and wellbeing.

Maslow's best-known work is the Pyramid of Needs framed within the Theory of Human Needs. This model proposes a hierarchy of human needs, in which the satisfaction of the most basic or subordinate needs gives rise to the successive generation of higher or superior needs. Therefore, there are factors that influence motivation and, consequently, productivity. If we extrapolate this theory to the educational field, the higher up in the hierarchy children are, the more levels that are met, the better the motivation for learning the children will experience.

'For students to succeed in the classroom, they must be motivated to learn. When all levels of Maslow's Hierarchy of Needs are met, students are at their full potential for learning (McLeod, 2007).

So, what levels are there in the pyramid? How can teachers contribute to moving smoothly from one level to another? Maslow's pyramid has 5 levels, at the base of the pyramid we find basic needs, physiological needs, and, as we move up, we find safety needs, love and belonging needs, esteem needs and self-actualization needs.

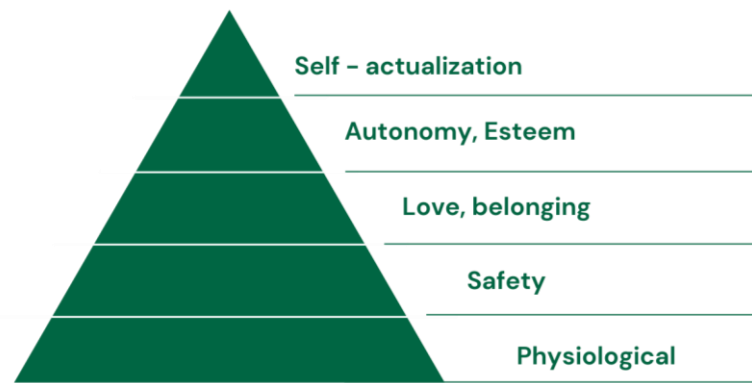


Figure 2. Maslow's Hierarchy of Needs

Therefore, according to this hierarchy, for children to reach their maximum learning potential, they must first meet their physiological needs (water, shelter, sleep, air, clothing...). Here, we can reflect on the moments in which a child asks us to go to the bathroom or tells us that they are hungry or thirsty and we experience it as an interruption that takes us away from the important objective, the acquisition of skills. This probably reminds the reader of how education in many places has historically been reduced to the acquisition of content, as introduced in chapter 1.1.

But is that child learning when he is still sitting in the classroom waiting for external approval to be able to attend to his/her biological need? If we think about it, it is quite an adult-centred attitude to pretend that an external agent, in this case, the adult, knows better than the child him/herself what his/her body needs and what his/her priorities should be at that given time.

At a second level, we find the need for safety (security, health, resources, and so on). This level is oriented to personal security, order, stability and protection. When the needs of this level are not met in learning contexts, the child is on alert, prepared to protect her/himself from any real or imagined, physical or abstract danger. So, what can we do as teachers to make sure these needs are met and motivation is not lost in the process?

As always in a human relationship, we should actively listen to the other person's needs. So, when a child shares with us that he/she is not feeling well, physically or emotionally, we should genuinely try our best to attend to this need. It seems pretty obvious, right? However, how many times have we seen adults undermining a child's conflict or asking a kid to 'get on with it'? Well, in my experience, this unfortunately happens quite often.

Favouring an orderly, placid and peaceful space, where you can concentrate on activities with some ease, is also key to giving yourself over to the learning experience. So how can we favour these conditions? By taking care of the group learning environment: regulating the coexistence of the group with clear norms and boundaries that make them feel secure and open to the experience, from a safe place. Later in this chapter, we will go into detail about ways to regulate this coexistence.

Ensuring that the physical environment protects the child from any threat and provides well-being is another fundamental thing for the teacher to aim for. So, not only we are responsible for protecting children from any health and safety hazards, but also, we should think about how the physical context can generate well-being.

In chapter 2 we reflect on the importance of growing up in contact with nature and how natural environments help us to rebalance ourselves. However, when learning in a natural environment is not possible, taking care of the physical context where the learning process is going to happen will have a big impact on the process itself. Certain environments facilitate concentration and focus while others make it difficult for the children to be able to be fully connected to the learning process.

What aspects can we take into account when preparing indoor learning spaces? According to 'Centre d'Assessorament i Investigació d'Educació Viva (CAIEV)', we should take into account the following aspects:

3.1.1. ILLUMINATION

Have an adequate amount of light, avoid direct sun and artificial light, whenever possible.

3.1.2. COLOURS

Use a pleasant colour range since using strident colours contributes to an overstimulation of the children. Traditionally children's stimuli have been associated with bright multiple colours. However, these bright colours can interfere with children's capacity to focus and concentrate.

3.1.3. FURNITURE DISTRIBUTION

Distribute the furniture in a way that favours focalization in the different environments and serves to reinforce specific norms. The type of furniture we use and how it is placed in the space has an impact on the group dynamics. For example, having a physical barrier near the entrance helps us remember the no-run rule when entering the building or room.

3.1.4. IDENTITY

Include elements that identify the children as a group, thus reinforcing the feeling of belonging. For example, displaying an image of a tree where each student's name is on a leaf. This aspect is usually taken into account in the early years stage, however, as they move into higher educational cycles it tends to disappear.

3.1.5. STRUCTURE, FLEXIBILITY AND ORDER

Use elements that are as versatile as possible, that allow a space to be transformed with relative ease and that generate harmonic and visually ordered spaces. For example, by using modular furniture that can be arranged as benches, shelves, room dividers, and so on.

3.1.6. POLYSENSORY SPACES

Make sure that the space itself has enough sensory stimuli, introducing different textures, materials, elements from nature or any other elements that bring in sensory diversity.

3.1.7. AUSTERITY

Choose precisely which elements add value to the space and remove all the stimuli that are expendable so that the child can engage in focus activities without distractions. Less is more!

3.1.8. AUTONOMY

The space itself must favour the autonomy of children. For example, if a child needs a material, he/she should be able to access it without having to ask an adult for help and, at the same time, be able to put it back in its place independently.

The following pictures show how, when taking into account the previous items, we can create a learning environment that invites us to explore and learn. These pictures were taken during the 'Mednight', an event organised by universities of different Mediterranean countries in which Amiga.eco collaborated with the Jaume I University in creating a hands-on area where to explore with your senses. The space allocated was a cafeteria that had about 40 chairs and a vending machine, that was all. As you can imagine, not very welcoming at all! However, by introducing nature, and caring for other aspects described above, we managed to create a warm environment full of stimuli.



Source: amiga.eco

At this point, when we have taken care of the physiological and security needs, we can focus on the need for love, belonging and connection (level 3 of Maslow's pyramid). For Maslow, this need is expressed when people seek to overcome feelings of loneliness and establish close bonds with people around them. They try to transcend the individual sphere and establish links with the social environment. In a learning environment, this can be expressed by the need of a kid to be loved and liked by their peers and teacher, and by his / her need to belong to the group. This contributes to giving meaning to what is done on a day-to-day basis. Furthermore, the personal contact and social relationships that favour these ties stimulate children in a way that helps them stay motivated and willing to keep learning. For instance, encouraging moments to listen to each other and share feelings, or facilitating moments for them to develop their own individual projects will help reinforce this feeling.

Establishing a strong and secure bond with the child is vital so that they dare to explore, make mistakes and adventure into new experiences, knowing that, no matter what, they will still be loved. If we want to build a healthy bond with a kid, it is important to be authentic, and to see them as unique, complete and wonderful human beings.

Of course, sometimes we will not like certain actions that they might do, however, when we tell them, we should do it in a way that their self-perception is not affected.

Love should not be for trade and be based on whether the other person fulfils our expectations or not. This is the reason why it is extremely important to ensure that the child knows that even when we did not like a certain action that he/ she did, our love for the person remains untouched.

At the next level of needs in Maslow's pyramid, we encounter the need to feel valued and recognised. According to Maslow, there are two needs for recognition: a lower one, which includes the respect of others, the need for status, fame, glory, recognition, attention, reputation, and dignity; and a higher one, which determines the need for self-respect, including feelings such as self-confidence, competence, achievement, independence, and freedom.

In a learning experience, it is crucial to trust the person we have in front of us. Trust his/her abilities and skills and see the process as just as important as the final goal. In fact, very often the goal is the process itself. Let us use a school playground situation as an example to see how our interventions can affect their self-worth.

A preschool kid is in the playground trying to climb up the steps to the slide, the teacher next to him intervenes as follows:

- a) The teacher runs to her and calls out 'get down, you are going to fall'
- b) The teacher sees that she is taking more time than the adult considers 'normal' and lifts her to the end of the steps
- c) The teacher raises her voice and says 'Come on, get down! Don't you see you can't do it?'

All three options take the power away from the child, affecting her self-worth. Instead, if we stay close to the kid, in silence, observing her moves, ready to help out if it is needed, with a facial expression that shows our trust in her, it is more likely that the child feels empowered and respected. What happens if we are truly scared? Then, we should connect with our inability to be there for her, be honest and express it as it is:

'When I see you climbing up the steps, I feel scared, please come down.'

Being aware of your limitations is the first step. Next you should ensure that the kid can accomplish her need (if it is a reasonable risk to take) by, for example, calling another adult to be with her if you are not capable due to your fears or belief system.

As you can see, recognition is also important at this level of needs. So, it could sometimes be appropriate for this recognition to come in the form of compliments (it will depend on the situation and the human being we have in front of us). However, if the compliments come when the other needs are not met and the kid has not developed autonomy, this approach will not be effective in building healthy self-esteem.

Finally, we encounter the last level: the internal needs and the self-actualization needs. This level is more abstract and more related to finding one's purpose in life. This level is closely related to the concept of subjectification, presented in chapter 1, and the holistic approach to education introduced in chapter 2.

So, how can we help children work towards this need of self-actualization? For instance, by providing materials and facilitating activities and life experiences that acknowledge and foster the child's real passion during his/her school time.

In summary, now that we have analysed the different stages of Maslow's Pyramid and how they are closely related to motivation and wellbeing, maybe we can answer the question raised in this subchapter 'Do children need praise to build healthy self-esteem?' There is no harm in praising a specific child in a specific situation, and as we said in the introduction, this is not a method that applies to everyone and every situation in the same way. However, in general, we can say that if teachers focus their efforts in placing themselves in a caregiver position and ensure that the above-mentioned levels of needs are covered, they will stand a higher chance of helping the kid find her/his real purpose in life.

3.2. NON-PUNITIVE EDUCATION

Traditionally, education has used punitive strategies like bribes, rewards, threats, or punishments to redirect and modify those behaviours that the adult considered inappropriate. In this essay, we would like to reflect on different ways of regulating coexistence, while respecting human development processes. This 'non-punitive education' approach pretends to preserve the child's essence, establishing a clear framework within which the child can be free, even if his behaviour does not match the adult's expectations or belief systems.

Because, at the end of the day, what is the purpose of education? What kind of society are we willing to build? Do we want a society in which human beings are indoctrinated, away from their true self, or a society in which human beings can flourish their full potential connected to their needs while respecting those of others?

According to Rafa Guerrero, psychologist and PhD in education, when we punish a child for his/her bad behaviour, the lower areas of the brain that are responsible for survival instincts are activated. Faced with this punishment, the child will have three possible reactions: attack, flight or paralysis. All of them start automatically, unconsciously and reactively. Large doses of adrenaline and cortisol will be released, which incites action and prevents thinking, which is why punishment blindly invites revenge. Since the part of the cerebral basement (instincts and emotions) are hyperactivated, it is difficult to connect with the cerebral attic (critical thinking, reasoning, executive functions, etc.). In this way we cannot be aware or think about what happened and, therefore, we only obey our most instinctive and emotional parts. There is no real learning when the cerebral basement is hyperactivated. Love, respect, patience and good treatment of children are therefore essential for learning.

The child, before the punishment, can be enraged (attack) or afraid (flight or fight). This happens at first, but later the guilt and shame appear, and the child thinks that he/she is bad because of his actions. All this must be replaced by support, understanding and adequate attributions to his acts. Punishment, by activating the most primitive and instinctive part of the brain, disconnects the child from the logical and

thinking part of him/her, in addition to not helping him/her to be responsible and consistent with his/her actions.

It is pretty striking how punishment and aggression toward children are widely tolerated within society. As Francesco Tonucci, a researcher at the Psychology Institute del Consiglio Nazionale delle Ricerche di Roma, cleverly reflects in his illustrations (figure 3), the educational system has traditionally used whatever was needed to shape children into productive pieces of a system that did not see individual needs as an asset, but to contrary, something to be wiped out in favour of conforming, 'well adapted' citizens.

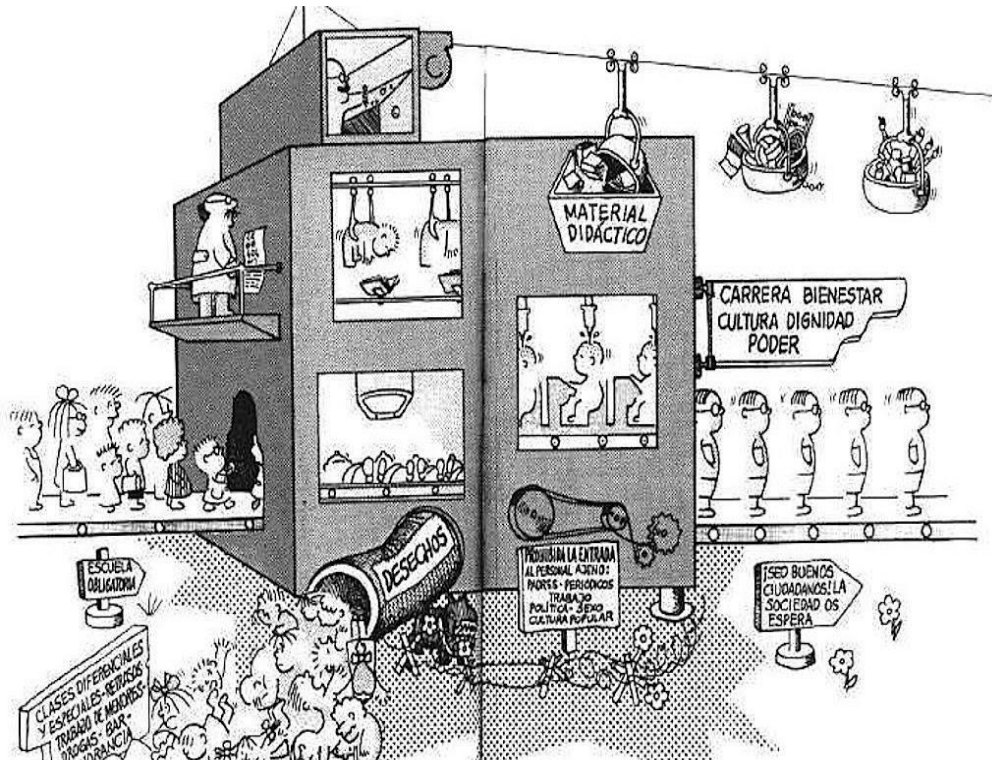


Figure 3: illustration by Francesco Tonucci (Frato).⁶

Figure 3 shows very clearly how children enter the system being diverse and throughout their years in school they either meet the educational system expectations (coming out through the 'power and wellbeing' exit) or they are seen as school failures (being expelled through the waste drain).

Now, I invite you to look at the picture from a teacher's perspective. If the professional truly believes that only those children who shape into the right shape can be successful in life, they will do whatever is in their hands, sometimes with their best

⁶ To facilitate reading in English Amiga.eco has translated the concepts of figure 2:

- material didáctico: teaching materials
- carrera, bienestar, cultura, dignidad, poder: career, welfare, culture, dignity, power
- escuela obligatoria: compulsory school
- desechos: waste
- prohibida la entrada al personal ajeno: padres, periódicos, trabajo, política, sexo, cultura popular: no entry to outside personnel: parents, newspapers, work, politics, sex, popular culture
- clases diferenciales y especiales, retrasos, trabajo de menores, drogas, bar, ignorancia: performance-based groups, delays, child labour, drugs, pub, ignorance.
- ¡se buenos ciudadanos! la sociedad os espera: be good citizens! society awaits you

intentions, to help children have a good life. So, before we go into more detail about possible alternatives to a punitive educational system, I invite the reader to question what kind of human being we want to see at the end of the conveyor belt. Perhaps, by doing this, we will realise that if we see each child as a unique and wonderful being, those peculiarities that make them different, and that we desperately want to erase, will no longer bother us. If we respect their internal rhythms because we understand that each child has their own, the need for rewards or punishments to alter his/her innate rhythm will disappear.

In other words, when teachers wholeheartedly accept this diversity, and therefore understand that each human being has a different purpose in life and a different way to achieve it, the use of punitive strategies is drastically reduced. In my experience as a teacher and consultant, I have seen far too often how sometimes teachers focus on repressing behaviours that are inherent to certain development stages.

For instance, it is well researched that children between the age of 3-6 years old struggle to be sitting in silence, truly concentrating on the same task for more than 10 minutes. However, instead of respecting this, some teachers present activities that require longer periods of concentration, using punitive strategies, to ensure that children allow them to finish the didactic units on time, as they have programmed.

Another example could be, having a rule in pre-school in which a child is expected to share a toy as soon as someone requests him/her to do so. This rule is oblivious to the fact that, at that age, the child is going through a very needed egocentric phase and, in order to comply with this rule, he will need to be disconnected from his true developmental need. Of course, we can get the child to obey by using punitive strategies like rewards, bribes or punishments, but we have to be aware that, by doing this, he/she is progressively disconnecting from his internal needs since his/her main purpose is to be loved and liked by us.

I can not insist enough on the fact that teachers should not be there to 'train' children, to force them to be disconnected from their real needs or to obey instructions that do not correspond to their development stage, regardless of the strategies used. In addition, when many rules are needed, it is important to do an exercise of reflection on the part of the adult and see if the space and the proposal are adequate for the children in front of us. The same happens if we observe that a rule is transgressed very frequently.

One of the problems we have in today's society is that, on many occasions, cities, buildings or even schools are not designed with children in mind, so endless rules are needed.

"Nature clearly shows us that those young organisms, that are, not yet fully mature, if they want to survive and mature, they must grow in an environment prepared by themselves in which they will be protected and cared for according to their species. In nature it is without a doubt the task of the parents to arrange what is necessary for this type of protected environment while, at the same time, providing adequate conditions to allow

the young one to mature. Now it is the time for us, citizens, parents, teachers... to face this task imposed by nature and seriously consider what environments children should be in so that they can become real human beings. And if we seriously think about it, there should be suitable environments in all places where there are children, at home, in the neighbourhood and in all other areas where children are growing little by little" (translated from Wild, 2010, p.17).

At this point, once we have reflected on what the objectives of the educational system should be, I would now like to present an alternative to the more traditional punitive strategies so that when a child presents behaviour that is not acceptable, we have suitable strategies to regulate it while respecting his rights as a human being.

Very often I have found professionals who, when talking about a change in the educational system and proposing to put aside punitive strategies to correct children's behaviour, have imagined a school where children do whatever they like at all times. However, the reality is quite far from this perception. In fact, the coexistence model that this educational system promotes is based on very clear norms and boundaries, as well as consequences, to ensure that we all respect ourselves, the others, the surroundings and, in the last instance, our planet.

In reality, a child needs boundaries for healthy development.

"Boundaries do not define the being of the other but, on the contrary, they serve to keep the environment relaxed. In such environments both children and adults feel comfortable, open to living new experiences, and learn to differentiate between authentic and substitute needs." (translated from Wild, 2010, p. 9).

As we have previously mentioned when analysing Maslow's pyramid of human needs, level two of the pyramid refers to the need for safety and establishing clear norms and boundaries will help us achieve this sense of safety that allows us to adventure into new learning experiences. So, what do we need to take into account when establishing group norms? What is the purpose of those norms?

- They regulate coexistence and mark the organisation of the day.
- More than establishing boundaries, what they do is regulate. They are negotiable and therefore more flexible than boundaries (the concept of boundaries is further developed underneath).
- If a norm is not complied with, no one's integrity is in danger. It is important to keep norms to the essential minimum, and to keep them very precise and specific.
- A norm is a social construction, a mandate, that a social system has adopted for the optimal functioning of a social system.

Here are some examples of norms:

- Before we go into the toilet, we should take the 'toilet card' displayed in the class so the others can see that the bathroom is being used.
- If you use a brush, you must clean it before returning it to the art area.
- When finishing playing with a material, you must return it to its place before starting a new game.

As you can see, these norms regulate co-existence and establish an appropriate environment for learning. However, no one is at risk, emotionally or physically, if children do not comply. On the other hand, boundaries are there to curb actions that compromise the physical and emotional safety of the child. The boundary intends to provide a feeling of security, of warmth and helps us to locate ourselves.

If we think about our own life, we can find plenty of examples of boundaries:

- *Physical boundaries*: A door or wall creates the boundary between rooms or the boundary between inside and outside. The lanes in a road define where cars should go and how many cars can travel safely on the same road.
- *Personal boundaries*: maybe we need to express a boundary if someone touches my computer without permission, when people hug me without asking first, or when a relative comes to visit without any notice.

They are parameters, guides that we establish for ourselves within all the social relationships in which we are involved (work, intimate relationships, friendships, family, and so on). They are unique for each individual, they are in constant construction and, being invisible, they therefore require fluid communication.

"Boundaries are an inherent part of life. On the physiological level, life itself occurs within boundaries: the simplest cell, as we have already seen, or a human baby, is bordered by its membrane. Without this delimitation, there is no identity. At the level of action, it is also clear that our capacity is boundaried: we cannot walk through walls without hitting each other; our own perception is boundaried; our sight is boundaried to certain wavelengths and our hearing is boundaried to certain sound decibel thresholds. So intertwined are these two concepts: life and boundary, that we can realise that exceeding certain boundaries endangers the very existence of life. Finally, it begins to be accepted that unchecked growth of human activity is contrary to the development of life itself on the planet. The boundaries, therefore, are consistent with life. The lack of them destroys the life around them" (Herrero, 2003).

Now that we see how crucial it is to set boundaries, it is important to reflect on the way in which boundaries should be presented, so that they really are caring and protecting the child without affecting their self-perception. Before setting a boundary, it is important that we ask ourselves if this boundary is in service to the child's learning and development or, on the contrary, if we are imposing the unconscious boundaries that are part of our belief system. If we finally decide to set the boundary, it is important to pay attention to the way in which we express it, as we further develop in the next subchapter.

3.3. COMMUNICATING FROM THE HEART AND ACCEPTING THE WHOLE RANGE OF EMOTIONS

This brings us to a key concept, 'communication'. Have you ever thought about the impact of your words? Are you communicating from the heart? Later in the chapter, we will briefly introduce Nonviolent Communication (NVC), which is a process of communication created by psychologist Marshall Rosenberg. But first, I would like to open up this section by sharing with you some communication tips from Virginia Satir's book *'En Contacto Íntimo' ('Making contact')* that can be useful not only for the purpose of setting boundaries in a loving and firm manner but also for starting to use a language that strengthens the bond between human beings, regardless of being a teacher-student relationship, two friends, your partner or any close relative. From my educational consultant experience I can say, without a doubt, that applying these tips in school meetings (*claustras*) helps in reaching common goals while creating a more pleasant working environment.

3.3.1. *SPEAK IN THE FIRST PERSON*

Many people avoid speaking in the first person because they feel that if they did, they would be trying to attract attention. They think they would be selfish. Reminiscences of childhood, when you shouldn't show off; Besides, who would want to be selfish?

The most important thing is that speaking in the first person clearly means that you take responsibility for what you say. Many speakers make the situation even more complicated by attributing everything to the listener, by using expressions such as, "You can't do that." This is often understood as a humiliation. In contrast, using the expression "I don't think you can do that" establishes a more equitable relationship between the two interlocutors, providing the same information without the burden of humiliation for the other person.

Speaking in the first person clearly states that it is "I" who is speaking, and therefore it is convenient to use this form of expression. If you want to be clear when you are speaking, regardless of what you are saying, it is important that you clearly state that you take responsibility for what you say.

Listen to the difference in this example: "I say the moon is made of cheese." (Obviously, this mental image is yours.) Instead of saying: "The moon is made of cheese." (Which would seem to be a declaration of fact.) Being aware of the clear use of the first person when speaking is particularly crucial when people are already in a critical situation. It is clearer to say, "My idea of the situation is..." (which is an expression in which one assumes responsibility).

With this in mind, one can begin to change a situation that threatens to get worse. When it is not clear that what is said reflects the speaker's opinions and feelings, it is

alarmingly easy for the listener to interpret the message personally and perceive it as a judgement or humiliation. Going back to setting boundaries, let me ask you how you feel when reading the following expressions:

"Get down! You're gonna fall down! Can't you see you can't climb it!"

"When I see you climbing onto that rock, I feel scared. Please, come down."

In the first example, we are assuming that the child will fall. But we can not foresee the future with total certainty. In the second example, we are taking responsibility for our feelings and fears. Furthermore, as we described in subchapter 3.1, when analysing Maslow's Pyramid, this type of language (where you project your fears and assumptions onto the child) prevents the child from developing a strong sense of self-worth.

THE IMPERSONAL FORM (SINGULAR OR PLURAL)

Often this way of expressing yourself is an indirect way of talking about yourself or attributing everything to the other person. It is often also a covert way of spreading gossip.

"People say that..."

"It is said that..."

This way of expressing oneself can also be a resource to manifest our negative fantasies, especially in conversations when people are looking for who is to blame. If we know who this third-person singular or plural refers to, we can say it. How many times have we heard...?

"They won't let me do it!"

"They are gonna get upset!"

"They don't like what I'm doing!"

"I've heard..."

"Everyone knows that..."

If the speaker uses these types of expressions, we can ask who or whom they are referring to. By doing this we ensure that the information we are passing on is precise and that it is clear who we are referring to. This clarity seems to help both interlocutors feel safe. The information becomes something concrete on which one can rely, instead of something nebulous and perhaps somewhat threatening.

If we think about a school situation, do you think we are equally connected when using the first sentence as much as when using the second?

"Again? I understand now why everyone says that you hit your classmates."

"I have seen you hitting Mary just now and Mrs Smith mentioned that during the day out you also hit John. Are you feeling ok? Let's find some time for us to talk about it because I don't feel secure when you hit other kids and you also know that in our school, we don't hit each other."

The first sentence clearly sounds more threatening and probably makes the listener more uneasy, ashamed and more guilty, which very likely makes the hitting situation even worse. The second sentence opens the door of communication because while it reminds the child that this type of behaviour is not acceptable, it also shows that we still care for him as a human being. It is vital to express very clearly that we reject certain actions, but not the human being who is in front of us.

THAT

That is a term that can easily be misunderstood because it is often not clear what *that* refers to. *That* is a word that should be used with caution. The clearer we are in what we mean by *that*, the less necessary it will be for our interlocutor to assign a meaning to it. (...)

"That happens to people very often!"

If we expressed this message in a more direct manner it could be a comforting message such as:

"I understand. What you are saying has also happened to me. I know how it feels when you get humiliated."

As you can see, giving details of what 'that' means not only can bring a lot of clarity to the message but also builds a bridge for deeper communication. Hence, the words we choose when communicating can have a big impact on our relationship with the child and can be our worst enemy or our best ally to start building a strong bond.

When it comes to regulating co-existence through boundaries, a very important aspect of healthy upbringings, as seen in the previous subchapter, having a strong bond will make an enormous difference when expressing a boundary or reminding the child of norms and rules. What kind of 'authority' do we want to be for the child? If we don't have a bond, they will probably follow our instructions because the educational system establishes that you must obey the teacher.

However, if we consistently set boundaries that show that we truly care for the child, it is more likely that they see us as adults who are there to protect them and to ensure that they are safe at all times. So, even if they do not like the boundary or rule, they will respect us based on the bond we have mutually built, and therefore our co-existence will be smoother.

Above we have introduced some tips on how to communicate with clarity without being intrusive or aggressive. However, each of us has a tendency to express boundaries in a certain way, based on our temperament or belief system. According to Jordi Mateu, president of Centre d'Assessorament i Investigació d'Educació Viva (CAIEV), we usually encounter six different professional profiles when accompanying children: executive, motivator, protective, absent, exclusive, egalitarian. Even though it is not a clear cut, Jordi argues that we have a tendency towards some of them and, therefore, set the boundaries accordingly, as we can see in table 1.

Table 1: Classification by Jordi Mateu, translated into English by Amiga.eco

Profile	How we express the limit...	The person has a tendency to...
Executive	<ul style="list-style-type: none"> • no, because I say so • you have to do it like this 	lead, guide, teach, advise...
motivator	<ul style="list-style-type: none"> • It's better that you do it this way because this way you can... • Come on, you can do better if you do your part 	stimulate, motivate, accelerate, show options, push for results...
Protective	<ul style="list-style-type: none"> • I understand that you need this, but I prefer that you do that. • Well, in any case, a little bit and then you leave it 	prevents the other from getting frustrated, overprotects sympathizes...
Absent	<ul style="list-style-type: none"> • no, no and no! N-O, NO. • and you will stay behind at lunchtime! 	avoid contact, rejects, is absent
exclusive	<ul style="list-style-type: none"> • no, it's not like that, look, this is how you do it 	provide the solution, do it/herself
Egalitarian	<ul style="list-style-type: none"> • Let's see, do you think this is fair? • the reason why it can't be done is that... blah blah blah... • Let's see what the others think... 	seek cooperation, to do it among all, share, allow....

However, when accompanying children, our role should not be any of the above-presented profiles, our role should be to care for the person we have in front of us, ensuring that he/she moves up smoothly between the different levels of the Maslow pyramid.

As we concluded when introducing Maslow's pyramid, to contribute to a healthy self-perception of the child, we must place ourselves in a caregiver position and ensure that the different levels of needs are covered, so we contribute to helping the kid find her/his real purpose in life. So, if we analyse a carer's profile:

- What does he/she think about the others (children)?
 - The others are legitimate, but not the same as me.
- What is the main purpose of education?
 - The objective is to live the experience of being, to develop one's own potentialities
- What do you think about yourself?
 - I care, they are cared for
- What attitudes do you have?
 - I favour experiences, especially those that contribute to the construction of healthy self-esteem.

When you place yourself in a position of a carer and facilitator, and you start seeing children and their learning processes from this perspective, the need to force them into a specific shape will fade because we will see diversity as an asset and their pace will be respected.

Let me clarify that. Of course, children, at some point, will have to cover certain contents that might not be as interesting to them. Public schools have to ensure that children acquire certain competencies. However, we will place ourselves in a different position, when we see children as seeds that know exactly what to do to grow and flourish, our job will be to ensure that we provide this seed with optimal conditions –we offer water and rich soil and ensure that it gets enough sunlight.

This concept refers to 'autopoiesis', a concept that was coined by biologists Humberto Maturana and Francesco Varela and refers to the fact that any healthy organism has an innate ability to build, sustain, and make decisions based on its inner wisdom or structure. At the pedagogical level, this principle means that children have the need and ability to make decisions, self-regulate and learn for themselves. If there are no opportunities for autonomy, the child will no longer be able to be in touch with what his or her body needs, and will build up stress that will damage his or her health and well-being. (CAIEV ⁷).

Once we really understand this idea, many boundaries will not be needed anymore, we will see ourselves as assistants to their processes, instead of carriers of all the knowledge that should be transferred to children, perpetuating this idea of children as passive agents of their own learning processes. So, how could we communicate those boundaries that are still needed? Earlier in this chapter, we went through some tips to strengthen the bond through communication. In the next section, we would like to introduce you to the basic concepts of Non-Violent Communication (NVC).

Before we go into more detail, I feel the urge to reinforce the idea that in education there is not a method that works for every situation and every child. That is precisely the beauty of it. So, please, always be critical and discern what works best for each specific situation.

3.3.2. NON-VIOLENT COMMUNICATION (NVC)

Marshall Rosenberg Ph.D, is the founder and educational director of the Centre for Nonviolent Communication (CNVC). He has travelled around the world mediating conflict and promoting peace, promoting a language that inspires compassion and joyful relationships in all areas of life.

As Mr. Rosenberg expresses in his workshops, NVC is a language that stresses the expression of feelings and needs, inviting vulnerability and transforming it into strength. In his conferences, he used to use two puppets, a giraffe and a jackal. He picked the giraffe, the land animal with the largest heart as a symbol for NVC, and used the jackal to represent that part of ourselves that thinks, speaks, or acts in ways that disconnect us from our awareness of our feelings and needs, as well as the feelings and needs of others. So, how does a jackal-speaking teacher evaluate students who are not in harmony with his / her values? Let's see some examples.

- If the teacher says something and a pupil does not understand it.
 - The teacher might think that he or she is a slow learner.
- If the student says something that the teacher does not understand.

⁷ <https://caiev.com/que-es-educacio-viva/>

- The teacher might think that he or she is being rude and socially inappropriate.
- If the teacher speaks so quickly that the student can not follow
 - surely the student has an auditory problem.
- If the teacher can not understand a child because he/she speaks very quickly
 - surely the student has an articulation problem.

This is how jackal-speaking teachers have been trained to think. When there is a conflict, they think in terms of what is wrong with a person who is behaving in a way that is in conflict with their values. I wish none of the readers were raised up in a context where jackal language was spoken. However, it is very likely that you were. And if you were, you know that if you wanted to succeed, be promoted or be rewarded, you had to play the game and measure up. So, now that we have briefly outlined what a jackal speaking teacher might sound like. Let's now focus on the language of giraffes.

As Marshall Rosenberg continues to explain in his booklet 'Teaching Children Compassionately' (a transcript of one of his workshops): Nonviolent Communication shows us a way of being very honest, but without any criticism, without any insults, without any put-downs, without any intellectual diagnosis implying wrongness. Because the more we use words that in any way imply criticism, the more difficult it is for people to stay connected to the beauty within themselves.

So, if we bear in mind that the aim of the Non-violent Communication Process is to clearly express how I am without blaming or criticising, as well as requesting actions that would enrich my life without demanding, what would the steps be to achieve this communication aim? As we previously mentioned, please take this as a guide, not a method, as human relationships are complex and every situation might be different.

The four-parts of the Nonviolent Communication Process are:

OBSERVATIONS

What I observe (see, hear, remember, imagine, free from my evaluations) that does or does not contribute to my well-being:

"When I (see, hear) ..."

FEELINGS

How I feel (emotion or sensation rather than thought) in relation to what I observe:

"I feel ..."

NEEDS

What I require or value (rather than a preference, or a specific action) that causes my feelings:

"... because I need / value ..."

REQUESTS

The concrete actions I would like to be taken:

"Would you be willing to ...?"

In order to follow this four-step process confidently, we shall go into more detail with each of the sections.

The Observation phase requires observation, not evaluation. So, it is very important to avoid expressions like the ones we previously introduced from V. Satir's book, as much as words such as right, wrong, good, bad, correct, incorrect, slow learner and fast learner. In my experience as a consultant, un-learning to use this language is quite a challenge for many teachers, as they feel that without that, they do not know how to evaluate children's performance. So, let me give you an example from a giraffe teacher.

A pupil is doing a project about Paris and he places the capital in Germany. The teacher takes a map and approaches the pupil. When she is next to him, she says:
"I was reading your information about Paris and I am a bit confused because when I look at my map it seems to me that Paris is in a different country. How did you find out that Paris is the capital of Germany? I got my map here, should we have a look together?"

Once we have made an observation without evaluating it, we will then move into identifying how we feel when this behaviour occurs.

This stage can be particularly challenging to those of us who grew up in environments where feelings were not spoken about, resulting in a lack of vocabulary to express how we feel and even difficulties in really understanding how we truly feel. In fact, it is very common to confuse feelings with mental images of what other people do. For instance, saying "I feel misunderstood", "I feel manipulated" or "I feel used".

As Mr. Rosenberg says, this stage of the communication process involves being conscious of the cause of our feelings and to take responsibility for them. The first two things we can ask are "What did the other person do?". Then, we can proceed with "And how do you feel *when* they do this?". Notice we are not asking, "How do you feel *because* they do it?". The cause of our feelings is never what the other person does. What other people do is a stimulus for our feelings, but it can't cause our feelings.

So, expressions such as, "I feel sad when you don't clean up at the end of the activity" or "You make me angry when you start talking during the activity" are the result of an education that made us believe that by using guilt-inducing expressions we could shape children into the successful students that Tonucci showed us in the image we presented earlier.

Therefore, if your emotional language is not as precise as you would like, the following list might help you when looking for a word to express how you feel. The feelings we are about to present are divided into feelings that appear when our needs are fulfilled and feelings that appear when they are not.

FEELINGS WHEN NEEDS ARE FULFILLED

Amazed	Comfortable	Confident	Eager	Energetic	Fulfilled	Hopeful	Inspired
Intrigued	Joyous	Moved	Optimistic	Proud	Glad	Relieved	Stimulated
Surprised	Thankful	Touched	Trustful				

FEELINGS WHEN NEEDS ARE NOT FULFILLED

Angry	Annoyed	Concerned	Confused	Disappointed	Discouraged	Angry	Annoyed
-------	---------	-----------	----------	--------------	-------------	-------	---------

THE MIDDLE RING

This ring comes between the innermost and outermost rings and narrows your feelings down more.

THE OUTERMOST RING

The feelings and emotions are further divided and categorised in the outermost part of the feelings wheel. These emotions are the subcategories of the larger categories of emotions defined in the innermost ring.

Personally, I find this wheel extremely useful when working with teachers and children because quite often the person gets confused and really struggles to figure out the core feeling. For instance, when a kid expresses that he feels 'worthless' we can track down the core feeling and understand that he or she is feeling fearful. Knowing that the core feeling is fear gives us valuable information when deciding how to accompany this human being. Well, now that we have more tools to put words into our feelings, we shall move into the next step of the Non-Violent Communication process.

3.4. EXPRESSING OUR NEEDS

Mr. Rosenberg suggests that during the communication process we place our attention on our needs. If we are truthful to ourselves, we can see that at the base of our feelings there is always a need that has or has not been met. And this should be our challenge, to be able to join our feelings with our needs, and therefore, feel responsible for them.

Once we do, whenever we express a feeling, we will take responsibility for it by saying something like 'I feel annoyed because I ...' instead of using a jackal language in which we make other people 'guilty' for how we feel. Have a look at these two examples:

- *"I feel discouraged because when I try to talk to you, I need your full attention to ensure that I do not miss any details when telling you the story."*
- *"I feel discouraged because you don't pay attention when I tell you the story."*

In the first example, I take responsibility for my needs, understanding that this is how I feel, but maybe other people could tell you a story while you are 'distracted' by sending an email and not feel discouraged. In other words, the same action triggers different feelings in each person based on aspects such as our temperament, belief systems or cultural surroundings.

Sometimes we struggle to differentiate if what we think we need is an essential need, so, to clarify this point, I would like to share with you some basic needs that we all have (please visit cnvc.org to learn more).

<i>AUTONOMY</i>	choosing dreams / goals / values choosing plans for fulfilling one's dreams, goals, values
<i>CELEBRATION</i>	celebrating the creation of life and dreams fulfilled celebrating losses: loved ones, dreams, etc. (mourning)

<i>INTEGRITY</i>	authenticity creativity meaning self-worth
<i>INTERDEPENDENCE</i>	acceptance appreciation closeness community consideration contribution to the enrichment of life emotional safety empathy honesty (the empowering honesty that enables us to learn from our limitations) love reassurance respect support trust understanding
<i>PHYSICAL NURTURANCE</i>	air food movement, exercise protection from life-threatening forms of life: viruses, bacteria, insects, predatory animals rest sexual expression shelter touch water
<i>PLAY</i>	fun laughter
<i>SPIRITUAL COMMUNION</i>	beauty harmony inspiration order peace

Probably at this point, you can see the connection between some of the needs presented in the different layers of Maslow's pyramid and the list of basic needs that Mr. Rosenberg presents. If we go deeper in analysing this, on one hand, physical nurturance needs are basic needs of the human being (bottom layer of Maslow's pyramid) and we have already seen that needs are inherently related to our feelings.

When we understand that the expression of a child's feelings gives the teacher invaluable information, we start looking at anger, sadness, happiness, love and fear in a different way. When we understand that each feeling serves a purpose, we stop seeing them as good and bad feelings.

When observing teaching sessions, it is very common to see how teachers would do anything in their power to avoid seeing a child's expression of sadness or anger, since they have already classified these feelings as negative. However, each serves its purpose, which in short is to help the child adapt to the context. So, what is the purpose of each feeling? Why is it important to accept the whole range of emotions?

Personally, I like the way Rafael Bisquerra (PhD in pedagogy and director of master and postgraduate courses on education and emotional intelligence) explains it

in his book 'Universo de Emociones' (A Universe of Emotions). Here I share with you some of his reflections:

Anger

Anger is one of the most common and frequent emotions. What do I want to do when I feel anger? Well, it has many expressions (yell, insult, hit, etc.) but deep down what we want to do is attack. Anger is a reaction of irritation, fury or rage triggered by indignation and anger when we feel our rights violated. Anger is generated when we have the feeling of having been wronged. It is triggered by situations that are valued as unfair or that threaten moral values and personal freedom.

Any stimulus or event, depending on the assessment made of it, can potentially be capable of triggering it. We could summarise by saying that we get angry and feel anger, to a lesser or greater extent, basically for two reasons:

- when things do not go our way
- when someone does not treat us as we think we deserve

The problem is not the anger but what we do with it. With anger we learn to defend ourselves from what can harm us. Thanks to anger we feel indignation at injustice and the urge to fight it to eliminate it.

Fear

What is fear? Fear is the emotion that is experienced when facing a real and imminent danger, experienced as overwhelming and that puts health and life at risk. The most common way to deal with fear is to flee or avoid the dangerous situation whenever possible. We are facing Darwin's classic fight-or-flight in such a way that the functional response aims to protect the person and, if this is not possible and there is no choice but to face it, then it is common to move from fear to anger.

The function of fear is to increase the chances of survival. Thanks to the fear of danger, we adopt the appropriate strategy to survive, which is usually to stay away from danger if possible.

Sadness

Sadness is inescapable at some moments in life. It is an emotion that does not usually involve any type of action. It is rather a desire to remain inactive that characterises sadness. This may be explained by the fact that sadness is experienced in the face of loss. After the loss we need to conserve what we have left. One way to conserve energy is inactivity.

Sadness acts as a call for help, it aims to capture the attention of others. Social cohesion and the feeling of belonging to a group are ways of coping with sadness.

Fear is associated with fleeing, anger with attack and sadness with crying. Fear is an emotion directed basically to the future: it anticipates a real and

imminent danger. Anger is an emotion that is lived in the present against someone we consider responsible for our discomfort. While sadness is a response to a past event.

Joy

Joy is the emotion that occurs in the face of a favourable event. The main causes of joy are: the achievement of objectives, relationships with friends, meeting basic needs (eating, drinking...), successful experiences...

Joy is a simple and uncomplicated emotion. It hardly needs regulation; it balances itself. It is important to create situations that allow you to live and experience moments of joy.

As we can see from R. Bisquerra's own words, each emotion serves a purpose and, therefore, is full of meaningful information for the teacher.

When we have a withdrawn child in a classroom, at first glance we can think that he is sad or introverted. However, now you hopefully have more tools to look at this situation: if we look at the feelings wheel, we can track this feeling and realise that the core emotion here is anger. And now that we know that anger can be a reaction when we feel our rights have been violated, maybe it is a good point to mentally scan through Maslow's pyramid needs and see if we, as caregivers, can help.

Sometimes you will go through this process and it will work, and sometimes it will not. And that is the beauty of working with human beings, we are complex and there will never be a manual that works for everyone in exactly the same way.

3.5. FURTHER READING

This chapter is inspired by the sources below:

Bisquerra, R., Punset, E. (2021). *Universo de Emociones*. PalauGea.

Guerrero, R. (2020). *Educación en el vínculo*. Plataforma.

Herrero, J. (2003) *Libertad, límites y responsabilidad*. Ojo de agua. Available from: <https://ojodeagua.es/articulos/>

Mateu, J. (2020). *Que entendemos por acompañar*. Caiev. Available from: <https://caiev.com/recursos/mediateca-caiev/>

Mateu, J. (2020). *Que es l'educació viva*. Caiev. Available from: <https://caiev.com/recursos/mediateca-caiev/>

McLeod, S. (2007). Maslow's Hierarchy of Needs. Simplypsychology.org

Rosenberg, M. B. (2005). *Teaching Children Compassionately*. Puddle Dancer.

Wild, R. (2010). *Libertad y límites. Amor y respeto*. Herder.

Satir, V. (1998, 2015). *En contacto íntimo*. NeoPerson.

4. CONCLUDING COMMENTS

In this book we have sketched out an active pedagogy that puts the child in the centre. We hope that the book will inspire teachers to take small steps in changing their praxis into an active pedagogy.

We have problematised the dominant educational rhetoric in European educational systems that emphasise learning of narrow academic skills through goal-oriented learning over values and attitudes such as environmentally friendly attitudes and emotions. We suggest that by taking the 'subjectification' dimension into consideration, teachers may shape children into citizens that know how to manage and participate in society and how to relate to, for example, other people and the environment with certain values. One way of doing it is, as we have argued, to facilitate experiential learning because here children learn through active engagement with the world. We have also introduced 'the Didactical Relationships Model', as a way teachers may facilitate learning. The model displays that planning for teaching is complex and multiple factors need to be considered.

We have shed light on green pedagogies and, most importantly, provided insight into some peculiarities of this pedagogy. Further, we provided insights about space, boundaries, play, imagination, and other factors important for children's experiences. We have illuminated what factors should be taken into account when accompanying children to ensure they grow up into confident, accountable, and assertive adults. The concept of non-punitive education was introduced to highlight the importance of establishing clear boundaries and appropriate learning environments, avoiding bribes, rewards, threats, or punishments of any kind.

The importance of accepting the entire range of a child's emotions, reflecting on the importance of listening non-judgmentally to children's expressions of feeling have also been explored.

We hope this book has provided inspiration and momentum for teachers to continue moving in the direction of active pedagogy. Our recommendation to teachers is to start with the small steps that you feel ready and able to take. In our experience, this is more likely to succeed than making large changes that involve uncertainty on the part of the teacher, school leaders or parents. The small steps will build on each other to move in the direction of active pedagogies and are more likely to result in solid, lasting changes.

We would like to remind readers that active pedagogies will look different in every context, for every teacher and class. There is not one right way or prescription to follow, and that is why this ebook has provided theories, tools and examples, but not lesson plans. We would like teachers to feel empowered, confident and curious to experiment with active pedagogies in their own teaching context and we are excited for the diversity of unique teaching and learning that will emerge.

We strongly encourage teachers to find and build community with others who share their goals and are employing active and green pedagogies. Let us learn from each other by sharing successes and struggles. Going alone may be slow and lonely, but going together provides momentum and joy. Find like-minded colleagues and recruit curious colleagues at your place of work. Seek out and participate in community, regional, national and international networks. The European Outdoor Education Network (<https://www.eoe-network.eu/>), for example, is a welcoming and diverse group of teachers, professionals, and academics. Individuals and organisations can become members for free. The EOE holds annual conferences, and the next ones will be in Finland in 2023, and Italy in 2024).

The intention of this eBook was to contribute to the resources available for those interested in active and green pedagogies and outdoor and experiential education. The existing resources in this field have been slow to spread to a wider group of readers. We call for increased sharing of knowledge, perspectives and resources across different languages, different educational institutions, as well as between academia and teachers.

Examples of this sharing are the publications 'Guía de escuelas en la naturaleza' from Asociación Nacional Edna, La Travesía Ediciones, and the Institute for Outdoor Learning's Horizons Magazine, which share good practice, reflections, research, news and more related to outdoor learning and education in nature. We hope to see more such knowledge distribution channels in the near future.

To conclude, we would like to send a final thank you to Erasmus+ for funding the OUTLEARN IT project which has made this collaboration possible. This ebook is the first of two project results of the OUTLEARN IT project. The second project result is the creation of didactic units which will show examples of the theories in this ebook in practice. More information can be found on the project website www.outlearn.eu about practical implementation of green and active pedagogies in outdoor learning for teachers in the first cycle of primary education.