## THE REGGIO EMILIA APPROACH TO SPECIAL NEEDS CHILDREN

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## Abstract

The purpose of this paper is to discover the way Reggio Emilia addresses special needs children. This research will discuss several theories from educational psychologists such as Vygotsky, Gardner, Piaget, Bronfenbrenner, Bruner, and Dewey that are used in the Reggio Emilia approach. The Reggio Emilia approach can help special needs children optimize their learning ability, facilitate learning through experience, and give them the opportunity and courage to try something new. Thus, the purpose of this article is to investigate the extent to which the Reggio Emilia approach can aid in the development of special needs children's creativity, as well as to inform the community about the form of early Reggio Emilia education for special needs children.

**Keywords:** Reggio Emilia approach, special needs, children, development, theories **Discipline:** pedagogy

## Absztrakt

A SAJÁTOS NEVELÉSI IGÉNYŰ GYERMEKEK REGGIO EMILIA JELLEGŰ MEGKÖZE-LÍTÉSE

A tanulmány célja annak feltárása, hogy milyen módon foglalkozik a "Reggio Emilia" a sajátos nevelési igényű gyermekekkel. A tanulmány a Reggio Emilia megközelítésben alkalmazott kutatók (például Vygotsky, Gardner, Piaget, Bronfenbrenner, Bruner és Dewey) elméleteit tárgyalja. A Reggio Emilia megközelítés segíthet a sajátos igényű gyermekek tanulási képességeinek optimalizálásában, megkönnyíti a tapasztalatokon keresztül történő tanulást és lehetőséget, bátorságot ad nekik, hogy kipróbáljanak valami újat. A cikk célja annak vizsgálata, hogy a Reggio Emilia megközelítés milyen mértékben segítheti a sajátos

nevelési igényű gyermekek kreativitásának fejlődését, valamint, hogy bemutassa a sajátos nevelési igényű gyermekek korai nevelése során alkalmazható Reggio Emilia nevelési formákat.

Kulcsszavak: Reggio Emilia megközelítés, speciális igények, gyerekek, fejlődés, elméletek Diszciplína: pedagógia

Childhood is a time when children are eager to try new things and are curious about the world. Environment, genetics, emotions, and learning methods all play important roles in children's development which happens at their own pace. Child development, according to Santos et al. (2022), can be viewed as a series of steps and progressive stages that increase the individual's complexity. Tatalovic and Elma (2015) concur, stating that children exhibit a typical progression that includes numerous changes as they grow older which according to Ramadhanty et al., (2022) can be seen in three major areas, motor/physical, cognitive, and socio/emotional. From birth to the beginning of adulthood, the growth of a child covers various aspects such as physical, language, cognitive, and emotional (Cowie, 2019). Thus, in ensuring that children go through the development process from all aspects, especially in terms of education, various approaches and initiatives have been carried out and implemented. One of the approaches implemented by most schools in the world is to use the Reggio Emilia Approach. Generally, this amazing approach is a pedagogy that is commonly used with preschool and kindergarten students. This approach places a focus on a child-centred, self-guided constructivist curriculum that uses practical, experiential learning in relationship-driven environments. (Gallagher-Immenschuh & Broderick, 2021). Over the past decade, the Reggio Emilia approach has become more popular and more widely used in many schools. This approach is seen to be able to attract students' interest to deepen something learned and also help them gain experience from

what they do. It is common knowledge that every school has a curriculum selection that is used in the children's learning system. While glancing at the definition of the term curriculum, it can be defined as the content of learning and academics that is taught in school or any educational program. A curriculum, as defined by Kenneth et al., (2021), is a benchmark, planned series of experiences through which students develop and procure content knowledge and adapted developing skills. The curriculum is broadly defined in education as the sum of the student's experiences that transpire all across the academic opportunity and journey. A student-centred and constructivist selfguided curriculum is used in the context of the Reggio Emilia Approach curriculum, which employs self-directed, experiential learning in relationship-driven environments constantly through observation, disclosure, and play (StNicholas Early Education, 2020).

The Reggio Emilia Approach has many potential benefits and drawbacks, which will be largely determined by the quality of the teaching and learning sessions which at the same time allows students with special needs to benefit from lessons with teachers and peers. Observation, resources, and guidance from the teacher are undoubtedly important components of the learning process, and the Reggio Emilia approach allows students to work independently with their abilities and skills. Aside from that, the Reggio Emilia approachhas shown to be very effective in developing children's social skills (Aden & Theodotou, 2019), particularly in terms of communication and interaction through gestures, body language, and personal appearance, whether verbal or nonverbal. Students' ability to communicate and interact will benefit immensely their daily interactions and can indirectly make the learning process more enjoyable.

According to McNally & Slutsky (2017), every Reggio Emilia approach is based on what is around children, allowing them to explore within their learning where the environment plays a significant role in innovation. The Reggio Emilia approach can be seen as a potent strategy for fostering children's confidence as educational materials are created from resources that are readily available to children. (Vargáné, 2018)

According to Shabazian (2016), the Reggio Emilia approach can increase students' confidence when they are free to express themselves and make choices. This is also by a study conducted by Mitchiner et al., (2018) on two ASL/English bilingual schools for Deaf children, which found that the Reggio Emilia approach helped children gain confidence in expressing their thoughts and ideas. Listening to someone gives them importance and value, and it promotes self-confidence, self-worth, and pride (Rimes et al., 2018). The efficiency of the Reggio Emilia approach has indeed been demonstrated to play a major role in the growth of children, but it is unclear whether this approach is also adequate for special needs students. Children with special needs have educational needs that differ from those of the general population; they are also known as children with learning disabilities. Jo Rudy (2022) wrote an article titled "What to Say Instead of "Special Needs". Why the Term "Special Needs" Is Confusing and Offensive" states that special needs refer to physical, behavioural, emotional, or learning difficulties that necessitate some form of specialized accommodation at school, work, or in the community. The special accommodation is vital in launching special needs students' learning processes. (Seid, 2019).

Peter et al. (2013) stated that special needs are a specific clinical and functional development phase that refers to individuals who require assistance due to medical, mental, or psychological disabilities. UNICEF (2022) affirmed there are approximately 240 million children worldwide classified as having special needs, which equates to one in every ten children in the world living with disabilities and experiencing deficiencies in indicators such as health, education, and protection. Thus, the global initiative to prevent special needschildren from dropping out has been inspired by the development of special needs classrooms, as well as appropriate resources and learning methods. The use of appropriate resources, such as those designed specifically for special needs children, has been shown to aid in the development of the student learning process, as evidenced by previous studies conducted on learning difficulties. Meanwhile, according to the study performed by Eskay & Oboegbulem (2013), a well-designed curriculum for special education needs children is dependent on the school administrator's ability to ensure adequate educational opportunities for students with disabilities. This includes adequate curriculum planning that focuses on activity-based learning, self-directed learning, cooperative group work, and peer learning (Okoro, 2019).

Knowing the effectiveness of the Emilia region's approach to children and seeing how this approach is gaining traction around the world, this article will look at the philosophy of Reggio Emilia that can help the development of SEN students. The following paragraph will explain the history of the Reggio Emilia approach, followed by the Reggio Emilia Approach principles. The explanation of the special needs children will be followed by the implementation of the Reggio Emilia Approach to special education students in the following subtopic. At the end of this article, a subtopic will discuss the difference between the Reggio Emilia Approach and the conventional approach to special education needs children by listing some of the advantages and disadvantages of the two approaches.

#### Special Needs Children

The term "special needs" is a broad term that can be defined as individuals, particularly children, who have disabilities that limit their daily interacttions. Special needs also refer to several other terms such as Special Educational Needs (SEN) and learning disabilities (LD). Section 20 Children and Families Act 2014 defines SEN as a condition in which A child has a developmental delay or complexity that necessitates special education. Learning disabilities are neurological conditions that affect spoken and written language, text comprehension, self-coordination, computation, and math problem-solving, among other math, reading, and writing skills (Binaghi Guida, 2022). These terms are ways to refer to students with disorders, in which their learning may be altered or delayed compared to other students. Spengler et al. (2016), special needs refers to a clinical diagnostic and functional development term used to describe individuals who demand guidance and assistance for any form of impairment, whether medical or psychological. It generally refers to a child's actual need, particularly in situations requiring accessibility, such as opportunities for education, transportation, work settings, government programs, public places, and housing (Disability Etiquette, n.d.).

Meanwhile, Hanurawan (2017) defines special needs as children who have a disability, health, or mental health condition that necessitates early intervention and support. According to Lee (2022, 11), in the Individuals with Disabilities Education Act (IDEA) Law 2004, there are 13 different types of special needs as protected classes have been outlined which are Autism, Deafness, Deaf/blindness, Emotional Disturbance, Hearing Impairment, Intellectual disability, Multiple Disabilities, Orthopedic Impairment, Other Health Impairment, Specific Learning Disability. Speech or Language Impairment, Traumatic Brain Injury, and Visual impairment (including blindness). Fundamentally, special needs children are defined as children who are different from their peers and require assistance, particularly with learning (Mező, 2022). Mohd Ali et al. (2018), stated that it is critical to provide special needs students with assistance or services for them to get the most value from the teaching and learning process.

## Theories Applied in the Reggio Emilia Approach

Loris Malaguzzi, who is the backbone of the idea of the Reggio Emilia approach, hasproduced a poem translating the meaning implied in this approach. The poem, "The 100 Languages" describes how children can express themselves in more than one way through drawing, carving, dramatic play, writing and drawing. It also represents the thoughts of children, who are always eager to try new things likewise with special needs children. All children, including those with special needs, can receive the same education, and there will be opportunities for students with and without disabilities to understand and learn together. According to Edwards et al., (2012) in their book titled, "The Hundred Languages of Children: The Reggio Emilia Experience in Transformation", the use of the 100 languages metaphor emphasizes the importance of providing children with one hundred ways to share their thoughts about the world around them and to demonstrate children's limitless potential. Many studies such as Allehyani (2022), Gulcicek et al., (2019), and Hong et al., (2017) have been conducted to determine how the approach of Reggio Emilia can aid in the development of educational opportunities for special needs children. This is an excellent platform for special needs children to use various representations to express their worldviews and ideas. Therefore, in constructing the Reggio Emilia approach, Reggio educators deliberately sought, studied, discussed, and evaluated a variety of viewpoints, opinions, and theories from sociology, psychology, and educational philosophy.

Reggio Emilia scholars furthermore evaluate this approach in light of several learning theories proposed by previous theorists. Learning theories are essential since they will relate the situations and procedures that take place during learning and benefit models for designing educational programs that improve learning. These philosophies depict the steps that people go through when they implement relevant data into their mental models to make it innovative knowledge. Learning theories also analyze what inspires individuals to learn and what occasions facilitate or obstruct learning. Therefore, the Reggio Emilia approach, emphasizes the integration of ideas from various theories, including the theories from Vygotsky, Gardner, Piaget, Bronfenbrenner, Brunner and Dewey. Each of these theories will elaborate further on its effectiveness on Reggio Emilia principles. Educational theory, which includes theories of learning and instruction, explicates the fundamental frameworks of learning and teaching. Acknowledging learning theories aid teachers in reflecting on their practice, improving, reshaping, and refining their work, and according to the advancement of professionalism (Wong et al., 2019).

Vygotsky's theory, which was inspired by Lev Vygotsky, has disclosed that children develop new social and cognitive skills through social interactions with older people (Kautz etal., 2014). This is consistent with another name for this theory, Vygotsky's Sociocultural Theory, which refers to social terms that explain how learning is much more important in the context of a social process than the independent process of discovery. Vygotsky's theory, which was introduced in 1962, has three distinct levels: cognitive, motoric, and socio-cultural.Cognitive learning is the process of thinking about concepts and ideas; motor learning is the process of doing something; and sociocultural learning is the process of interacting with others (Vygotsky, (1978). Play was seen by Vygotsky as another way for kids to learn about their socio-cultural environment. Vygotsky used the example of a boy playing with bricks to illustrate his idea. The child learns object exploitation skills while playing with the blocks, which he later used to build structures (Bjork-Willen, 2022).

The sociocultural theory of Vygotsky holds that learning is largely a social process in which the assistance of parents, caregivers, peers, and the greater society and culture plays a crucial role in the development of higher psychological processes (Silalahi, 2019).

Howard Gardner (1983) introduced the Gardner theory with the concept of Multiple Intelligences, which refers to the learning occurring through many types of intelligence, with people having varying levels of each. Multiple intelligences is a theory that outlines the various methods by which students learn and obtain information (Mahmood et al., 2022). Gardner's theory implies that people do not always possess all of their intelligence at birth and have different ways of processing data (Cook, 2021). Therefore, Gardner introduced eight different types of intelligence to broaden this concept of intelligence: 2)logical/mathematical, 1)linguistic, 3)spatial, 4)bodily-kinesthetic, 5)musical, 6)interpersonal, 7)intrapersonal, and 8)naturalist. Gardner's multiple intelligences theory has had a significant impact on how people think about human intelligence (Gardner, 1983). This theory believes people can be intelligent in different ways. Gardner contends that schools and teachers should teach in a way that encourages all types of intelligence, not just the traditional ones like linguistic and logical intelligence (Ababneh, 2021).

Research findings indicated that multiple intelligences adapted to teaching activities could outstandingly improve the ability to conspire to learn with peers (Yerizon & Putra, (2021), enhance students' learning achievement (Ndia et al.,2020), promote the motivation to learn (Hajhashemi et al., 2018) and enhance reading comprehension (Nemat, 2016). Furthermore, this theory suggests that teachers should individualize instruction by identifying students' strengths and weaknesses (Elsayed, 2021).

The Theory of Cognitive Development proposed by Swiss psychologist Jean Piaget (Domingo, 2021) which is also known as Piaget's theory suggests that children progress through stages based on their ability and intelligence to perceive sophisticated relationships (Bellieni, 2022).

Piaget's theory, published in 1936, refers to a specific insight which is the involvement of growth and development in children's expanding ability to comprehend their world, and children cannot execute specific tasks until they have reached a specific level of psychological maturity (Pakpahan & Saragih, 2022). Piaget discovered that children of certain ages frequently gave the same varieties of incorrect answers, and he formulated a theory of how children's cognitive processes developed on these findings (Waite-Stupiansky, 2017). There are four stages of development suggested by Piaget's theory of cognitive development 1) sensorimotor stage: birth to 2 years, 2) preoperational stage: 2 to 7 years, 3) concrete operational stage: 7 to 11 years and 4) formal operational stage: ages 12 and up (Piaget, 1936). Teachers can use Piaget's theory in the classroom to create a great learning environment for their students by asking students to reflect on their experiences or empowering discussions regarding what is being instructed. Meanwhile, for the students, the cognitive learning that occurs during the learning session will undoubtedly boost their confidence (Daly-Smith et al., 2018)

and motivate the children to enhance the tendency for children to develop a learned inadequacy reaction when confronted with challenging problems(Yee & Braver, 2018).

Meanwhile, Urie Bronfenbrenner, a Russian-American physiologist, who developed the Bronfenbrenner theory acknowledged that every aspect of a person's environment impacted their development (Soyer, 2019). Bronfenbrenner's theory is among the most widely recognized theories that inspired social environments on human evolution. The progression of Bronfenbrenner's ecological systems theory views child development as a complex system of relationships inspired by various levels of the environment, from the contexts of immediate family and the school to more general cultural values, laws, and customs (Chuang et al., 2018). Bronfenbrenner's theory which was published in 1979 contends that your upbringing influences every aspect of your life. Bronfenbrenner also developed the Ecological Systems Theory (EST) to focus on the child's environment's quality and context. and highlighted that, the interaction within these environments becomes more complex as the child grows. According to Crawford (2020), the ecological systems theory states that humans encounter different environments throughout their lifespan that may influence children's development through five major structures; 1) microsystem (families, teachers, school, peers), 2) mesosystem (communication between the parents and teachers), the 3) exosystem (neighbourhood, parent's workplaces), 4)macrosystem (socioeconomic, belief) and (5)chronosystem consist of changes in family structure and economic cycles (Bronfenbrenner, 1974, 1979).

Dewey Theory was founded by John Dewey in 1938, which holds that humans develop and evolve as a result of their interactions with the outside world. John Dewey's educational philosophy stated that children learn best when they interact with the environment and participate in the school's learning plan (Escudero, 2022). Furthermore, based on Dewey's theory, the learning process involves pragmatism which is doing practical things that get results (Mailhot & Lachapelle, 2022).

Wang (2015) defines pragmatism as a teaching and learning approach in which students can understand and use the methods and skills needed to complete a task. In explaining the direction of this theory towards children's development, Dewey's theory has outlined four principles: (a) Learning by doing or experiential learning (b) Discussion (c) Interactive and (d) Interdisciplinary. In terms of education, the process of learning through experience or experiential learning is important and focuses on learning by doing (Almousa & Hejazi, 2022). This theory encourages students to learn through experiences that aid in their ability to remember facts and retain information (Stang, 2022). Dewey's educational philosophy prioritizes meaningful learning activities and participation in classroom democracy. 12 Dewey's learning theory emphasizes the significance of the creative mind in propelling thinking and learning forward, as well as teachers offering students to engage in mischievous deliberation of possibilities and experience the world.

## The Theories: Principles of Reggio Emilia and Special Needs

Reggio Emilia educators agreed that the combination of theories produces the principles of effecttiveness in the Reggio Emilia approach (Rinaldi, 2021). The integration of children with special needs into school systems is a global issue being addressed. As a result, some Reggio Emilia principles will look at how it can assist special needs children in their learning process and the principles are as follows:

#### The image of the child in Vygotsky's theory

Childhood is an essential stage in human development. This is demonstrated by Trent (2019), who reported that A child's brain develops rapidly during the first five years of life. This indicates how a child's learning relies on their age group and how a child's brain grows during the first few years of life will depend on the quality of their experiences. (Bick et al., 2022). Thus, the image of children outlined by Reggio Emilia educators is beneficial to the child's growth. According to the concept of child image (Cameron & Boyles, 2022). All children, along with children with learning disabilities who have unique personalities and learning styles, have readiness, potential, and inquisitiveness, and they are fascinated by relationships, establishing their learning, and negotiating with everything that their environment draws to them. Radhika and Kiran (2017) conducted a study on 106 children with learning disabilities to assess students' cognitive ability to classify the computer hardware, words, alphabets, differrent colours, and shapes. According to research findings, half of the learning-disabled children in this study can identify computer components such as monitors, keyboards, and mice, meanwhile, more than half can recognize and pronounce words and alphabets. Nevertheless, some of them had difficulty reading and writing respectable words and had difficulty giving examples of the forms in question. This demonstrates that readiness and curiosity play an important role in assisting special needs children's learning processes. Vygotsky was adamant about creating a learning environment in which students with disabilities could use "psychological tools" 13 to compensate for their disabilities (Finesilver et al., 2022). Special needs children have a significant impact on the development of social factors.

#### The 100 Languages in Gardner's theory

Malaguzzi (1996) wrote a poem titled "100 linguaggi" (The 100 Languages) to demonstrate how children communicate and respond to what they see around them. The 100 languages also refer to children's self-expression, in which children can express their thoughts and feelings through words, choices, or actions (Kocer, 2012). Self-expression is essential for a child's sense of identity, self-confidence, and about the world. Furthermore, this will also broaden the minds of children, allowing them to develop ideas and sharpen their cognitive skills (Nurjanah & Hardiyanti, 2020). It will also assist children in positively communicating their feelings (Bailey et al., 2020). Meanwhile, Pritzker, (2016) stated that children reveal themselves when free to express their inner needs, wants and preferences. In general, children can express themselves through play, choice, conversation (Mehrabian, 2017), art (Quaglia et al., 2015), art (Malchiodi, 2014), and writing (Fartoukh et al., 2012), It is critical to provide children with a plethora of opportunities to instil in them the confidence to speak up and be themselves. Furthermore, this will undoubtedly encourage children to take proactive steps that will allow them to express themselves in comforttable ways. Creating a welcoming learning environment for children through simple activities can go a long way toward allowing them to express themselves. Howard Gardner's multiple intelligences theory emphasizes that the human brain uses various types of intelligence or skills. Children's intelligence is the result of complex interactions between their heredity and their experiences. Children, including those with special needs, learn and express themselves in a variety of ways. Simacek et al., (2021) stated that children with learning disorders can be taught interaction skills that allow them to cope independently and increase social relationships. The National Joint Committee (NJC) for the Communicative Needs of Persons with Severe Disabilities, which issued

The Communication Bill of Rights in 1992 states that everyone has the fundamental right to influence the conditions of their 14 own existence through communication (Wofford et al., 2022). Aside from this public right, a special set of needs (Pálfi et al., 2020) and communication rights should be protected in every daily interaction that involves people with severe disabilities. The following are some of these fundamental communication rights; (a)the right to sensitive interaction with others, (b) the right to ask and know about my schedule and world, (c) the right to be taught how to communicate, (d) the right to share feelings and (e) the right to be heard and responded to. The 100 languages in special needs children are essential because they enable children to appreciate their individuality, which is a requisite constituent of developing a strong sense of self (Saroyan, 2021), as well as developing their imaginations problem-solving and skills (Rashidov, 2022).

#### Pedagogical Documentation in Piaget's Theory

In the Reggio Emilia Approach, the focus of documentation is on how and what childrenlearn. The documentation usually includes samples of the children's work, photographs of children engaged in the project work and comments. (Mesquita, 2022). Other forms of documentation can include photography, tape recording, and video (Lim & Cho, 2019). Documentation can be written in several ways, including taking observation notes on what the teacher observes the child doing, or making a note of the picture, event or experience (Bingham et al., 2022). By using the theory of Piaget in the classroom for documentting children's work, teachers may develop a better understanding of their students' thinking and align their teaching strategies with their cognitive level (Erlandsson et al., 2021). According to Hostyn et al., (2020), pedagogical documentation is an essential method in special needs education

as it supports planning, implementing, assessing, and developing early childhood education. Smith & Sheridan (2019) highlighted that in terms of family participation, pedagogical documentation is essential for assisting the special needs children in their education as families become aware of their child's experiences at kindergarten and getopportunities to contribute to the activities. Simultaneously, it will help the teachers to know the group of children, their interests, thoughts, skills, potentialities and ways of participation (Heiskanen et al., 2019).

Many Reggio Emilia institutes have been built in countries around the world, including Italy, Sweden, Norway and Denmark to display the results of 15 children's work and, in turn, indirectly open the world's eyes to how documenting the results of children's work can benefit the world.

#### Community influences in Bronfenbrenner's theory

Community connections play an important role in social development and it is also an elementthat greatly influences children's environment. According to Frolli et al., (2022), the presence of community relations provides children with a sense of belonging and aids in the development of social and other skills. Gulleng, (2021), a community is emphasized as agroup of people who share a common geographical, social and cultural life pattern and have a relatively interdependent livelihood. The community entails the distinct sections in the branch and the way they interact to acquire the outcome which could promote the culture that exists inside the organization. (Dankwa, 2020). According to Wenger (2021), community connections for children may include extended family and friends, neighbours, and of local organizations. Different members community connections provide different advantages to children (Chawla, 2015) and children's confidence can also be bolstered by strong social connections, which can lead to new friendships.

(Hino, 2012). Reupert et al., (2022) stated that the prominent proverb, it takes a village to raise a child, which comes from an international conference held in Oslo, 2018 produces a clear message which means that the entire community plays a salient responsibility in the growth and development of its youngergenerations.

The importance of community in children's learning process can be linked to Bronfenbrenner's theory, which states that a series of environmental and personal contexts can affect a child's development (Antony, 2022). This coincides with a study done by Egilson et al., (2016) in which to gain new experiences and interactions for children with AutismSpectrum Disorder with other people and environments, the family should participate in the community. At the same time, the community would help children have the opportunity to generalize current skills (Jamaluddin et al., 2021). In general, children with disabilities have the same social needs as children without disabilities. They require love and respect while playing and exploring their surroundings with other children and adults. To ensure that these special children feel valued and 16 accepted in the community. Opportunities are required for children to develop and use their bodies and minds to the best of their abilities.

Parental participation and involvement in Bruner's theory Parental involvement in children's education is believed to benefit children's development. Parental involvement, as defined by Gachari et al. (2012), is the participation of parents in all aspects of education and child development. Parents participate in school activities by attending Parent-Teacher meetings, assisting their children with homework, and participating in a variety of other school activities. Parental involvement according to Estrada-Chichon (2022) is defined as an action that encourages parents to assist their children with various tasks and activities that support their children's maturity and educational development at home, usually by the learning guidelines suggested by the teacher. Thus, the involvement of parents in special needs children's education has an indirect positive effect on the development of these children's education (Boonk et al., 2018). The parent is regarded as an essential resource for the child's learning in the Reggio approach. Parents and teachers must exchange ideas to create a more positive and productive learning environment. A book written by Van Voorhis et al., (2013) shows that regardless of their origin or socioeconomic status, students who have involved parents are more likely to have better grades and test scores, attend school regularly, have greater social skills, exhibit improved behaviour, and adjust well to school.

The Bruner theory, according to Rannikmae et al. (2020), asserted that when kids begin learning new concepts, they need assistance from teachers and other adults in the form of active support. The research shows that children whose parents are involved in school will have thicker skin and are more responsible for their achievement in schoolwork than children on their own. (Lara & Saracostti, 2019). Parent involvement activities include conferring a journal or log for homework that parents sign upon accomplishment (Kung & Lee, 2016), sending students home with notes on what they did well and where they can improve (Nunez et al., 2015), and sending a class newsletter home with curriculum themes and highlights (Okeke, 2014). A study conducted by Balli (2016) 17 on the involvement of parents in the education of special needs children stated that parents should be more intensive in assisting, accompanying, and guiding their children, particularly children with special needs, to improve their motivation and academic achievement. Furthermore, Wang & Sheikh-Khalil, (2014) explained that parental participation also helps special needs children feel cherished bytheir

parents, demonstrating behavior improvement in schools such as communication, empathy, and conflict resolution. (Thomas et al., 2020), and production communication between the teacher and the parent can oblige the school about the student (Fishman & Nickerson, 2015). Children with special needs require more attention than other children. The involvement of teachers in schools certainly benefits all parties involved, including the teacher, the children, the school, and the parents. Parents should not undervalue their involvement in their children's learning processes because parents are the primary pillar in the learning processes of special needs students.

#### Learning exploration by project in Dewey theory

The Reggio Emilia Approach has observed that children learn quickly when they are involved in a project that is well structured to accomplish a specific goal (Asy'ari & Rachmawati, 2022). This approach uses a "child-developed curriculum" as opposed to a "child-prepared curriculum" where children create projects based on their areas of interest. The Reggio Emilia project framework has several distinctive qualities and components, including a guided inquiry (Senent et al., 2022), multimodal learning, (Brandao & Theodotou, 2020) symbolic representations (Mikati, 2019) and a holistic approach (Miller, 2019). These factors led to the conclusion that the Reggio Emilia Approach can be classified as a project-based learning (PBL) strategy. Thus, PBL is an effective teaching strategy that has numerous advantages for students, including the development of critical thinking (Umar & Ko, 2022) and building selfconfidence (Yuliansyah & Ayu, 2021). Dewey's theory has developed a concept of 'learning by doing' which relates to the project-based learning methodology. Learning by doing is when children engage in an activity practically as they learn by doing, which gives them the chance to learn more. According to Bruce, & Bloch (2012), people understand their experiences when they produce things and explore their surroundings. This is also an 18 designation applied to a wide range of educational circumstances as well as a pedagogical strategy used by teachers to encourage their students to engage in more practical and innovative forms of learning. Numerous studies have shown that project-based learning is associated with giving special needs children the opportunity such as to use creative thinking skills to innovate new projects (Eldiva & Azizah, 2019), enhancing classroom engagement (Arntzen, 2018), and provide teachers with the possibility to forge closer bonds with their students by serving as facilitators of active learning (Lopez & Corcoran, 2014). This is also supported by a study conducted by Cevik & Uredi (2016) where the results of a study on Mild Intellectual Disability (MID) children show an increase in academic achievement and a positive attitude towards project-based learning. There is no doubt that project-based learning appears to help children become comfortable with obstructions by developing strong problem-solving skills and self-confidence, as a reflection on one's conclusions is essential in a continuous inquiry process. This extended learning is possible because children are working to solve real-world problems that are important to them, and it allows for deep learning and comprehension understanding of topics and concepts.

# The environment is the third teacher in Vygotsky and Piaget's theory

Educators are very concerned and agree that what is around children will influence their learning development process (Cade et al., 2022). Therefore, creating a community of shared relationships between students, teachers, and parents in the classroom as well as a feeling of place in the world is one of the most potent and crucial aspects of implementing the Reggio Emilia approach. The ambience is seen as the third teacher as it contributes numerous opportunities for children to explore, experiment, develop and their ideas (Feliu-Torruella, 2021). It should be a place for research and encourage collaboration and communication. Therefore, learning through this environment has been applied in the Reggio Emilia Approach based on Vygotsky's theory and also Piaget's theory where these two theories state that environmental factors affect the development and progress of a child. Two examples of environmental factors in children's development are the physical environment (Schell & Rousham, 2022) and the psychosocial environment (Burke et al., 2018). According to Debele (2015), the school's 19 physical environments include buildings, laboratories, equipment, classroom furniture, teaching materials, libraries, and playgrounds. A conducive and exciting learning environment is created in large part by the physical setting of the classroom. A study conducted by Iswari et al., (2020) which focuses on the learning environment for special needs children shows that friendly schools can optimally develop the potential of students with special needs from a wide variety of students. Another study on the impact of the environment on special needs children can be found in Alnahdi's (2014) study, which stated that assistive technology plays an important part in the learning progress of special needs children. Meanwhile, peers are referred to as the psychosocial environment, which is also closely related to learning motivation. There is no doubt that special needs children's daily interactions in the classroom influence their learning development. This is supported by a study on special education needs children conducted by Louick & Muenks (2022), the findings of which show that the influence of peers is very important in providing interaction and motivation during the learning process in the classroom. Syukri & Humaera (2019) conducted research on the employment of teaching aids such as flashcards, foldable books, and posters in the subject of English for special needs children, and the findings revealed that this method ultimately increases students' motivation. Students with disabilities frequently experience higher levels of stress, anxiety, depression, and other emotional trauma. All of these factors can have a significant influence on their self-esteem and ability to learn and focus in school. As a result, motivation is critical in the development of special needs children.

### Conclusion

The learning theories and the Reggio Emilia Approach continue to influence education today on many levels, notably for kids with special needs. To better understand how the Reggio Emilia theory might help children with exceptional needs develop conceptual understanding and knowledge systems, this article was prepared. The Reggio Emilia approach has gained acceptance as a foundation for instruction in kindergarten classrooms in some nations. By the theories previously discussed, the Reggio Emilia approach was associated with special needs children by employing both pragmatic and scientific ways to advance education. Each hypothesis offered includes remarks on how it helps children with unique needs. Children with special needs benefit from a more enjoyable learning environment and the freedom to select the learning style they prefer thanks to the uniqueness of the Reggio Emilia approach. The approach used in the Reggio Emilia approach establishes a curriculum and learning environment that removes all significant distractions, giving the special needs students the ability to concentrate on what is being taught and beneficial producing а more learning environment. The key ideas in the aforementioned theories are that learning and information acquisition need to take place in appropriate environments and socially secure circumstances.

Teachers must therefore consider how important the classroom atmosphere is to their special needs students. The Reggio Emilia teachers design specialized lesson plans for each kid based on their observations of them. Parents and educators discuss the benefits of including special needs kids in Reggio Emilia classrooms for discipline, self-assurance, and growth. The Reggio Emilia educational approach integrates all five senses into a child's development and learning process. In addition to being connected to memory and the capacity to retain or continue learning, the senses work together to provide special needs children with a comprehensive picture of their experiences.

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