

Name of the Course: Technology and Early Childhood Development

Semester: II

Credit hours: 4

Objective of the course: At the end of this course, the student will be able to:

- g. Understand the role of technology in early childhood development
- h. Comprehend the use of technology in child development and care practices
- i. Explore the innovative practices using technology in Early learning

Unit 1: Understanding Technology and Early Childhood Development

- a. Defining technology, types of technology used in social and child development spaces, Technology driven projects, Pros and Cons of technology
- b. Understanding Early childhood development: Role of technology in early childhood development, Technology as an enabler or barrier (developmentally appropriate techniques, music , sounds and visuals attraction for children, imagination, factors that makes technology appealing for children)
- c. Current scenario of technology in India/ world view–through the data lens, the current trends

Unit 2: Use of Technology and Child Development Practices

- a. Penetration and access of technology to families and young children
- b. Technology influencing everyday child care and development practices (use for upgrading own knowledge- co-reading/co-viewing and influencing childhood)
- c. Existing efforts by the governments/multi-lateral/INGos, Tech-interventions, Role of digital literacy- play and early learning, breastfeeding, cultural

Unit 3: Early Learning & Innovative Practices Using Technology

- a. Technology in pre-primary and primary classrooms- Framework for integrating classroom practices (WorldReader, smart boards, edu-com, pragadigi by Pratham, SARD intervention PlanetRead ,Karadi tales)
- b. Challenges of using technology in early childhood development, the principles and ethics of working with children using technology

- c. Innovative technology and ECD initiatives, hackthon, tech products, learning through caseprofiles, need based analysis (health, safety, abuse, learning, literacy)

Assessment Structure:

25 marks- Internal assessment (Test / Assignment / Presentation / Field Visit/short video clips/project work) 75 marks- End semester examination

Essential Readings:

1. Technology and Interactive Media as Tools in Early Childhood Programs Serving Children from Birth through Age 8- https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/topics/PS_technology_WEB.pdf
2. Christakis, D.A., & M.M. Garrison. 2009. "Preschool-Aged Children's Television Viewing in Child Care Settings." *Pediatrics* 124 (6): 1627-32. <http://pediatrics.aappublications.org/content/124/6/1627.full>
3. Learning Shaped By Ict In Early Childhood Care And Education: Indian Context, Archana Kumari https://www.researchgate.net/publication/273144789_LEARNING_SHAPED_BY_ICT_IN_EARLY_CHILDHOOD_CARE_AND_EDUCATION_INDIAN_CONTEXT

Suggested Readings:

1. Watson, D. (2001) Pedagogy before technology: Rethinking the relationship between ICT and teaching. *Education and Information Technologies*, 6 (4), 251-266.
2. Elkind, D. (1998). Computers for infants and young children. *Child Care Information Exchange*. 123, 44-46.
3. Wolf, D. (1988) The quality of interaction: Domain knowledge, social interchange, and computer learning. In G. Forman and P. Pufull (Ed.s) *Constructivism in the computer age*. Lawrence Erlbaum Associates, Hillsdale.
4. Hodas, S. (1993) Technology refusal and the organizational culture of schools. *Education Policy Analysis Archives*, 1 (10). Online: <http://epaa.asu.edu/epaa/v1n10.html>
5. ICT in the Early Years By Mark O'Hara- https://books.google.co.in/books?id=meR4hF6tgyYC&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
6. Constructing on Constructivism: The Role of Technology, Aloka Nanjappa and Michael M. Grant- <http://ejite.isu.edu/Volume2No1/nanjappa.htm>
7. The role and potential of ICT in early childhood education <https://www.nzcer.org.nz/system/files/ictinecefinal.pdf>
8. Recognizing the potential of ICT in early childhood education Analytical survey- <https://iite.unesco.org/pics/publications/en/files/3214673.pdf>
9. ICT Advantages & Disadvantages- <http://ict-adv-disadv.blogspot.com/>

10. Information and Communication Technology in Early Childhood Education: Challenges for effective implementation and integration
http://www.ijsrp.org/research_paper_jan2012/ijsrp-jan-2012-20.pdf
11. Papert, S. (1993), *The children's machine: Rethinking school in the computer age*. Basic Books, New York.