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## The Bases of Montessori Pedagogy as a Facilitating factor for Child Development in Burkina Faso and Spain

Aida Macià-Gual

Montessori-Palau International Research and Training Center,  
SPAIN

Laura Domingo-Peñañiel\*

University of Vic – Central University of Catalonia, SPAIN

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**Abstract:** Education faces barriers all over the world, which sometimes makes it difficult to look after children's rights and their individual development. Hence, society is clamoring for new practices, and different approaches are emerging, Montessori among them. Despite the fact that this approach was developed to attend to the poor strata, nowadays it is basically promoted by elitist sectors, though it can be perfectly applied as an education system for all children, regardless of their socio-economic and cultural backgrounds. This study analyzes the bases of Montessori pedagogy in a school from a low-to-middle-income country (LMIC), Burkina Faso, and another school in a high-income country (HIC), Spain. The study takes into account children, family, school environment and teacher training all of which contribute to children's development.

**Keywords:** *Early childhood, Montessori Pedagogy, child development, environment, children's rights.*

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### Introduction

Education and early childhood development are the basis for our future (Cobanoglu & Sevim, 2019), particularly early education, since children's academic success depend on it (Bainbridge et al., 2005; Montessori, 2019; Reynolds et al., 2009) as well as on developing social and emotional competencies (Kirk & Jay, 2018). However, countries and societies worldwide face significant barriers when it comes to implementing an education system that addresses early childhood, sometimes because of poverty or strict governmental policies. Consequently, evidence has shown that early attendance to preschool enhances the future academics performance of pupils from immigrant and/or lower socio-economic backgrounds (Sierens et al., 2020).

As human development is no longer considered a universal phenomenon (Vogler et al., 2008), curricula focus on addressing children's development and rights. Pedagogical approaches like Montessori are thus surfacing, as its principles were created to help humanity (Lillard, 2018). They are regarded as facilitating factors for children's development (Montessori, 2019) at an individual level, and help unite families and schools to work together for a common goal: the children's own progress.

Considering that Montessori Pedagogy serves as support for child and youth growth, the aim of this paper is to analyze how Montessori principles can benefit any child, and how these are considered in a low-to-middle-income country (LMIC), Burkina Faso, and in a high-income country (HIC), Spain. The implementation of these principles in both countries will be discussed considering educator and family involvement in regard to inclusive practices, respect to each and every child, and the possibility of offering them a personal and meaningful education that fosters enriching practices to achieve individual goals.

To conduct this paper we have analyzed the foundation and background of Montessori Education, focusing on the prepared environment and teacher guidance, and reflecting on school barriers that limit children's development. In order to do this, Bronfenbrenner (1979), Vygotsky (1978) and Piaget's (1978) ideas are presented, delving into Montessori (2019) principles that foster education in a prepared environment to meet children's interests through

#### \* Corresponding author:

Laura Domingo-Peñañiel, University of Vic – Central University of Catalonia, Pedagogy Department, Sagrada Família, 7, 08500 Vic, Barcelona, Spain.  
✉ [laura.domingo@uvic.cat](mailto:laura.domingo@uvic.cat)



different means: using their own senses, moving freely around the classroom (Ongoren & Yazlik, 2019), and using specific materials to enhance their skills. Furthermore, Montessori practices that relate children with their culture and their participation in the family and environment are provided, such as gaining independence and autonomy thanks to the role of the guide or giving children the chance to choose in the classroom. These key features are reviewed in academic literature, and then detailed information about the methodology used is provided, continuing with the analysis and discussion of the presented framework. The paper ends with results and conclusions about how the Montessori approach is implemented in both contexts to promote child development and link families to school practices.

### *Background*

Considering that our research focuses on analyzing Montessori prepared environment and teacher guidance in preschool, context for both countries is needed, as well as information about the origins of Montessori education in order to associate this approach to LMICs and its contribution to humanity.

Burkina Faso's total population of 20321378 has steadily increased over the past 60 years (The World Bank, 2020a); while Spain, with a total population of 47076781 (The World Bank, 2020b) has stabilized in the past 10 years. Differences between the countries are clear in their Gross Domestic Product (GDP) per capita. Whereas Burkina Faso last recorded 822.38 US dollars (Trading Economics, 2020a), Spain registered 33349.70 US dollars in 2019 (Trading Economics, 2020b).

Despite infant education being in high demand in most societies, it is not compulsory in neither Burkina Faso nor Spain; for both countries compulsory education begins at age 6 with primary education—which lasts six years—then continues into secondary education until the age of 15. Even though the school organizations are similar in these countries, disparities are apparent in their structure and enrollment rates: figures for the 2015-2016 school year in Spain show 57% enrollment of 0 to 3-year-olds and 96% of 3 to 6-year-olds (National Institute of Statistics, 2019), whereas in Burkina Faso the enrollment rate in preschool was a mere 1.17% in 2005 (United Nations International Children's Emergency Fund [UNICEF], 2019a).

The changing needs of the society continuously create a paradigm shift in the policies and program implementation of agencies and educational landscapes (Raguindin et al., 2020). However, the reality of each country is different, as educational policies have undertaken major disparate innovations in all fronts, such as reaching enrollment rates (UNICEF, 2019a), improving literacy or promoting active child educational activities and approaches, Montessori among them.

Montessori Pedagogy was founded and developed by Dr. Maria Montessori (1870-1952). When she started working with children with mental disabilities, she realized that the need for a pedagogical approach was more pressing than a mental approach to care for them. Itard (2009) and Seguin's (1866) contributions helped Montessori create sensorial materials and practical life activities that contributed towards building children's confidence, independence and self-discipline. Due to the economic recession in Rome from 1900 to 1912, the pedagogical approach expanded and Montessori took part in social projects with low-income families and opened schools in abandoned buildings. This allowed her to work with children from the poorest sectors of society who were mostly afraid and shy, who sometimes challenged authority and were possessive or disruptive (Montessori, 2019). She offered them the same pedagogical approach that she had used before. Meeting the children's physiological needs led to individual transformation, specifically in their behavior and willingness to learn (Montessori, 2019). The Montessori movement expanded, courses were offered across Europe, and the implementation of the approach extended to different contexts. Although the influx of Montessori pedagogy currently persists mostly in HICs such as the United States or European countries, this approach has also been implemented in LMICs, as both value Montessori's pursuit of human progress (Montessori, 1986) far more than curricular merit.

### *Review of Early Childhood Education: Facilitating Factors, Benefits and Current Barriers*

The period of infancy is currently receiving a great deal of attention in research, as evidence is conclusive in that early years are formative in a child's long-term prospects (Woodhead, 2006) like school performance (Bainbridge et al., 2005; Reynolds et al., 2009) and performance in society showing lower crime and delinquency rates and contributes to positive effects in their well-being (Reynolds et al., 2007). Those years are also key when it comes to creating the bases of social and emotional competencies which will lead to positive life outcomes (Kirk & Jay, 2018). To achieve these aims, critical perspectives on developmental models are needed to start a pedagogical renovation without barriers or limitations.

The first limitation came with the idea of understanding the human brain as a 'tabula rasa' (Locke, 2015), which has been substituted for a wider concept, as children experience numerous progressive transformations that shape them physically, mentally, cognitively, socio-emotionally (Montessori, 2019; Woodhead, 2006) and morally (Vogler et al., 2008). In any society, childhood must be seen as an entire pole of humanity (Carnes, 2016) because children's transformations and how they go through developmental phases mark the acquisition of skills and capacities

(Woodhead, 2006). Early education and care programs should thus be seen as an integral first stage within the school system in all countries (Vogler et al., 2008). However, this is hardly the case in Western countries, as compulsory education starts at age 6 (Woodhead & Moss, 2007). In LMICs, schooling is not accessible to everyone on account of poverty, living in rural areas, or because parents have poor schooling (Woodhead & Moss, 2007).

The second barrier arises when children are placed in traditional educational practices, mostly sitting idle and being submitted to instructions (Colgan, 2016) because teachers have the knowledge constructed in a superior manner (Gattegno, 1970). This education is forced on children as their autonomous will is stultified (Peterson et al., 1993) since they are seen as vessels to fill with information instead of being taught to use their minds. Furthermore, the organization of school timetables in a sequence of subjects alters a generalized education where knowledge is interdependent (Colgan, 2016); assumptions about what counts as normal development are considered unqualified within curriculum development and international policies (Woodhead, 2006). Holfester (2018) argues that concepts such as textbooks, exams, grades, rewards or punishments only provide a dependent instruction. Cooperation rather than competition among children (Colgan, 2016; Gross & Rutland, 2019) should be transmitted to educate for humanity, offering children the right to participate in their educational development as it benefits their social participation processes (Correia et al., 2019; Ongoren & Yazlik, 2019).

The third limitation comes from a generalized education that makes no allowance for individual differences nor for diversity aspects (Montessori, 2019; Malaguzzi, 2011). Development is individual growth, change and transformation (Montessori, 1986), which nowadays is conceptualized in terms of moving through a sequence of age-appropriate stages (Fabian & Dunlop, 2002) or an aged-curricula (Vogler et al., 2008). Thus, educational pedagogies that uphold children's rights and support their individual development through appropriate practices—such as the Modern School Movement (Freinet, 1993), Malaguzzi (2011) or Montessori (2019)—are needed. However, Sanders and Epstein (2005) point out that families and communities must become full partners in the educational process. Not all schools are at the same point regarding their work on partnership, but Epstein (1987) found that objectives like student development and academic success are of interest to all institutions and are best achieved through cooperation and support actions. School-family-community involvement practices are diverse (Epstein, 1995), but more research is needed to find out which practices promote favorable child profiles, for instance mother monitoring, mother-child communication or mother/father-child activity, all of which have been tested (Lv et al., 2019).

These new understandings of educational practices are trying to implement principles that support children's development as active beings in their personal growth, advancing families and community and creating social relationships to empower the environment.

The following section provides a review of the Montessori principles of education that meet the new demands of our society as they help children develop their own selves into caring and wise adults who take part in society and find meaning in their lives (Lillard, 2018). To achieve this, Montessori developed a pedagogy focused on two main aspects: environment and teacher guidance.

### *Montessori Environment*

Montessori believed that internal guides lead children to their potential, (Montessori, 2006), propelling them towards activities that serve their developmental needs (Lillard, 2018). One key aspect of this approach is where education takes place: a prepared environment designed and created to cater for children of different ages. Spatial adaptations are based on this particular methodology and affect the quality of education (Chan, 1988; İslamoğlu, 2017) as materials are created and set to stimulate children's interests and skills (Ongoren & Yazlik, 2019). Kirk and Jay (2018) note that the creation of a prepared environment is defined as the structure (physical) and process (psychological) where children increase their knowledge as creative and critical people who emancipate their talents freely (İslamoğlu, 2017), and drive to virtuosity unobstructed by adult praise or judgement (Lillard, 2018). Moreover, Cobanoglu and Sevim (2019) state the importance of developing a positive attitude toward healthy growth as it is directly related to an environment that provides qualified cognitive stimuli, language interactions, positive social-emotional experiences and autonomous children, as recognised in Montessori classrooms.

The environment surrounding children influences character formation, as social, cultural and economic processes shape childhood (Vygotsky, 1978), and children are active agents in their own environment (Piaget, 1978; Vygotsky, 1978). Bronfenbrenner (1979) added that the environment has an external influence on any human, and so it does on any child.

Montessori established specific principles to foster children's education. First, the aim of the environment is to provide a wide range of opportunities for children to explore, learn (İslamoğlu, 2017) and achieve their potential, understanding and mastery (Lillard, 2018) of all their abilities. To do so, complex hands-on material and lessons across major topic areas are created for children aged 0 to 12+ years (Montessori, 1994). These activities are based on personal senses, since by acting children turn sensations into perceptions (Colgan, 2016; Gross & Rutland, 2019), and this knowledge is not isolated as pure knowing; it is integrated in a complete activity of cognition and acting within the world (Frierson, 2015).

Second, the environment is designed taking order into account, as external order can create an internal order in children's minds (Montessori, 2019). Sets of color-coded material are placed in specific areas, leading to the development of abilities such as considering others, theory of mind (Lillard et al., 2017), tolerance (Gross & Rutland, 2019), self-control, and respect for others and for the environment (Montessori, 2019).

Third, learning is encouraged through the use of these materials rather than direct instruction (Colgan, 2016; Montessori, 2019). Montessori witnessed that children could make constructive choices and thrive when given freedom of choice (Colgan, 2016; Gross & Rutland, 2019; Lillard, 2018). Autonomy and independence are gained through practical life activities (Montessori, 2019) that give them the motivation to participate in daily social activities, acquiring the skills needed for an uncertain future (Colgan, 2016). These abilities are absorbed and persist in the long term, under no pressure or coercion from adults (Bone, 2017).

An adult is needed to establish the environment, as they assume the role of guides, connecting the child with the environment, activities and material.

### *Teacher Guidance*

In Montessori education, those in charge of classrooms are seen as guides since they do not transmit knowledge but let children's abilities flourish (Montessori, 2019) and respect individual development. Hence, children are the ones who develop and adults guide or facilitate their development (Gross & Rutland, 2019), providing them with activities and materials to work with and master their abilities.

As the guide is the link between children and environment, evidence shows that the quality of children's relationships with teachers and their ties to the school can determine their school success (Reynolds et al., 2009). Sasson et al. (2020) state that training programs should emphasize pedagogical development, enabling efficient educators who relate better to their profession. Moreover, teachers' behavior regarding the creation of a positive emotional and social environment can enhance young children's social-emotional competence (Heller et al., 2012; Kirk & Jay, 2018). Consequently, Montessori (2019) pays special attention to adult training, as they are responsible for guiding their development and offering inclusive practices that respect every child. Understanding these two major aspects as child education goals will drive our research question: How are Montessori bases implemented in two different realities to facilitate child development?

Our objectives are the following:

1. To identify educational barriers and responses in order to respect children's rights and development in any educational activity.
2. To describe and analyze the Montessori bases considered to be a facilitating factor for children, family and community, and their implementation in both contexts.
3. To interpret how Montessori bases can be applied in different contexts.

Based on the current state of scientific and technical knowledge, the end goal of this research is to analyze, describe, and provide a description of the selected Montessori bases that can be implemented in any country regardless of its economic situation, taking into account practices that enable child development and family participation. All the information gathered can be transferable to different types of schools and may help the educational community.

### **Methodology**

The present study is framed within the interpretative paradigm and adopts Yin's (2009) descriptive case study approach, as questions beginning with "how" and "why" are related to contemporary events, a process, etc., and are thus appropriate for a case study. Our research question begins with "how" and it aims at presenting "a complete description of a phenomenon within its context" (Yin, 2003, p.5) while "look[ing] for the detail of interaction with its contexts . . . coming to understand its activity within important circumstances" (Stake, 1995, p.11). This applies to our case study since Montessori bases are implemented differently in both contexts. This analysis can provide a perspective for similar schools, and to this end, qualitative data have been collected.

### *Participants*

To conduct this study, a selection process was designed to find two different schools, one in a HIC and the second in a LMIC. Accordingly, we pre-selected schools from different countries that implemented the Montessori approach. Then a survey was carried out in all pre-selected schools and several responded (n=7). We finally selected our samples—a school in Burkina Faso and a school in Spain—that fulfilled two conditions: a) offering non-compulsory education for 3-to-6-year-olds; b) implementing Montessori Pedagogy in their education project. Having teachers who hold a Montessori degree was valued positively, but we decided not to make it a mandatory requirement since teacher training tends to be rather poor in LMICs, though basic competencies and skills are mastered.

After the selection process, two participants (Principal A and B) conducted semi-structured interviews and informal conversations. Interviews were only conducted to principals as they form the governing and directing body of the education institution. Consequently, their points of views are clear and associated to the standards and basis of each educational pedagogy implemented. Both principals constructed and developed their schools with the Montessori Pedagogy. The implementation of the Montessori Pedagogy in the Spanish school has meant constant work and development, from both the founders and management team, in all educational and organizational areas to fulfill and support the ideology that they respect the most. Likewise, in Burkina Faso, the development of the Montessori Pedagogy has required constant effort.

Principal A, with the support of the governing body, has managed the Spanish school for over 30 years. On the other hand, principal B created the Burkina Faso school four years ago as part of an educational project to promote literacy and writing skills with the help of volunteers. Principal A is a qualified specialized Montessori educator for infants and primary while principal B is a qualified primary education teacher. Differences are apparent in their daily implication in the schools, principal A lives in the same city and attends the school daily, assisting institutional meetings and organizing all school services offered. Principal B visits Burkina Faso once every six months, as Burkina Faso is not their country of residence, working staff and volunteers continue principal B's tasks during the remaining six months of the year. The Burkina Faso school project aims to give the responsibility to the native inhabitants to continue the educational work, as a consequence, principal B transfers leadership tasks to facilitate the autonomy of the inhabitants in the school project.

### *Instruments*

The same procedure was carried out in both countries. First, the school principals completed a survey. The main objective was to identify how the schools work and how the Montessori approach is implemented regarding environment and teacher guidance. Both parameters guided construction of the survey under a Likert scale and open ended questions provided qualitative information related to the school. After its creation, the survey was validated by two experts: a methodological expert focused on construct and validity criteria and an expert in literature and assessment of the items in the survey, answered for face and content validity.

Then, document analysis was collected from multiple sources, which enabled us to document how each school established and implemented different Montessori bases.

Once we had the data, we conducted semi-structured interviews (n=3) and informal conversations (n=3) with principals (n=2) to validate the information gathered and obtain more refined data regarding the implementation of the Montessori approach in any country regardless of poverty, but rather focusing on how to overcome barriers in order to introduce the approach. Surveys were transcribed and translated to Spanish, interview data were tallied, analyzed, and discussed by both researchers, and document analysis enabled data triangulation, producing a range of relevant information for our research.

Documental analysis revision was achieved using a content analysis method. Documental data from websites, social media and school materials was systematically collected. The content analysis was qualitative, focused on coding themes and concepts within the documental data and then interpreting and understanding to analyze and draw results. Table 1 depicts the procedure used.

*Table 1. Procedure*

<b>Resource</b>	<b>Spain</b>	<b>Burkina Faso</b>
Survey	Principal A	Principal B
	Website	Humanitarian organization website
Documental analysis	School website	Fundraisers' social media and newspaper clippings
	Social Media	Internal project B and images
	School materials	Internal project A and images
Semi-structured interviews (n=3)	Principal A	Principal B
Informal conversations (n=3)	Principal A	Principal B

The following section provides a detailed account of school selection based on the data collected.

### *Sample: Two Case Studies*

The sample for the descriptive case study includes two schools that offer non-compulsory education; the school in Burkina Faso teaches children aged 3 to 6, whereas the one in Spain includes ages 0 to 6 and 16 to 18. We disregarded these structural differences since schools were selected for their implementation of Montessori pedagogy in non-compulsory education, so the aim of the study could be achieved regardless of the divergent features of country and school contexts. The following analysis focuses on ages 3 to 6, the age range shared by both schools.

*Case No. 1: A Private School in Northeast Spain*

The selected school is in Catalonia, in a city that has over 50 schools—public, private and charter—offering different types of education for ages 0 to 18. In 2018 there were 18,130 children aged 0 to 15 (Statistical Institute of Catalonia [IDESCAT], 2019) out of which 17,215 were attending school (Government of Catalonia, 2019).

The school is private, secular and co-educational, and maintains an attitude of respect, openness and tolerance towards all cultures, ideologies and religions. It has over 200 employees and comprises an area of 150,000m<sup>2</sup> including sports facilities, a vegetable garden, a farm and a forest. The Montessori approach is applied for pupils aged 0 to 15. Additional activities from the Glenn Doman program are also implemented. More than 1,000 students—both city dwellers and from surrounding villages (internal project A, June 2019)—attend this school.

*Results Case No. 1**Promoting Skills for Child and Adult Life Thanks to Montessori Pedagogy*

The different daily school activities have been conceived and organized according to Montessori guidelines, albeit not strictly curricular. Daily school organization offers three uninterrupted hours of classwork where “language, science and mathematics are taught using strictly Montessori materials” (principal A, survey). Practical life and meal times are considered educational moments too (principal A, informal conversation 1) where child autonomy and independence are observed, though cooperation and participation in favor of the group are also developed.

Although child development is mostly offered through Montessori bases, the Glenn Doman program from the Institutes for the Achievement of Human Potential in Pennsylvania provides additional support in physical education (PE) and language, as principal A states:

“Montessori bases regulate our whole education project, although the Glenn Doman program complements PE and language, so children can develop or hone a wider range of skills and abilities with standardized activities” (principal A, interview 1).

Therefore, students are placed at the center as an active agent in their development, by means of inclusive practices that respect the child’s pace (internal project A, 2019), which is a major goal in teacher guidance.

*Adult Activities in Children’s Hands*

Activities offered to children are varied. Activities or routines which are mainly carried out by adults, such as “serving meals, folding clothes, sweeping and mopping, or washing the dishes, have been adapted for 3 to 6 year old children” (principal A, interview 2). In none of these cases do children play or pretend; moreover, they carry out these tasks using real objects as they are conceived as daily routines for them.

*Montessori International Association† (AMI) Regulates Guide Training*

The school has seven classrooms for students aged 3 to 6. In each classroom, there is a guide or tutor responsible for the group, plus an assistant. As the school is loyal to the Montessori approach, all seven guides are Montessori certified to work in Children’s House by the AMI. This ensures that all guides receive the same training following Montessori’s Pedagogy concerning inclusive practices, respect for all children, and development guidance so they become committed citizens (internal project A, 2019).

AMI trainers evaluate the school yearly and provide consultancy to improve educational activities as “every year we want to provide better care not only for our children but for our families too, and the way to do it is having qualified external consultants that support our educational approach” (principal A, interview 2).

*AMI-Validated Materials*

The spatial organization follows the Montessori design; each classroom has mathematics, language, movement, science and art areas, in a set of color-coded materials (principal A, interview 2). Classrooms have minor variations following the guides’ opinions as they are responsible for organizing the class into areas of materials, setting the materials and placing individual desks and rugs to work independently or in small groups if needed (principal A, informal conversation 2).

To guarantee the reliability and validity of the methodology, more than 80% of Montessori materials are bought from suppliers that are loyal to this approach:

† Montessori International Association operates under the name of Association Montessori Internationale, for this reason it is abbreviated as AMI.

“We trust these companies as they follow the blueprints provided by AMI when they manufacture the materials. Moreover, AMI is in constant contact with them to create the exact materials developed by Dra. Montessori” (principal A, interview 1).

The school allows teachers to prepare language sets of material or buy other material under the principal’s supervision (internal project A, 2019), as the support materials created are organized in the office show.

#### *Families are Educational Partners*

School philosophy asserts that family and school are partners in the educational process and they sign a contract accepting so. There is open communication between family and tutor through children’s agendas, though both parts write only in case of unexpected circumstances. Tutors do not write what children do on a daily basis as “[they] want them to talk about their day when they arrive home” (principal A, informal conversation 2). The school offers families three workshops, two group meetings, a seminar, and at least three interviews a year (internal project A, 2019). On such occasions, families receive information of interest, not only about their children’s school day but also about age-relevant topics that might be useful for their education.

In the interest of transparency, the school sends families a monthly newsletter, and instructions are published on the school’s website or memos are sent to parents. Additionally, parents may observe their children’s class for an hour if they have previously attended the seminar (internal project A, 2019).

#### *Case No.2: A Nursery School in the Center of Burkina Faso*

The school selected in Burkina Faso, in the center of the country, is a municipality of 25 villages in a rural urbanization where 4,000 pupils are taught in 24 primary schools. Although the population aged 0 to 15 is 11,452 in 2006 (City Population, 2019), adult literacy is less than 29% in the area while school dropout reaches an alarming 70-80% (UNICEF, 2019b). Furthermore, according to the United Nations Data (2019), the illiteracy rate in Burkina Faso is high owing to school expenses, as families must pay enrollment fees and purchase school material, which takes a toll on an already critical economic situation. In this rural area, families send their children to work in agro-pastoral activities for supplemental income.

In view of the above, the Basic Education District proposed a series of activities to improve school success rates and, with the support of a humanitarian organization, the first nursery school in the main village was built. It welcomed 62 pupils aged 3 to 6 in 2016. The school facilities consist of two classrooms, a warehouse, an office and two latrines. Regarding education, it implements Freinet (1993), Malaguzzi (2011) and Montessori (2019) ideas. This school project was created in 2015 with cooperation activities carried out in partner countries—where private supporters raised the €64,300 needed for the construction and the new education model—paying special attention to the literacy program.

#### *Results Case No. 2*

##### *Training Teachers in the Behavior of an Active Child*

The school’s staff basically consists of the principal and two teachers who get help from volunteers and the humanitarian organization at specific times. To understand this nursery school project, it is necessary to explain teacher training. Principal B and the internal project developed by the humanitarian organization reflect on teacher training as a way of facing context situations:

“The project was developed to face barriers related to literacy and to involve the whole community to achieve a higher school enrollment and school attendance. That is why we especially focus on teacher training but also on community involvement” (principal B, interview 1).

The survey showed a coordination of three approaches: Freinet (1993), Malaguzzi (2011) and Montessori (2019), which were introduced to the teachers through training given by the principal. All three approaches place children at the center and understand them as active agents in any environment (principal B, interview 1).

Furthermore, in 2016 the whole educational community from all five provinces attended a 48-hour training in ‘Freinet techniques and their stakes on civility in schools’ under the Burkina Movement of the Modern School. The value of such training lies in the acquisition of common values like “patriotism and good citizenship at an early age [which] are assets that can contribute to end the phenomenon of incivility” (newspaper clipping, April 2016).

The humanitarian organization offered community meetings, and training for janitorial and teaching staff. The latter was imparted by the principal, who states that:

“Montessori training focused on sensorial and language materials; Malaguzzi on respecting children’s way of expressing their opinions and feelings; and Freinet on boosting joy in learning” (principal B, interview 1).

All three approaches see children as active beings in their development, as “teachers are placed in a secondary role because they guide the process” (principal B, informal conversation 1). Throughout the year, training is offered to teachers, and the principal supervises school activities for six months.

#### *Combining Different Approaches*

“Being autonomous, independent, joyful, active, cooperative, free to choose” (fundraisers social media, June 2019) in combination with “a meaningful learning related to the community life” (principal B, interview 1) are interrelated components in all three approaches proposed by the school. In view of these standards, the school day is organized around children’s educational needs, offering small group and class activities. Students are divided into different groups based on their interests, “occasionally aided by the teacher’s pedagogical criteria” (principal B, informal conversation 1).

The combination of pedagogical approaches conditions classroom distribution. There is a workspace in the middle of every classroom, where rugs are placed between two shared tables where children work in groups of four. Furniture is organized by areas along the walls. A few shelves accommodate some Montessori sensorial sets, instruments, toys and language materials (fundraisers’ social media, June 2019). Activities are selected according to children’s interests or even proposed by the children themselves; in the latter case, documentary data is gathered and hung up on classroom walls. “The synchronization of three approaches is adapted to respect children’s interest and promote their autonomy” (principal B, informal conversation 1).

#### *Children’s Legacy for the Future*

The nursery project seeks “school attendance, in addition to giving a basic education that can promote cultural development in perspective and guaranteeing a place to grow in relation to others” (humanitarian organization website, June 2019). It sets a limit to the widespread phenomenon of child labor, as education and training are key to strengthening each community as “they allow access to economic and social innovations, enabling people to be aware of their rights and their potential, thus reducing the risk of exploitation” (principal B, interview 1).

Increasing academic success is understood as a strategic action to improve general living conditions and to prepare children for an uncertain future (principal B, informal conversation 1), as climate, technology, socioeconomically policies, society and their way of living is in continual transformation, adapting to new settings.

#### *Handmade Materials and Partner Involvement*

School materials come from two different sources (principal B, survey): from donations—thanks to the humanitarian organization and fundraisers—and from volunteers, teachers, families and community who create handmade materials. Social media analysis and records evidence that consumables and books are mostly acquired through fundraising initiatives, while furniture, sets of Montessori materials and playground toys are handmade.

The making of furniture and Montessori handmade material was completed before the opening day and supervised by the principal, while playground toys were community and volunteer contributions received throughout the year.

#### *The Whole Community is Involved in Education*

Education wants to be part of the community in two ways: a) informing community members about the nursery school project and getting them involved if they want to collaborate; and b) promoting visits so that children get to know the neighborhood and work on science projects in a real environment (internal project B, 2019).

Families do have special participation as they are always welcome in the school. There is total transparency between school activities and families (internal project B, 2019).

### **Discussion**

This study aimed at analyzing the implementation of the Montessori approach in two sample schools characterized by the availability of economic resources and their fidelity to the method. Although schools differ in their economical investment and societal differences, they share a common educational project objective.

Placing the child as an active being in his/her personal development and in any educational activity is paramount in both schools, which leads to respect for each and every development process (Montessori, 2019). However, cultural and societal differences can convey more determination and implication in some Montessori principles, as children’s background, community, family environment and social demands might differ. Despite Montessori practices being much stricter in Spain, the school in Burkina Faso implements different theories, all of which place the child at the core of any education project and propose activities that children may find interesting, understanding them as active agents in any environment (Montessori, 2019; Piaget, 1978; Vygotsky, 1978). As a consequence, children’s rights are

enshrined, as all ideas adopted respect individual pace and offer meaningful practices that lead to social commitment (Montessori, 2019). Therefore, students have different options to develop personally and freely (İslamoğlu, 2017).

The implementation of any school practice is closely related to the prepared environment. As Kirk and Jay (2018) have noted, it needs to contemplate the structural and process areas which are respected in both schools. Moreover, autonomous independence for children, allowing them the opportunity to participate actively in any activity, which results in their own empowerment and theory of mind (Lillard, 2018) is sought. Activities offered allow children to advance in their personal development and form intellect (Frierson, 2015) as sensations turn to perceptions (Colgan, 2016; Gross & Rutland, 2019) on account of real actions and the opportunity to take part in practical life activities at a young age. Colgan (2016) agrees that all these aspects help to educate for humanity, which is presented in the Spanish school's motto. For the school in Burkina Faso, Woodhead's (2006) idea is defended, they support the idea that early years are formative for children's long-term prospects which regulates the aim of this school project.

In Spain the materials used come from specialized suppliers, while in Burkina Faso they are acquired thanks to the implication of the community as well as contributions from fundraisers and volunteers. Economic circumstances have an effect on the variety of the material available and on the indirect objectives achieved in all activity sets. As the Montessori Pedagogy has its own specific materials it could be argued that it affects the accessibility of the method, or that the method is not accessible to everyone due to economical reasons (Woodhead & Moss, 2007). However, Burkina Faso school has provided alternatives to produce the materials needed with a small economic investment and support from the local people.

Teacher training faces the same situation, as each individual has a specific amount of money to invest in his/her education. This means that training courses are highly successful in HICs owing to personal funding and educational opportunities, whereas in LMICs curricular training is limited, albeit fundraisers offering reflective and preparatory practices. Furthermore, their willingness to learn and improve through external consultancy in both contexts results in more qualified educational practices, which at the same time help to fulfill the following commitments: a) positioning the child as someone who experiences numerous and personal transformations (Montessori, 2019; Vogler et al., 2008; Woodhead, 2006); b) organizing education to help children and providing skills and values to educate for humanity and; c) offering a non-generalized education as children's rights and individual development are safeguarded. These commitments are linked to fostering cooperation rather than competition (Colgan, 2016; Gross & Rutland, 2019) and focusing on offering children the opportunity to participate in their educational development which also benefits social participation processes (Correia et al., 2019).

Besides, as Kirk and Jay (2018) have noted, the teachers demeanor and behavior plays an important role in children's social-emotional competences (Heller et al., 2012) and a school's success can be determined by the bonds made between children and the environment, and their relationship with their teachers (Reynolds et al., 2009). Thanks to teacher training and the importance placed on teacher's relationships with children and families, both schools have accomplished this aim that facilitates the relationship between school and society.

Educational practices and later academic success are of great interest to community and family, so relatives and community members are conceived as partners throughout the whole educational process in both schools. However, their involvement in the school varies; in Burkina Faso, involvement in any school activity focuses on gaining support for school attendance and on encouraging parents to believe in the education system. As Sanders and Epstein (2005) point out, they become full partners in the educational process. Conversely, Spanish society values school practices, so parental participation implies: a) being well informed of all educational practices; b) taking part in yearly activities with their children; c) participating in parents associations to contribute and highlight their interests in the school, although a contract is being signed from both parts accepting that family and school are partners in the educational process (Sanders & Epstein, 2005).

Bronfenbrenner (1979) explains, the external environment influences the child, which is in turn linked to community-school involvement, as there is a bi-directional interaction between both parts. However, community-school involvement is achieved differently in both situations as school projects differ depending upon family involvement in schools. A reason for this is achieving the school's project goals, which in Burkina Faso's case needs the participation of any community member, as well as reducing economical investments the school may need to make.

Although both schools created partnership strategies between both parts, children are raised as citizens who can participate in the community, offering valuable contributions and receiving worthy knowledge from the environment that will further their development.

### Recommendations

It is recommended for other researchers that if they want to conduct research in this area, further studies should be conducted to analyze more Montessori schools in LMICs and HICs in order to determine extended practices in the implementation of this approach regardless of governmental policies, economic investment and available resources. Moreover, autonomy, independence, social competences and skills developed through Montessori practices that

respect children's development should be analyzed in benefit of children's rights and as long-term prospects that help humanity.

### Limitations

This study aims at understanding how Montessori bases are implemented in two different realities, focusing not only on educational barriers faced by any country, but also considering how child, family, community and school are involved in order to grow as partners with a common aim: child development. To achieve this, sample schools were analyzed and interpreted through qualitative data, despite limitations encountered in the Burkina Faso school as it closed down because of armed conflicts; as a result, contact with teachers and families is inconceivable, so we decided against providing this information about the Spanish school. Had this information been available, different perspectives and opinions could have been considered, as despite being partners in educational practices, their viewpoints and attitudes towards Montessori school implementation may have provided new information.

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