



LLCd Symposium.
POSTER PRESENTATIONS.

Name: Vidhya Satish

Affiliation: Institute of Comprehensive Education, SIES College, Mumbai, India

Brief Bio: Vidhya Satish is the Director of SIES Institute of Comprehensive Education, SIES College, Mumbai, which is one of the premier institutes providing training in Early Childhood Education, Special Education, and Counselling. Vidhya has completed her master's in Human Development from the University of Madras and her bachelor's in Education from Annamalai University. Vidhya is a doctoral student in Human Development at Nirmala Niketan College of Home Science, University of Mumbai. Her doctoral research is on the developmental appropriateness of educational software used for 4-to-7-year-old children in schools. Her master's research was on home-based intervention for facilitating language and cognitive development in preschool children from underprivileged families. Vidhya has been specializing in early childhood education for more than a decade. She conducts workshops on topics such as music and movement, teaching through games, puppetry, innovative classroom activities, and enhancing self esteem and creativity in children. She frequently writes for the children's section in a spiritual magazine called "Anugraha". She has presented various papers on topics such as "Puppetry and Social Justice" and "Readiness for Primary Children". She has also co-authored papers on human rights.

and

Name: Anuradha J. Bakshi

Affiliation: Nirmala Niketan College of Home Science, University of Mumbai, India

Title of Presentation: Use of Educational Software to Facilitate Language and Mathematics Learning in 4-to-7-Year-Old School Children in Mumbai and Navi Mumbai Region

Abstract: There are two parts to this presentation: Given the increasing use of educational software in schools today, it was judged important to survey the use of educational software in schools in Greater Mumbai and Navi Mumbai region. Therefore, Part 1 of this presentation is a report of a survey of the different types of language and mathematics educational software available for and/or being used by 4-to-7-year old children in classrooms in Greater Mumbai and Navi Mumbai region. English-medium schools affiliated to the Maharashtra State Board of Secondary and Higher Secondary Education or the Council for the Indian School Certificate Examination that were using

educational software as part of the curriculum were selected for the survey (n=37). Multiple methods were used for the survey: (a) interviews of school administrators; (b) visits to schools to ascertain the range of educational software being used, related facilities, and methods of use; (c) interviews of the computer educator and/or class teacher responsible for children's use of educational software; (d) teacher interviews on the use of the software; and (e) observations of teachers and students in classrooms while educational software was being used. The following are examples of what has been examined through this survey: facilities for use, range of software available, periodicity of use, nature of integration into the curriculum, manner of use, role of teacher, role of student, types of software used, reasons for use, reasons for preferring certain software, and teacher perceptions of whether and how the software was facilitating children's learning. Examples of findings: English language learning software completely eclipsed the software for learning of Indian languages. All 37 schools had English language learning software whereas only 5 schools had educational software designed for promoting learning of Hindi, and one school had educational software designed for language learning also in Marathi and Gujarati. Across the schools, 381 English language learning software titles were available as opposed to 24 titles for Hindi language learning, 2 titles for Marathi and 3 for Gujarati language learning. English language learning software titles included 99 software titles exclusively for rhymes, 121 software titles exclusively for narrating stories, and 161 software titles focused on two or more of the following: alphabets, phonics, grammar, and enhancement of listening, speaking, reading and writing skills. In contrast to English language learning software, only 48 exclusive mathematics learning software titles were used. Mathematics software focused on number recognition, identification, matching, sequencing, counting, addition, subtraction, place value, early multiplication, division, and number games.

In Part 2 of the presentation, the developmental appropriateness of selected language and mathematics software is explored. The criteria for assessing the developmental appropriateness of educational software for language and math learning have been developed using the findings of the survey (Part 1), the National Curriculum Framework 2005, and relevant literature (e.g., the Haugland-Shade Evaluation Scale). The criteria are organised into three sections: (a) General criteria (e.g., appropriateness for child as a single user, appropriateness for use by children in a team/group, educator appropriateness, cultural appropriateness, and free of prejudice/bias, technical appropriateness). (b) Domain-specific criteria—extent to which the software appears appropriate for language (pragmatics, semantics, grammar, phonology) and math learning. (c) Holistic development criteria—extent to which the software appears facilitative of learning related to other domains (self, identity, social, emotional, creativity/imagination, moral, spiritual). In future research, it is imperative to test the efficacy of educational software for promoting language and mathematics learning.

References:

Haugland, S. W., & Shade, D. D. (1990). *Developmental evaluations of software for young children*. Albany, NY: Delmar.

NCERT. (2005). *National Curriculum Framework 2005* (Chairperson of Steering Committee: Yash Pal). N. Delhi.