

## Early Childhood Care and Education in The 21<sup>st</sup> Century: A Review of the Literature

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**ABSTRACT:** *Pre-school prepares children with the requisite skills and competencies necessary for formal education. It provides parents with productive time for their work while their children are being cared for in kindergartens, day-care centers, crèches, and pre-schools where children are provided opportunities for stimulation and holistic development using play-based activities. Enhancing the quality of Early Childhood Care and Education has been expressed through research and policy initiatives, development programmes, advocacy, theories, and philosophies that underpin practice in pre-schools. A qualitative approach was employed to look at views related to Early Childhood Care and Education. The purposive sampling method was adopted for the study. The findings however suggest that children in general exhibit relatively different cognitive and social competencies in varied environments. Data collected and analyzed concluded that there was a significant disparity in the experiences of the children, teacher expertise and experience, and academic and play facilities coupled with differences in the social and economic backgrounds of children. It is recommended that further research be conducted in other pre-schools to verify the findings of this research.*

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**KEYWORDS:** early schooling, early learning, kindergarten, pre-school, early childhood care.

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### INTRODUCTION

Early Childhood Education often focuses on children learning through play based on the research and philosophy of Jean Piaget, one of the pioneers in early childhood education. This belief is centered on the "power of play" which hinges on the belief that children learn more efficiently and gain more knowledge through play-based activities such as dramatic play, art, and social games. The play theory stems from children's natural curiosity and tendencies to "make believe", mixing in educational lessons (Winner & Melinda, 2009). Kindergarten education, which begins at age 3 or 4, pre-disposes children to conditions of formal schooling, inculcating in them the desire for learning and providing opportunities for the overall development of the child. Researchers and practitioners have explored the development of children's

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awareness of and understanding about the individual and combined meaning-making potentials of written language, and elements of visual art, design, and layout in picturebooks (Pantaleo, 2023). Picture book illustrations can provide the opportunity for critical examination of a work of art (Acer & Gözen, 2020).

The World Bank report on Early Childhood Development in Cape Verde and Guinea (Osei-Poku & Gyekye-Ampofo, 2017) asserts that early childhood intervention programmes are one of the most effective ways to build human capital and break the cycle of poverty. Yet, funds spent on Early Childhood Care and Education (ECCE) varies considerably, and no single approach has been identified as a universal model to suit all cultures. The report further indicates attempts to extract general guidelines for adaptation and implementation of different programme options to inform educational planning. It further describes the range of early childhood programmes in operation and explores the impact of these programmes on children's cognitive and physical development in the respective countries.

In Jamaica, the World Bank report on Early Childhood Development (May, 2013) intimates that for policymakers and development experts, the answers lie in early childhood development, when children's brains and bodies are still developing. Citing proper healthcare, nutrition, psychosocial stimulation, and emotional support as factors that play a key role in giving children the foundation they need to do well later on, the report reveals that children who do not receive the proper nutrition, stimulation, and emotional support in early years are more likely to lag behind their more advantaged peers even before they start school. Once in school, such children are less likely to do as well and are more likely to drop out before graduating, thus hurting their chances to succeed later in life. Consequently, the World Bank has committed itself to working with governments to help them meet the United Nations Millennium Development Goals (MDGs), which includes attainment of universal primary school education. The report notes that getting kids to school is just a start: they need to be prepared physically, cognitively and socially for the challenges of learning.

In Mozambique, pre-schools were shown to be effective at boosting children's emotional, cognitive, and physical readiness for school and getting them to start school at the right age. Nobel Laureate Heckman (1999) therefore argues that investments in disadvantaged children bring a higher rate of return than investments in low skill adults. Hence policies that seek to remedy deficits incurred in the early years are much costlier than initial investments in the early years. A survey conducted in Guatemala, Bolivia, and Jamaica (World Bank, June, 2004) reveals that a child who is ready for school has a combination of positive characteristics: he or she is socially and emotionally healthy, confident, and friendly; has good peer relationships; tackles challenging tasks and persists with them; has good language skills and communicates well; listens to instructions and is attentive.

Almond and Currie (2011) opine that home visiting programmes and parent training programmes have led to not only improved health, but also a reduction in crime and other adverse behaviours when children reach adolescence. Several child care and pre-school programmes have had long-term impacts on health, education, employment, income, and other indicators of well-being. Hence, leading Economics Nobel laureate James Heckman argues that "investing in disadvantaged young children is a rare public policy with no equity-efficiency tradeoff" (Heckman & Masterov, 2007 as cited in Gyekye-Ampofo, 2016).

## **Objective**

The objective of the research is to explore global perspectives of the Early Childhood Care and Education programme and its implementation. This study sought to collate literature on early childhood care and education in Pre-schools to inform research.

The study finds justification in the fact that though many researchers present ideas about the Early Childhood Education in relation to how the intended global awareness to train children with equal or similar early childhood education to meet the Millennium Development Goal two (MDG2) and for holistic national development. Even though publication accrue throughout the world with respect to early childhood care and education, there still remains much work to be done in the area of Early Grade Learning. It is in this light that the study generates this awareness through differences in children's early childhood experiences globally.

## **METHODOLOGY**

The study used the traditional library research approach, by using books, article publications and other materials, to review the relevant literature on early childhood care and education globally. The researcher however, used the descriptive approach to discuss and explain the key findings from the field. Purposive sampling method was adopted for the study.

### **Starting Age of Mainstream Education**

Yoshikawa et al. (2007), Eurydice and UNESCO Institute for Statistics (n.d. as cited in Gyekye-Ampofo, 2016) have cited the starting age for compulsory education in Europe, North America, and other countries as: 3 years in Mexico, 4 years in Brazil and Northern Ireland, 5 years in Argentina, Greece, Hungary, Latvia, Malta, the Netherlands England and Scotland, 6 years in Austria, Belgium, Canada, Chile, Cuba, Denmark, France, Germany, Hong Kong, Republic of South Africa, China, Iceland, Ireland, Italy, Norway, Poland, Republic of Korea, Romania, Singapore, Slovak Republic, Slovenia, Spain, Turkey, United States, and 7 years in Bulgaria, Estonia, Finland, Lithuania and Sweden. The variation in the starting age of early childhood education across the world extends into the start of middle childhood (Santrock, 2005) and the main stream primary schooling. Ghana has its starting official schooling at age 4 in the kindergarten as part of the main stream basic education. This has streamlined the haphazard nature of early year education until the implementation of the programme in 2007.

### **Child Development**

The subject matter of child development has grown exponentially over the last fifty years such that its study has become a vast multi-disciplinary enterprise (Hopkins, 2005). The field of child development spans the domains of social and natural sciences: developmental biology, psychology, neuroscience, sociology, medicine and philosophy, with theories from these specialized domains shaping pedagogical philosophies and practices. The outcome is the development of a holistic or whole child approach which stresses the importance of thinking about and behaving towards children as entire individuals with their varied skills and competencies working in tandem to support their development as a whole (Lindon, 2010). However, Bruner (2005) indicates that child development in the last quarter-century has been of general and politically passionate concern in broader societal discussions and policies. Some issues that are being publically scrutinized are *when* and *how* 'education' should start even before a child ever gets to

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school; *what* schools should take as their objective; and, *ways* in which the larger social environment might harm or help a child's readiness for later school learning.

As Santrock (2005 as cited in Enti 2008) explains, there are five sequential periods in a child's development: There is the prenatal period, followed by infancy and toddlerhood, early childhood, middle childhood, late childhood, and adolescence. The prenatal period spans the time from conception to birth, while infancy and toddlerhood spans the period from birth to about three years of age. Brain growth to its peak also occurs in three distinct spurts: from eight weeks after conception through to the thirteenth week; from ten weeks before birth until age two; and between conception and age five which constitute the critical years of the child's development (Wenger & Poe, 1995). This growth period therefore presents an invaluable window of opportunity through which children can be properly prepared to give them an unparalleled early advantage in life. This suggests that the study of child development can be tackled from any of these stages. Because children's brains can be significantly modified through training and conditioning, parents and teachers can intervene dramatically in children's intellectual growth and development by regulating nutrition, stimulation and other environmental factors (Wenger & Poe, 1996).

### **Child Development Theories**

Kohlberg and Mayer (1972) as cited in Bowman (1993) outline the major theoretical or philosophical positions in early childhood education in terms of mosaicism (to describe an inner-directed, maturationist perspective), cultural transmission (to describe an outer-directed, behaviourist point of view), and progressivism (for a self-constructed, stage-determined Piagetian position).

The influence of educational thinkers such as Pestalozzi, Froebel and Maria Montessori have shaped pedagogical approaches to early childhood development. Bredekamp et al.'s (1992) theoretical principles of child development and learning are critical in designing developmentally appropriate practice (DAP) which derives from the works of Piaget, Vygotsky, Erickson and several others. They propose that children reach their best when their physical and psychological needs are met, alluding to the fact that children learn through play and social interactions with both peers and adults in constructing their knowledge. The authors however, admit that human development and learning are not definite but characterized by individual variations and the child's own interests and quest for knowledge.

### **Early Childhood Education**

Although early childhood education has existed since the creation of kindergartens in the 1800s, and that tremendous amount of attention has been devoted to the subject of early education for young children, Bredekamp *et al.* (1992) as cited in Yorke (2012) indicate that there still exists the need to collate literature in a comprehensive format to make clear the various theories and philosophies that underpin early childhood development as adopted by Pre-schools. In the United States of America during the 1980s, stakeholders and organizations in the business of education made numerous calls for school reforms or recommendations for changes in teacher education, graduation requirements, and school structure and accountability measures. According to Bredekamp et al. (1992), the National Association for the Education of Young Children (NAEYC) made influential statements defining developmentally appropriate practices for young children and specifically criticizing rote memorization, drill and practice on isolated academic skills, teacher lecture, and repetitive seatwork.

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In particular, the NAEYC stressed the need for greater emphasis on the following areas:

1. Active, hands-on learning.
2. Conceptual learning that leads to understanding along with acquisition of basic skills, meaningful, relevant learning experiences.
3. Interactive teaching and cooperative learning.
4. A broad range of relevant content, integrated across traditional subject matter divisions.

### **Objective of Early Childhood Education**

Enhancing the quality of young children's lives is now a national and international priority, which has been expressed through research and policy initiatives, programme development and advocacy (Woodhead, 2006). Keely (2007) and Papatheodorou (2008) have quoted Nobel laureate James Heckman as saying that early education gives individuals a head start and an advantage to both enjoy high earnings and to get into the pathway of lifelong learning. Findings and arguments by the OECD, UNICEF and UNESCO point to the need for making the provision and expansion of early years care and education the cornerstone of international policies and commitments (Papatheodorou, 2008). The underlining principle is that early child development yields high returns in physical, mental, and economic well-being during the life of the child and in adulthood (World Bank, 2001). Providing high quality early childhood care and education services is therefore of prime importance.

Research studies of Early Childhood education support the importance of licensing and regulating services of the providers, their qualifications and the commitment of providers in taking care of children and also learning about children's development and care (UNESCO, 2002). Citing the results of comprehensive reviews of experimental evaluations of high-quality early-childhood education programmes provided to children from at-risk groups, Magnuson *et al.* (2004) point to improvements in the children's short-term cognitive and language development, their long-term academic achievement, and reduction in their special education placement and grade retention. The results of the Carolina Abecedarian project with exceptionally low child-to-staff ratio and a curriculum focused on developing the language of children (Campbell *et al.*, 2002 as cited in UNESCO, 2007) showed that by age 21, students in the Abecedarian programme in USA were more likely to have gone on to college than those in the comparison group. This emphasizes UNICEF's (2007) stand that Pre-school can be particularly helpful for children from families and communities that have traditionally been excluded from education, and for those who only speak a minority language or whose home circumstances make it hard for them to benefit from early stimulation.

In the mid-1990s, the Government of Uruguay also initiated a policy to achieve universal pre-primary education with the aim of increasing the number of years of schooling without raising school leaving age; easing children's insertion into and transition through the primary school system via provision of basic foundations before the start of the primary cycle; and socializing them (and their parents) to school from an early age (Berlinski *et al.*, 2007). The Uruguay government's policy in the long term was to reduce the incentive for early drop out and speed up the transition through the primary cycle. Pre-school was therefore used as an educational, social, economic and cultural intervention to make development of both human and economic resources coherent.



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Early education is meant to provide children with the foundations for later learning and for formal education; it is also concerned with the development of a broad range of social skills that would help children in their transition from home to schooling (Pollitt, 1998). Early education programmes support composite skills that are often referred to as “psycho-social development” because they include development of the social, emotional, mental, and motor or physical domains of the child. The idea is that these domains undergo rapid changes in children aged 4 to 5 years and are also interrelated. Early education addresses these skills through “active learning” via exploration, problem-solving, action and reflection; play, group interactions, use of materials in expressive ways, experimentation, and project-based or contextual learning that address many skill areas including the following:

- **Pre-Academic Skills:** The child learns basic concepts, improves small muscle coordination, and begins to master skills necessary for reading, writing, and arithmetic;
- **Motor/Physical skills:** The child improves coordination, balance, and agility through large muscle activities;
- **Self-Expression Skills:** The child learns self-expression creatively through arts and crafts, music, dance, imaginative play;
- **Language Skills:** The child learns to express thoughts and feelings verbally in a clear and appropriate manner;
- **Social Skills:** The child learns to share and cooperate with other children, to respect and understand other children’s feelings; learns to listen to, cooperate with, and respect adults;
- **Self-Sufficiency Skills:** The child learns to be independent and to take care of belongings in a responsible manner;
- **Self-Assessment Skills:** The child learns to self-assess abilities and behaviours, begins to take pride in accomplishments, and develops a sense of self-confidence.

### **Access and Attendance to Early Childhood Education and Care**

The early years of children are critical as it forms the bedrock for subsequent learning. This has made it imperative for investment in quality early childhood education and care (ECEC) especially for the most disadvantaged, to ensure that children go to school at the right age, achieve better learning outcomes, stay longer in school and develop their full potential (Global Partnership for Education, 2012). In Romania, UNESCO (2007) reports that the provision of free meals, books and learning materials, and support with school transport made positive contributions to enrolment and promoted access to early childhood education. In many cases, early childhood education was free of charge, particularly for the pre-first grade preparatory or ‘zero-year’. This was by no means general because in cases where fees were obligatory, arrangements were made to facilitate access for families on low income (social disadvantage) and or with disability. Access to early childhood education (ECE) in low-and middle-income countries (LMICs) is increasing, yet attention to the quality of these services is only relatively recent. Efforts to expand access to high-quality ECE in LMICs will require similar efforts that are theoretically grounded and locally adapted. Whether there are universal constructs of ECE quality and the extent that quality is contextually specific is unknown (Chen, & Wolf, 2021).

### **Monitoring and Supervision of Pre-Schools**

Globally, early childhood education has had interest groups monitoring and providing supervisory direction to pre-school institutions, both public and private. The interest groups range from governmental agencies and international donors and partners which provide technical and monetary support and also monitor to check the achievement of their objectives to monitoring groups and interested agencies such as the Global Partnership for Education (GPE), UNESCO, UNICEF and local agencies such as the Ministry of Education and the Department of Social Welfare which engage in the supervision and monitoring of several aspects of pre-school education.

In the Republic of Mauritius, The Early Childhood Care and Education Authority (2012) is in charge of the registration of pre-schools, supervision of educational activities and teacher education. The Authority implements policies, projects and activities of the government of The Republic of Mauritius with regards to early childhood care and education. They also set norms and standards for play equipment, play materials, play space, furniture, books and children's literature used by educational institutions. The Authority is also in charge of the registration and supervision of educational institutions, their managers, educators and other staff engaged in early childhood care and education and serve as advisors on the development of training programmes on early childhood care and education for educators and other staff in educational institutions. It also administers the payment and management of grants to registered educational institutions in collaboration with the relevant Ministries.

The federal government of USA does not regulate early childhood education and care programmes, and state regulations also vary widely in terms of stringency and enforcement (Adams & Rohacek, 2002; Helburn & Bergmann, 2002 as cited in Magnuson *et al.*, 2004). In the Gambia, The Ministry of Education provides technical assistance for Early Childhood Development (ECD) Centres while the Ministry of Community Development supports Daycare Centres, and the Ministry of Health and Social Affairs supports Clinics. However, the overall administrative and policy responsibility for International Economic Development Council (IECD) lies with the Ministry of Local Government, which oversees a national multi-sectoral working group (Soo-Hyang, 2000).

In Ghana, the Department of Social Welfare is responsible for registration and maintenance of standards in all crèches and day care centres for children aged 0 – 2 years while the Ghana Education Service (which has the responsibility of implementing pre-tertiary education policies formulated by the Ministry of Education) is responsible for curriculum development for children aged 3 - 5 years. Early Childhood Development activities have however, been constrained by lack of collaboration and coordination between these two principal agencies (International Bureau of Education, 2006).

### **Assessing Quality**

Quality of ECE is measured in two ways: 1) assessing the structural features of programmes such as child-to-staff ratios and teacher education; and 2) direct assessment by trained observers who rate the quality of the learning environment and child-caregiver interactions (Magnuson *et al.*, 2004). Using these observational measures for recent reviews have shown that few center-based programmes are of high quality in terms of learning environment and that quality is low for a substantial proportion (Blau, 2001; Helburn & Bergmann, 2002; Smolensky & Gootman, 2003 as cited in Magnuson *et al.* 2004). Magnuson *et al.* (2004) reports that The Cost, Quality, and Child Outcomes Study conducted in 1993 in the USA

revealed that only 24% of centres serving pre-school-aged children provided good or developmentally appropriate care; 10% were rated as being of poor quality while positive child-caregiver interactions were observed in fewer than half (Helburn, 1995).

### **Early Childhood Policies and Interventions**

Early childhood development (ECD) incorporates the physical and intellectual development of children. It has several benefits in terms of improved nutrition and health, higher intelligence scores, higher school enrollment, less grade repetition, fewer dropouts, and increased participation of females in the labour force. A large body of literature in neuroscience, psychology and cognition makes the case for early childhood interventions (Berlinski *et al.*, 2007). Woodhead (2007) admits that the early years are formative of children's long-term prospects and one of the most ancient, enduring and influential themes shaping early childhood policy. Although interventions are made to mitigate differentials due to economic and social statuses, concerns are greatly centered on curriculum and pedagogical assumptions and how they reflect are developmentally appropriate economic theories of human capital and political theories of social justice.

Governments all over the world acknowledge the significant benefits of early child education and care and have adopted this service as an intervention towards mitigating social and economic disparities between the rich and poor. The USA is on record for initiating the Head Start programme in 1965 for children from low-income households and children with developmental delays or disabilities. The focus of the Head Start programme was health and nutrition, social services and parental involvement with educational programmes. These composite services, experts have suggested, promote school readiness of young children (Magnuson *et al.*, 2004). The Dakar Framework for Action also made the development of early childhood care and education the first of its six main goals to urge governments to expand equitable access to quality early childhood services, underscoring the importance of instituting policy in favour of the poor (World Education Forum, 2000).

### **Teaching Strategies in Early Childhood Education**

Teaching strategies, which refer to methods used in implementing the curriculum, are the arranged interactions of people and materials planned and used by teachers. Teaching strategies include the teacher's role, teaching styles, and instructional techniques (Siraj-Blatchford, 1998 as cited in Bowman & Donovan, 2000). Adopting effective teaching strategies is imperative for giving children a resounding foundational training before the commencement of formal education.

According to Plato 'And the first step... is always what matters most, particularly when we are dealing with the young and tender. This is the time when they are taking shape and when any impression, we choose to make leaves a permanent mark'' (Clarke & Clarke, 2000, as cited in Woodhead, 2007). All children have physical, social and emotional, and cognitive needs. Physical needs include food, clothing, shelter and medical care. Basic social and emotional needs include a consistent and predictable relationship with an attentive and caring adult who has high social and moral expectations, strong peer acceptance and freedom from exploitation and discrimination in their communities (Weissbourd, 1996 as cited in White & Isenberg, 2003). Minimal cognitive needs include the ability to communicate thoughts and feelings, to engage in constructive problem solving and to experience success both at school and in the community (Case, Griffin & Kelly, 2001; Weissbourd, 1996 as cited in White & Isenberg, 2003).



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Children who grow up with their basic physical and material needs met are likely to trust themselves and their community, possess a zest for life, and build on inner resourcefulness to participate in society regardless of the obstacles they face. They are also more likely to develop a sense of confidence and competence in family, school and community endeavours as a result of repeated successful coping experiences (White & Isenberg, 2003).

On the other hand, children who grow up without having their basic needs met are at a clear disadvantage for a healthy start in life (White & Isenberg, 2003). Many of these deprived children exhibit particular behavioural and developmental characteristics such as developmental disabilities, medical fragility, poor school performance), making them vulnerable to being able to function effectively as learners (White & Isenberg, 2003). In poor countries, a large share of the population is excluded from the education system already at an early age and well before completion of the compulsory schooling cycle. Exclusion from the school system encompasses varying combinations: failure to enroll, late entry, intermittent and irregular attendance, high retention rates and eventually early drop out (UNESCO, 2005). Although there is worldwide increase in pre-school education, access and quality in developing countries cannot be equaled to the developed nations.

The Global Partnership for Education (GPE) revealed that Sub-Saharan Africa showed the lowest gross enrollment ratios of 18% in 2009 where children from privileged backgrounds were assessed to be four times more likely to receive preprimary education than poor children. According to the GPE (2012), the principal challenge to Early Childhood Education and Care (ECEC) programmes is an effective and well-targeted intervention, lack of adequate funding, limited local and national administration capacity and low social demand for quality Early Childhood Care and Education (ECCE) Services. Other challenges bedeviling pre-school education in Sub-Saharan Africa were identified as inadequate ECCE services, low quality or lack of infrastructure, teaching and learning materials, poor curricula which are not well adapted to the needs of children, and the lack of qualified teachers. However, children from privileged backgrounds were four times more likely to receive pre-school education than poor children (GPE, 2012). Although there is worldwide increase in pre-school education, access and quality in developing countries cannot equal that of the developed nations. Other parts of the world also have challenges with the provision and access to quality early childhood Education services.

In Central and Eastern European Countries and the Commonwealth of Independent States (CEECIS), only a fraction of children between ages three to six years in urban areas have access to ECEC services especially in the poorest countries. In 2009, 46% of the world's children were enrolled in pre-school education as compared to 33% in 1999 (Global Partnership for Education, 2012). In Romania, challenges of entry into early childhood facilities were the lack of correct individual documentation like birth certificates, poverty, social and political strife, transportation, and the fear of abduction and child trafficking which prevented some families from having the confidence to place their young children in early childhood educational institutions. Parental fears for children's welfare and safety in anticipation of prejudice on the part of the staff of institutions and non-Roma pupils and their parents was also a factor that limited access to pre-school. The fear of families that their children were not competent in the official language of instruction in the early childhood educational setting, and the use of buses as part of Roma desegregation programmes made access to early childhood education difficult and or compromised for some families (UNESCO, 2007). There has, at times, been doubts regarding the effectiveness of Early

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Childhood Care and Education (ECCE) and pre-primary programmes on children's learning and development. Some studies have found that the effects of ECCE wear off soon after children start primary school (Durkin et al., 2022 as cited in UNESCO Report, 2022). However, it is evident that ECCE programmes are indeed effective in bettering childhood outcomes.

## CONCLUSIONS

The research was done to elicit the global perspective of the Early Childhood Care and Education programme implementation but to explore what is happening in the implementation with special emphasis on the policy, curriculum, and support systems. It could be realized that the effective combination of models brings about clear and interesting approaches to early childhood education globally. The starting age, provision, and access to quality Early Childhood Education services vary across the globe, and no single approach to childhood development programmes has been identified as a universal model to suit every cultural context.

## Educational Implication

Global moral and economic future depend on us providing quality support and equal opportunities to our children most especially the less endowed children from poor backgrounds. We must all work together to change the odds for these and all our children by 2030 and beyond. Our future and our values as a nation depend on it. Research shows that pupils with sufficient exposure to early childhood development programmes have better attainment levels and cognitive abilities (Gyekye-Ampofo, 2016).

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