

**A STUDY OF INNOVATIVE PEDAGOGY USED IN PRESCHOOLS OF NATIONAL
CAPITAL REGION-DELHI****R. K. Parua**

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Abstract

The purpose of this study was to investigate the present status of innovative pedagogy applied in government and private preschools situated in National Capital and Haryana Region in India. The study was conducted in 48 preschools situated in Delhi and Haryana region as part of National Capital Region. Results provided evidence that in almost all the preschools the practiced pedagogy was based on play but the quantity of preschools where application of innovative pedagogies was performed remained very low. In this regard, the condition of preschools managed by private bodies was found little better as compared to government run preschools. Most of the preschools lacked in modern audio-visual equipments, Information Communication Technology (ICT) and application of varied forms of innovative pedagogies which drew inference that preschool education in India, has not been given the level of significance, as has been given by European counterparts. Absence of implementation of norms regarding preschools' conditions and curriculum on part of concerned government ministry may be cited as major reason.

Key Words: Innovative Pedagogy, Preschool, National Capital Region

Introduction

Pedagogy refers to that set of instructional techniques and strategies which enable learning to take place and provide opportunities for the acquisition of knowledge, skills, attitudes

and dispositions within a particular social and material context. It refers to the interactive processes between teacher and learner and to the learning environment, which includes the concrete learning environment, the family and community (Siraj-Blatchford, 1999; Siraj-Blatchford, Sylva, Muttock, Gilden and Bell, 2002). Pedagogy has been described as the 'act and discourse of teaching' (Alexander, 2004), the application of professional judgements or 'any conscious activity by one person designed to enhance learning in another' (Watkins and Mortimer, 1999). Pedagogical knowledge is itself complex, incorporating knowledge of children's learning, classroom management and organisation, curriculum knowledge and appropriate use of resources, pedagogical content knowledge that informs teaching, specific knowledge about learners, their interests and prior learning, knowledge of educational contexts as well as knowledge of the aims and purposes of education (Shulman, 1999). The term innovative means 'new to a situation, context, or environment' (DesignShare.com and Elliot Washor, 2003). Increased attention and effort must be placed on creating the best possible early learning environments for young children by appropriate selection and application of innovative pedagogy and approaches. If students' interests are engaged and learning environments exist both inside and outside the school building, the technology is the glue that will hold this together (Schank, 1995; Schank, 2000). There is also evidence that ICT has the potential to improve the quality of teaching when used in a well-planned manner. Technology has enabled practitioners to become more creative and interactive with the Early Years' curriculum (Ritzer, 1999). Papert (1980) investigated that technology helped the learner to think about thinking and therefore related to develop meta-cognitive skills. Young learners have a 'natural' technological competence (Prensky, 2003). Espinosa et al (2006) showed that access and use of technology influenced children's academic achievement. The innovative practices like Information and communication technology can be explored to shift the rote memory based practices in schools to individualistic learning processes related with higher level skills, problem-solving, in-depth study and collaborative learning. There are number of research studies to demonstrate significance of various technological devices such as computer or its accessories on preschool learners' achievements (DeBell and Chapman, 2006; Calvert ; Weiss, Kramarski and Talis, 2006). Haughland (2000a, 2000b) found that preschool children's use of computer software led to development in intelligence, non-verbal skills, structural knowledge, long-term memory, manual dexterity, verbal skills, problem solving, abstraction and conceptual skills but very less trained teachers are available to maximize its effects in classrooms. Marsh et al (2005) reported that children used a very wide range of technologies in the home, whereas in the preschool environment the technologies used were limited to CD players/tape recorders, computers, televisions and video recorders, with more limited use of both video and digital cameras, scanners and interactive whiteboards. Television viewing has also been related to learners' outcomes (Linebarger and Walker, 2005; Marsh et al, 2005). Involvement of many interactive games, high visual and auditory stimulation and creativity in preschool learners' social environment was found in enabling children to play an active role in their own learning. ICT was generally conceptualised as 'computers' and that children's use of computers usually took

place during periods of free play (Plowman and Stephen, 2007; Plowman and Stephen, 2008). The term 'ICT' is giving way to new information and communication technologies, such as the Internet that, in turn, generate new literacies required for reading, writing and communications (Bruce, 2003). The OECD paper 'Quo Vademus' (2002) throws light as to how ICT can function as a tool for assisting schools to become more effective and efficient. The challenge for the educators of today's young children will be to improve pedagogy so that it better reflects the changes in technologies and literacies and the intersection between the two (Carol Aubrey and Sarah Dahl, 2008)

Research provides evidence that interactions between children and staff which are based on sustained, shared thinking within play-based programs maximise children's learning outcomes (Kagan, S. L. & Neumann, M. J., 1996; EPPE, 1997-2007; Smith, A. B., Grima, B., Gaffney, M., Powell, K., Masse, L., & Barnett, S., 2000). According to Siraj-Blatchford (2004) effective pedagogy is both 'teaching' and the provision of instructive learning and play environments with routines. Learners at preschool age have been found as equal partners in the learning, social and emotional interactions they experience in group settings and that they have distinct preferences and interests which may be influenced, but not defined, by the adults they encounter at home or in early years settings (e.g. Stephen, McPake, Plowman and Berch-Heyman, 2008; Stephen, 2003; Gmitrova, Podhajeck and Gmitrov, 2009). The Study of Pedagogical Effectiveness in Early Learning (SPEEL) Project started from the foundation that the characteristics of effective pedagogy were embedded in practice and went on to attempt to identify and validate related characteristics (Moyles, Adams and Mosgrove, 2002).

According to quality standards for Early Childhood Care and Education Ministry of Woman and Child Development, Government of India (2012) pedagogies used in ECCE programmes should emphasize the holistic development of the young child. Both care and education are important, and the linkages between them need to be explored and drawn on. The pedagogy should reflect the learning of the child in his/her context. Transactions should be based on understanding of the context of the child and the social background of the family. National Early Childhood Education Curriculum Framework, Ministry of women and Child development, Government of India (2012) discusses only traditional pedagogical approaches lacking any piece of mentioning in regard to innovative pedagogy. In N.C.E.R.T surveys conducted in prestigious schools of major cities in India, it was uniformly indicated that play based development, through early childhood programme is more of an exception than the norm (Upadhyay, 2000). In India there is no substantial evidences provided by the researchers on application of innovative pedagogy in preschools. Most Of the research works conducted on ICDS lack references on innovative pedagogy but provide good evidences on conditions of traditional practices in regard to teaching and learning abundantly practiced in anganwadis and preschools (Datta, 2002; Shanmugavelayutham, 2003; Srivastava and Singh, 2007; Kumar, 2009; Trivedi, 2007; Vinayak, 2004). The literature provides quantum of evidences that innovative pedagogies can play pivotal role in transforming the rote memory based practices in preschools to individualistic learning processes related with higher level skills, problem-solving, collaborative learning

which will further pave the way to meet the holistic development aims enshrined in quality norms for preschool learners in India. This is therefore, investigator made an attempt through this study to find out present status and forms of innovative pedagogy applied in preschools situated in National Capital and Haryana Region in India.

Method

Instrument: In this study a Preschool Learning Environment Survey developed by investigator himself was used to collect data and investigate the problems faced by preschool teachers. The PLES area to find various forms of innovative pedagogy used by preschools' teachers consisted of 15 items covering various aspects of preschool education.

Sample: This study aims at analyzing the innovative pedagogy used by preschool teachers working in government and private schools in national capital region (NCR) India which comprises national capital territory of Delhi and various state regions. The sample of this study comprises 48 head-teachers or principals working in government preschools and private preschools of Delhi and Haryana region. To investigate the nature and types of innovative pedagogy used by government and private preschool teachers, percentage measurement was performed for differential analysis.

Limitations

The study was limited to 48 head-teachers of preschools situated in Delhi and Haryana regions as part of National Capital Region (NCR).It was also limited with the Preschool Learning Environment Survey and responses of preschool teachers to PLES.

Result and Interpretation

TABLE: 1

Percentage measurement of government and private preschools in various aspects of innovative pedagogy used in preschools

Sr. No	Innovative pedagogy based on general practices.	Government preschool Head-teacher (N=24)		Private Preschool Head-teacher (N=24)		Total Preschool Head-teachers (N=48)	
		YES	NO	YES	NO	YES	NO
01	Are teaching -learning activities based on play in preschool?	24(100)	00(0)	24(100)	00(0)	48(100)	00(0)
02	Does preschool provides concrete learning experiences to learners for making them understand various concepts?	12(50)	12(50)	20(83.33)	04(16.67)	32(66.67)	16(33.33)
03	Does preschool functions on democratic framework?	12(50)	12(50)	12(50)	12(50)	24(50)	24(50)
04.	Does preschool has a pedagogy of mathematics both as a separate subject and as an integral part of other preschool activities?	00(0)	24(100)	02(8.33)	22(91.67)	02(4.17)	46(95.83)
05.	Does preschool has both formative and summative evaluation for assessment of preschool learners?	12(50)	12(50)	16(66.67)	08(33.33)	28(58.33)	20(41.67)

Scores shown in parenthesis indicate percentages

Table 1 depicts that 100 percent preschools both run by government and private bodies perform teaching -learning activities based on play. It is further revealed by the results that 50 percent government and 83.33 percent private preschools provide concrete learning experiences to learners for making them understand various concepts whereas 50 percent government and 16.67 percent private preschools expressed to not providing the same. In total, teachers of 66.67 percent preschools told to facilitate concrete learning experiences as compared to 33.33 percent which do not provide it. Further it was investigated that 50 percent preschools each from government, private management and from overall preschools function on democratic framework. It was investigated that no government preschool has a pedagogy of mathematics both as a separate subject and as an integral part of other preschool activities whereas 8.33

percent private preschools and in total 4.17 percent preschools expressed to have the pedagogy of mathematics for same. The percentage of government and private preschools which apply formative and summative evaluation for assessment of learners stand at 50 percent and 66.67 percent respectively further it was found that 58.33 percent preschools from overall preschools apply formative and summative evaluation for assessment of learners.

TABLE: 2

Percentage measurement of government and private preschools in various aspects of innovative pedagogy used in preschools

S.No	Innovative pedagogy based on Information Communication Technology	Government preschool Head-teacher (N=24)		Private Preschool Head-teacher (N=24)		Total Preschool Head-teachers (N=48)	
		YES	NO	YES	NO	YES	NO
06	Do teachers in preschool apply Information and Communication Technology (ICT) to support learning in all areas of curriculum?	04 (16.67)	20 (83.33)	16 (66.67)	08 (33.33)	20 (41.67)	28 (58.33)
07	Do preschool teachers use T.V. to arouse learners' interest through visual actions for holding attention?	00 (0)	24 (100)	12 (50)	12 (50)	12 (25)	36 (75)
08.	Do preschool teachers apply Computer Aided Learning (CAL) for letter and early word recognition in preschool learners?	10 (41.67)	14 (58.3)	14 (58.33)	10 (41.67)	24 (50)	24 (50)
09	Do preschool teachers use Audio Visual programmes for developing imagination in preschool learners?	00 (0)	24 (100)	2 (8.33)	22 (91.67)	02 (4.17)	46 (95.83)
10.	Do preschool teachers use projector for general curriculum transaction?	00 (0)	24 (100)	08 (33.33)	16 (66.67)	08 (16.67)	40 (83.3)

Scores shown in parenthesis indicate percentages

Table 2, reveals that the percentage of preschools where teachers apply Information and Communication Technology (ICT) to support learning in all areas of curriculum stands at 16.67

percent for government preschools, 66.66 percent for private preschools and 41.66 in total. Whereas in 83.33 percent government preschools, 33.33 percent private preschools and 58.33 all preschools, teachers expressed that they do not use ICT in curricular areas. It was further analyzed that 0 percent government, 50 percent private and overall 25 percent preschools reported use of T.V. to arouse learners' interest through visual actions for holding attention. It was further revealed by table-2, that 41.67 percent government preschools and 58.33 percent private preschools apply Computer Aided Learning (CAL) for letter and early word recognition in preschool learners. In total, 50 percent preschools apply Computer Aided Learning (CAL) for letter and early word recognition in preschool learners. It is evident from table 2, that very less preschools use audio-visual programmes for developing imagination in learners. It was found that no government preschool uses the audio-visual programmes for the task whereas 8.33 percent Private preschools and in total, 4.16 percent preschools use audio visual programmes for developing imagination in learners. It was evident from the results no government preschool uses projector for curriculum transaction. The percentage of private preschools where projector is applied for general curriculum transaction stands at 33.33 percent whereas in total, 16.67 percent preschools expressed to use projector.

TABLE: 3
Percentage measurement of government and private preschools in various aspects of innovative pedagogy used in preschools

S. No	Innovative pedagogy applied for learners' skill development.	Government preschool Head-teacher (N=24)		Private Preschool Head-teacher (N=24)		Total Preschool Head-teachers (N=48)	
		YES	NO	YES	NO	YES	NO
11	Do preschool teachers use computer for teaching basic language skills?	04 (16.67)	20 (83.33)	12 (50)	12 (50)	16 (33.33)	32 (66.67)
12	Do preschool teachers use shared reading as innovative pedagogic practice for developing linguistic skills in your preschool learners?	24 (100)	00 (0)	24 (100)	00 (0)	48 (100)	00 (0)
13.	Do preschool teachers provide Print exposure to develop linguistic skills in your preschool learners (e.g. Books' exposure in class library)?	24 (100)	00 (0)	24 (100)	00 (0)	48 (100)	00 (0)
14	Do preschool teachers	16	8	20	04	36	12

	apply socio- dramatic play to enrich social skills and manners in preschool learners?	(75)	(25)	(83.33)	(16.67)	(75)	(25)
15.	Do preschool teachers practice dialogic reading in your preschool (children and teachers having conversation about book and chapter)?	24 (100)	00 (0)	24 (100)	00 (0)	48 (100)	00 (0)

Scores shown in parenthesis indicate percentages

. It was clear from the results depicted above in table -3, that 16.67 percent government preschools and 50 percent private preschools use computer for teaching basic language skills. In total, 33.33percent preschools use computer for the same. Further, 100 percent preschools both from government sector and private bodies were found to use shared reading as innovative pedagogic practice for developing linguistic skills in preschool learners and to provide print exposure to develop linguistic skills in learners (e.g. exposure of books in class library). As depicted above in table 3, it was found that 75 percent government preschools and 83.33 percent private preschools apply socio- dramatic play to enrich social skills and manners in preschool learners. In total, 75percent preschools apply socio- dramatic play to enrich social skills. Further it was found that 100 percent preschools both managed by government and private sector practice dialogic reading in preschool (children and teachers having conversation about book and chapter).

Discussion and Conclusion

The purpose of the study was to investigate the various aspects of innovative pedagogy used in preschools situated in Delhi and Haryana region as part of National Capital Region. Results of the study show that in preschools managed by private bodies application of innovative pedagogy is far more better as compared to the preschools managed by government. In present study play was found major innovative pedagogic approach, in teaching learning activities in almost all preschools. Extensive research has recommended play as a basis of innovative pedagogy because overemphasis on academic achievement can have profound negative impacts on children's development and learning (Sylva, 1984; Novak, 1998; Church, 1993). It is therefore application of play as Innovative pedagogy helps preschool learners in exploring, investigating, problem-solving and also absorbing new information which is meaningful to them and paves the way to further their sense of self worth and learning (Moyle, 1989; Wood & Attfield, 2005).Kane & Carpenter (2003) found that creative play helps in the development of children's cognition and imaginative capacity. At the moment, potential curricular changes due to technological advances seem to be better appreciated in the field of literacy by scholars from a range of disciplines

(Lankshear and Knobel, 2006; Leu et al 2004). Suffice it to say that even the term 'ICT' is giving way to new information and communication technologies, which leads to generate new forms of literacy required for reading, writing and communications (Bruce, 2003). In present study it was revealed that, the percentage of preschools where teachers apply Information and Communication Technology (ICT) to support learning in all areas of curriculum stands at 16.66 percent for government preschools and 66.67 percent private category and 41.66 in total. Further, it was found that the percentage of preschools where teachers are applying technological aids such as television, computer & associated audio-visual software and projector etc. as a means to further innovative pedagogy is very less. The reasons of above findings possibly can be traced back in the fact that so far preschool education has not been given its due importance in India because there are no set norms in regard to preschool education its conditions and curriculum. The Right of Children to Free and Compulsory Education Act (RTE) which came into effect from April 1, 2010 also fails to mention that preschool education is mandatory as it mentions the education of child from six years to fourteen years compulsory. Further, only until quite recently Ministry of Woman and Child Development came up with draft on affiliation and curricular conditions in relation to preschool education. Because preschools run by private bodies need to ensure their quality it is therefore their conditions were found better as compared to government run preschools. In the light of the above findings it may be suggested that the shift from academic rote learning to more experimental differentiated learning that focuses on life-long skills and character building is aimed at encouraging children to think widely, be more engaged and explore ideas thoughtfully. This objective can be reached with judicious application of innovative pedagogies in preschool education. The results obtained in present study are supported by findings of various research works in India which reported that traditional pedagogy was prevalently practiced in preschools as compared to innovative pedagogies (Kaul, 2000 ; Dutta, 2001 ; Prakash, 2005; Singh, 2006).

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