EFFECTS OF PEDAGOGICAL APPROACHES & PRACTICES FOR SUSTAINABLE DEVELOPMENT IN EARLY CHILDHOOD EDUCATION: A RESEARCH REVIEW

Pushpita Rajawat
Department of Teacher Education, Central University of Kashmir, Srinagar (India)
Email id pushpita01@gmail.com

Abstract

The relative effectiveness of different pedagogical approaches and pedagogies in early childhood has raised substantial debate. While the other are associated with the acquisition of basic skills and knowledge and some of them are associated with socio-emotional development and problem-solving abilities. In general, research revealed both positive and negative effects of pedagogical approaches, without favouring specific pedagogical approaches over mainstream ones. However, it is important to note that research evidence and studies considering the same approaches in the same context are very limited. On the other hand, specific pedagogical practices are found to enhance child development, including high-quality interactions involving sustained-shared thinking methods, play-based learning, scaffolding, as well as a combination of staff- and child initiated activities. Research impacts pedagogy and pedagogical practices in the sense that research findings can inform policy makers and practitioners on best practices and what works best in enhancing staff performance, process quality and child development. Research on pedagogy and practices is usually not conducted at the national level, but focuses on particular programmes. So, research review has been used as a guide or manual to provide pedagogical guidance for Early Childhood Education (ECE) staff not only in India but also worldwide. The main focus of the study is that how of the best pedagogical practices and approaches across the country can be useful & implemented in early childhood education.

Introduction:

The earliest years of a child’s life are critical. These years determine child’s survival and thriving in life, and lay the foundations for her/his learning and holistic development. It is during the early years that children develop the cognitive, physical, social and emotional skills that they need to succeed in life. These early experiences are largely determined by supportive family and community care practices, proper nutrition and health care, learning opportunities, which in turn are dependent on enabling policies and investments for young children and families. ECE positively impacts attendance, retention, and learning of children in elementary and higher education.

Copyright © 2017, Scholarly Research Journal for Interdisciplinary Studies
In India, according to Census 2011 data there are 164.48 million children of 0-6 years of age. Recognizing the need to provide quality pre-primary programmes, a number of constitutional and policy provisions have been made such as the 86th Constitutional Amendment which introduced Article 21A on the right to free and compulsory education for 6-14 years old children and Article 45 to urge states to provide ECCE for all children until they complete the age of six years. The Right of Children to Free and Compulsory Education (RTE) Act 2010 guarantees children their right to quality elementary education. ECE is not recognized as a compulsory provision by RTE, but RTE urges states to provide free pre-school education for children above three years. The 12th Five Year Plan acknowledges the importance of ECE and improving school preparedness. The Government of India approved the National Early Childhood Care and Education (ECCE) Policy in 2013. The Policy framework also includes the National Curriculum Framework and Quality Standards for ECCE. The Policy caters to all children under 6 years of age and commits to universal access to quality early childhood education. The Ministry of Women and Child Development (MWCD) is the nodal department for ECCE. MWCD is responsible for the Integrated Child Development Services (ICDS) programme, which is a centrally sponsored and state administered ECCE programme, covering around 38 million children through a network of almost 1.4 million anganwadi centres (a village courtyard). ICDS includes delivery of an integrated package of services such as supplementary nutrition, immunization, health check-up, preschool education, referral services and nutrition & health education. ECCE is one of the components and aims at psycho-social development of children and developing school readiness.

Needs & Importance of the study
Sustainability should not be considered an abstract concept but a common way of action of our daily life. The problem, then, is whether our education system can contribute to helping our citizens to develop the notion of sustainable development. All the problems should remind us to look at and explore our educational systems and programmes, including early childhood education (ECE). Over the last decade, the early childhood education sector has shifted from focusing on childcare to concern for children’s education and development. The early childhood education (ECE) from ages 3 to 6 has been instrumental in realizing this transformation that, in the long term, will have a powerful impact on the lives and
opportunities of all children. ECE is an important stage and can utilize this potential of these children for the development of our society.

Despite the recognition of the importance of ECE by the Government of India, the challenges in implementation still remain. There are still substantial numbers of children not enrolled in preschools. Even in elementary education, while there is a significant rise in enrolments, the dropout rate continues to be a matter of concern, with drop outs being highest in the first two grades of elementary schooling. Learning assessments also show that literacy skills are poor in early primary grades. This point to the urgency of helping children, particularly from first generation families, develop adequate school readiness through a good quality ECE programme and pedagogical practices and approaches as well.

**Methodology**

Pedagogy develops from a range of factors including theories and research evidence, political drivers, evidence from practice, individual and group reflection, educators’ experiences and expertise, and community expectations and requirements. It informs both curriculum (all the interactions, experiences, activities, routines and events planned and unplanned) and teaching in a service. It reflects and supports the principles of and outcomes sought by a service. Early years’ pedagogy is an extremely complex phenomenon comprising a wide variety of practices underpinned by principles acquired through training and as a result of professional experiences and personal understandings. Because of its complexity ‘effectiveness’ has to be viewed as a whole rather than as particular aspects taken in isolation. (Moyles, Adams & Musgrove, 2002).

Early childhood education and care is concerned with ensuring children achieve positive outcomes. Research on teaching, learning and outcomes shows that quality pedagogy is identified as a key lever for improving children’s outcome. Sound research evidence shows what educators can do to provide children with strong foundations for on-going learning and development in all aspects of life.

This literature review builds on and references reports from previous and ongoing initiatives, original research and academic studies, meta-analyses, literature and policy reviews, and technical reports at the international, regional, and country levels. The authors searched scholarly and online databases (e.g., Google Scholar, ERIC, JStor, Proquest, Researchgate, Academia) for studies published between 2000 and 2017 that focus on the ECE
workforce and related policies, trends, and issues. Search terms were associated with the following topics:

A. Teacher Preparation and professional development;
B. Teacher’s Beliefs and pedagogical practices.
C. Integration of Technologies into pedagogy.

**A. Teacher’s Preparation and Professional Development**

The duration and intensity of teacher training can have significant effects on children’s learning. Studies consistently point to the importance of well-trained teachers to ECCE program quality in developing countries (Engle et al., 2011; Behrman et al., 2013; Rao et al., 2014), though it is often difficult to disentangle teacher variables from a comprehensive package of interventions (Behrman et al., 2013). A large observational study of preschools in ten countries (Finland, Greece, Hong Kong, Indonesia, Ireland, Italy, Poland, Spain, Thailand, and the United States) found that children attending preschools with teachers with more education were more likely to have higher language scores at age 7 (Montie, Xiang, & Schweinhart, 2006). A recent systematic review of 111 studies found evidence from several developing countries including Bangladesh, China, and Costa Rica, that qualifications and training of teachers (referred to as “change agents”) in preschools are significantly associated with both program quality and children’s cognitive outcomes (Rao et al., 2014). Although the level of education and training varied in these studies, many of the teachers had received at least secondary education and many also participated in ongoing training once they started work in the field. The intensity and duration of pre-service training seem to matter. For example, there is evidence from Cambodia that longer preservice training has stronger effect sizes on children’s learning (Rao et al., 2014). Professional development incorporating on-site observation and coaching have also been found to be important (Yoshikawa & Kabay, 2015).

**Training can help shape teacher beliefs that affect pedagogical practices in the classroom**

In developing contexts, there are studies indicating that training can help shape teacher beliefs as well as their capacity to translate these beliefs into activities with children. For example, in Jordan, teachers with less training and experience were more likely to hold traditional and authoritative beliefs in favour of teacher-directed approaches (Betawi, 2010). In Lam Dong province in Vietnam, early childhood teachers trained with a “strong theoretical
framework” around child-centred learning felt more confident about implementing the pedagogy than less-qualified teachers (Thao& Boyd, 2014).

Training can also lead to positive interactions with children, parents, and less-qualified staff

Interaction and communication with children, parents, and other professionals are also critical factors of quality. High quality pedagogy relates to the way in which staff engages children, scaffold their learning, and stimulate interactions with other children. The importance of supportive and reciprocal interaction between teachers and children is well established (AKF, 2010; Raikes, 2015; Myers, 2006; UNESCO, 2006; Britto et al., 2011), even though teacher-child interactions have not yet received as much research attention in developing countries as in the developed world (Raikes, 2015). Better qualified personnel employ pedagogical practices which foster quality learning environments and better learning outcomes for children, and the benefits of their training may also spill over into the practices of other staff in the centre. In the EPPE study in the UK, higher qualified staff positively influenced the behaviours of lower qualified staff working beside them (Siraj-Blatchford, 2010 in OECD, 2012).

B. Teacher’s Beliefs and Pedagogical Practices

Teacher beliefs and perspectives about children’s development and quality learning environments can influence the organization and practices in an early childhood setting and affect quality and child outcomes.

Child-centred beliefs and teaching practices can improve program quality and child outcomes. Pre-primary teacher beliefs and actual pedagogical practices are two critical dimensions to ensuring quality learning environments for young children. Teacher beliefs and perspectives about children’s development and quality learning environments can influence the organization and practices in an early childhood setting and affect quality and child outcomes. What types of pedagogical practices are important for quality ECCE? Available studies in both developing and developed countries underscore the importance of teachers’ curriculum knowledge and ability to translate their understanding of child development to form warm, responsive, and enduring relationships (Gialamas et al., 2013; Mtahabwa and Rao, 2010; Naudeau et al., 2011). Research in the US has found that effective teachers hold “child-centered” beliefs that emphasize the child’s role in decision-making and deemphasize obedience and adult control (Pianta, et al., 2005 in Raikes, 2015). There is increasing focus in
curricula and training on child-centered approaches, including those fostering children’s play as a means to improve quality, and trained teachers are more comfortable shifting their practices (Banu, 2014; Thao& Boyd, 2014). The effectiveness of pedagogical practices, however, can be negatively influenced by other constructs such as large group sizes, undertrained staff, and competing teacher beliefs. A study in Chile found that pre-primary teacher use of child-centered approaches and small group activities was constrained by space issues (i.e., small classrooms) as well as by cultural attitudes toward group instruction and children’s independence (Leyva et al., 2015). This point to the need for cross-cultural research on pedagogical beliefs and practices in diverse contexts (Raikes, 2015).

For more than 20 years, the Madrasa Preschool Program in Kenya, Uganda, and Zanzibar has trained and supported women from the local community to employ child-centred approaches and use locally-available materials in preschools. Quasiexperimental evaluations have found that these programs had better quality compared to more traditional, teacher-directed preschools; participating children performed better on cognitive assessments (Mwaura et al., 2008). In Lam Dong, Vietnam, the Education Development Strategic Plan (2001- 2010) stimulated curriculum and pedagogical changes that shift from a more rigid, traditional approach to an integrated one centred around the child’s learning and development (Thao&Boyd, 2014). Across all 10 countries in the IEA Pre-primary Project (cited earlier), children had better language and cognitive performance at age 7 if they were given a greater number of freechoice activities during preschool and spent less time in whole-group activities and more time in smaller groups (Montie et al., 2006).

There is plenty of research evidence to suggest that children’s success in school and other aspects of their life can be considerably enhanced when quality educational experiences in their early years are taken seriously (Melhuish and Petrogiannis, 2006, Sylva et al., 2003, Whitebread, 2008, Yelland, 2010). It is theorised in the literature that the focus in learner-centred teaching in the early years is to enable an individual learner to construct knowledge for him or herself using the environment, including both the physical and social environments (Tracey and Morrow, 2012, Vygotsky, 1978), and therefore require a flexible curriculum within the broad parameters of the socially constructed curriculum (Bell, 2011, Mligo, 2008). However, many writers advocate that LCP is situational, that means it is not effective for all learning environments i.e “it works some of the time, or for some of the pupils, but not all of the time for all of the pupils, and that some clusters of variables produce better results in
terms of pupils academic achievement than others” (Herbert, 2004). In other words, aspects that produce better results are described where academic attainment is understood in terms of performance measurable by internationally accepted assessment tools, such as those used by the International Association for the Evaluation of Educational Achievement (IEA) e.g. standardised test (Barnett and Frede, 2010, Herbert, 2004). Recognising settings that are likely to enhance the effectiveness of LCP, as well as those in which it is likely to fail, should help education policy makers to take a course of action most suited to a particular context, instead of adopting (habitually for ideological reasons) a learner-centred framework only because it may have worked in another country, or for a different population (Herbert, 2004, Wood, 2004). However, for meaningful learning in the early years, LCP is the most suitable for engaging in spontaneous learning (Barnett and Frede, 2010, Melhuish and Petrogiannis, 2006, Sylva et al., 2003, Wood, 2004, Mitchell et al., 2008). LCP has been a critical issue in teaching and learning and few empirical studies have been conducted regarding this matter in Tanzania (Bartlett and Mogusu, 2013, Mtika and Gates, 2010, Paris and Combs, 2006). However such studies did not describe how LCP can be conducted where there are limited resources, large class sizes with a sole teacher, untrained teachers and limited professional development, and lack of teaching and learning materials and facilities. Furthermore, the analysis of the pre-school curriculum document indicates that the curriculum seems to be based on “ideological rather than pragmatic grounds” (Herbert, 2004).

C. Integration of Technologies into pedagogy in ECE

Scholars in the field of early childhood education are still debating the inclusion of digital technologies in play-based pedagogy and our understanding of digital play in early childhood education is still developing. Technology, digital media and popular culture form an important aspect of young children's life-worlds in contemporary post-industrial societies. A problem for early childhood educators is how to most effectively integrate these aspects of children's life-worlds into the provision of play-based learning. Traditionally, research has considered barriers to teacher uptake of technologies in the early years, or teacher beliefs and attitudes about using technologies with young children. An alternative perspective focuses on children's play as the foundation for early childhood curriculum provision and argues that what is needed instead are "new" concepts of play more appropriate for explaining children's contemporary play experiences in post-industrial societies. Although early childhood education teachers' are competent users of digital technologies in their personal lives and the
classrooms have been digitalised to a large extent, the teachers are still hesitant in embedding these in their curriculum practices (Fayiz, 2016; Ioanna & Susan, 2016). There has been development of a pedagogy that enables young children to learn in developmentally appropriate play-based and student-focused environments (Sandra, 2016). Incorporation of digital technology into pedagogical practices has been seen in early childhood education (ECE). Teachers incorporated digital storytelling in their classrooms to enhance learning. The results emphasize on specific points may assist teachers, parents, educational researchers and education policy-makers in using technological tools in young children's learning environments (Pelin, 2016). A further area worthy of investigation involves the role of content in early childhood education, specifically the relationship between content, context and pedagogy. Digital literacy is an important aspect to consider within teacher education as a way to address twenty-first century learner needs, particularly in early childhood contexts where developmental concerns should be paramount in making instructional design decisions (Lee, 2017). A nature-based social-emotional approach to supporting young children's holistic development that can be applied in a range of early childhood settings from forest kindergartens and nature-based preschools to more traditional centre-based early childhood programs. "The Social-Emotional and Environmental Education Development (SEED) Framework" blends early childhood education, environmental education, and social-emotional development through the integration of best practice (Deborah, 2016).

**Conclusion & Recommendations**

This study recommends that government policy makers and curriculum developers need to do renew pedagogical methods, approaches and practices to ensure quality learning in ECE. Also, in the future there needs to be a greater government commitment and spending on training more teachers in initial teacher education. Alongside this, emphasis should be placed on the provision of professional development, and improving teaching and learning materials and facilities. For meaningful learning in early childhood education, teachers should be trained in a learner-centred pedagogy. The findings suggest that creativity, problem solving, and inquisitiveness in children, among other things, can be promoted when children are involved actively in interactions with teachers/adults and with their peers. Overall this study locate more emphasise on a curriculum review; curriculum review would lead to improvement in practice. In addition there is a need for an intervention in pedagogical methods that could include drawings, simulation, role play, storytelling, songs, local dances,
games, and cultural aspects. The intention would be to develop children’s critical thinking after intervention. The paper concludes with suggestions for areas for future research in world-wide in the field of ECE and suitable pedagogical practices. The current research is therefore worthwhile, timely, and needed, particularly to explore pedagogical approaches.

References


Web sources

www.eric.org
www.jstor.org
www.researchgate.net
www.academicjournals.org