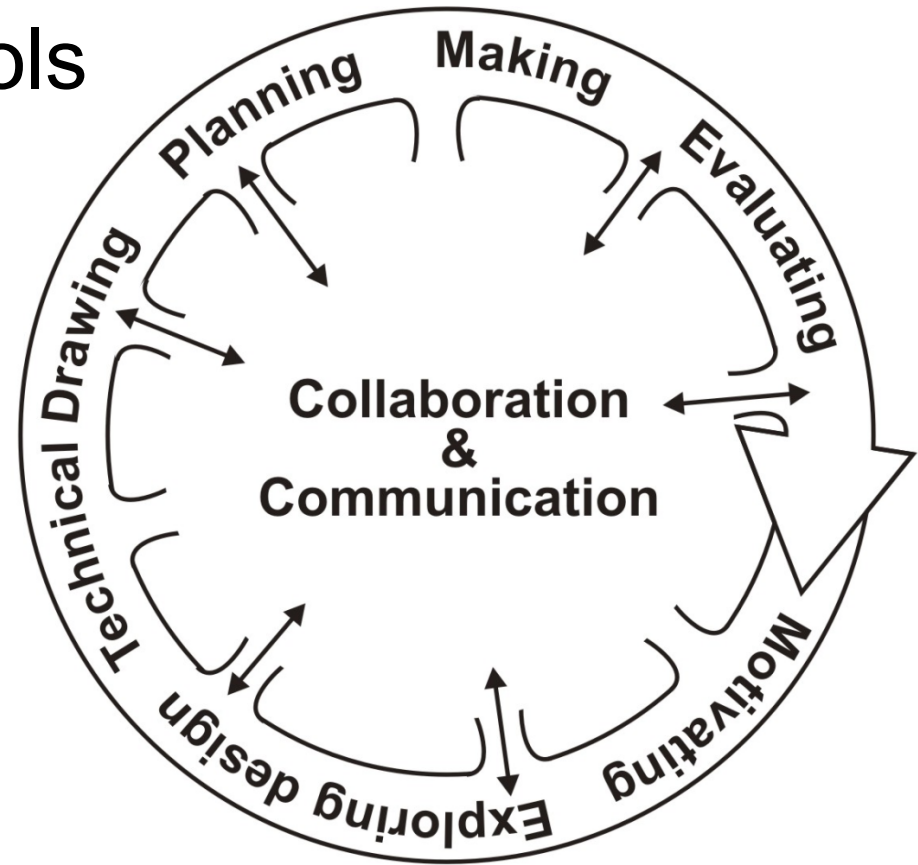


D&T Education at HBCSE

D&T curricula for Schools

Imperatives

- Knowledge
- Activity
- Context



Research Group

Chitra Natarajan, Sugra Chunawala, Ritesh Khunyakari,
Swati Mehrotra, Farhat Ara, Saurav Shome

D&T curricula for Indian schools



Survey of ideas about design and technology among students, teachers and professionals

Mehrotra, et al. (2007), In J. Dakers, W. Dow, & M. de Vries (Eds.), PATT-18 conference, Glasgow.

Ara, et al. (2013), Design and Technology Education: An International Journal , 18 (2), 50-65.

D&T activity units for students (11-13 y) from 3 settings (English-urban, Marathi-urban, Marathi-tribal)

Cognitive and affective aspects in students' engagements in D&T activities



Mehrotra, et al. 2007, In M. de Vries, R. Custer, J. Dakers, & G. Martin (Eds.), Analyzing best practices in technology education (p. 107-122). Sense Publishers.

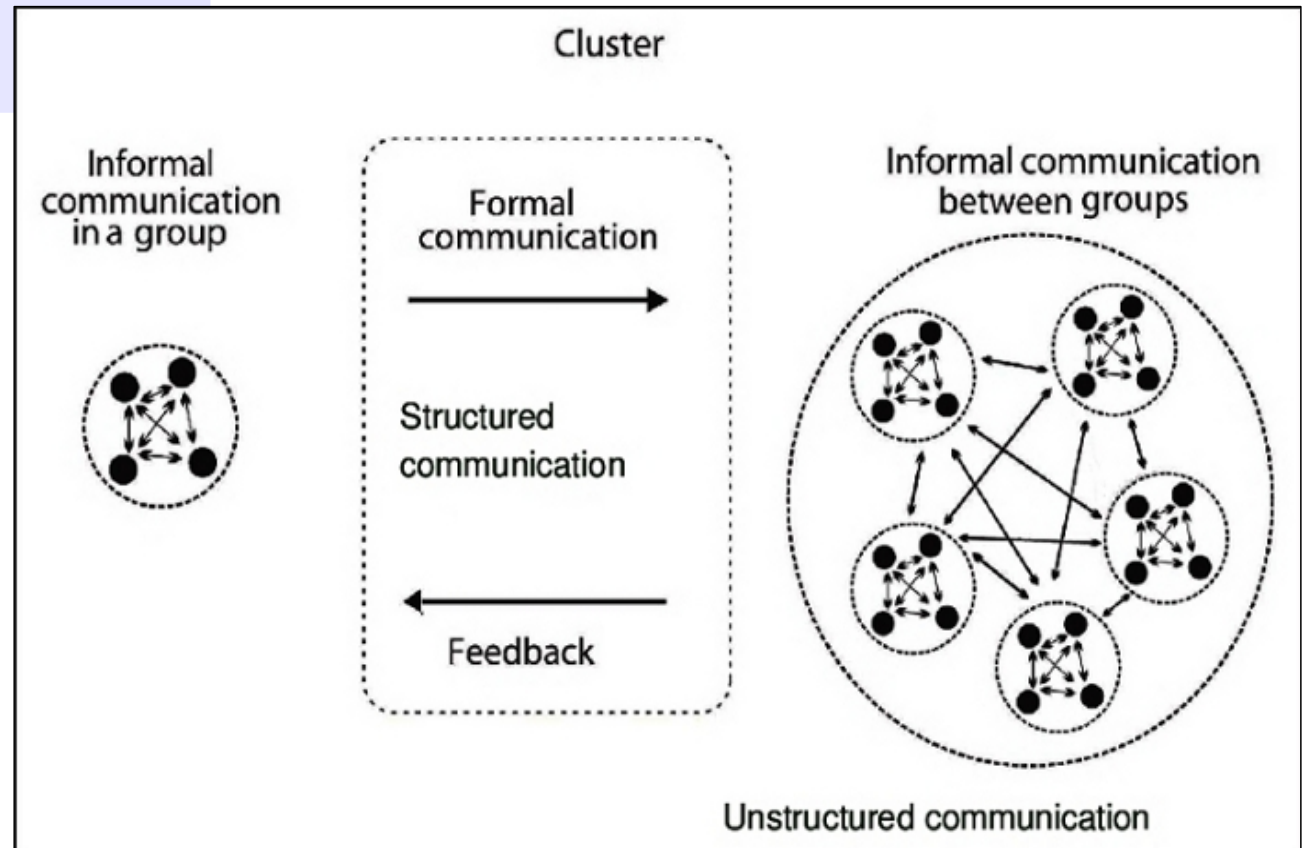
Khunyakari, et al. (2007). International Journal of Technology and Design Education, 17, 5-22.

D&T curricula for Indian schools

Study of the communication and collaboration strategies of students engaged in D&T activities



*Mehrotra et al. (2009)
International Journal of
Technology and Design
Education, 19, p 1-14.*



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Ara, et al. (2009), *D&T Education: An Internl J.*, 14 (3), 47-57.

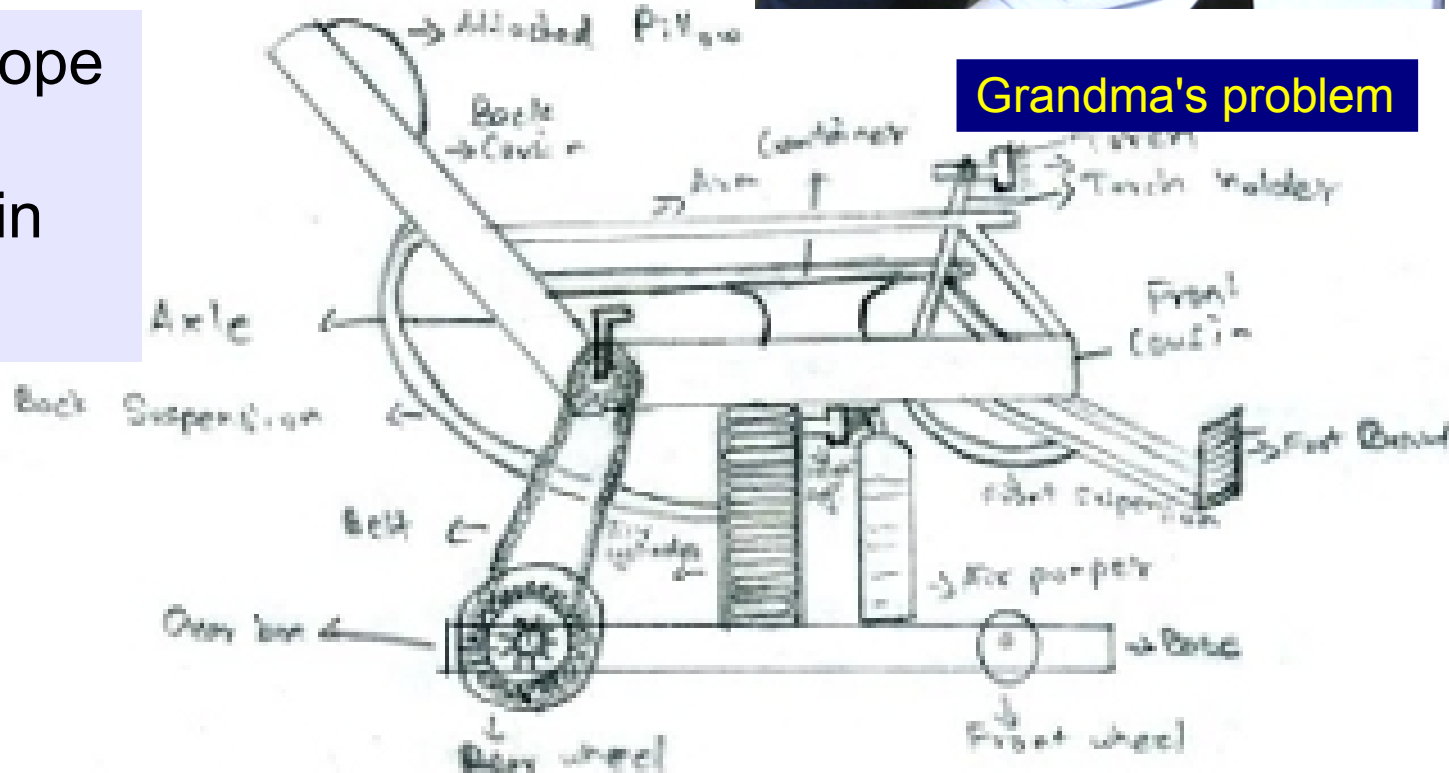


Unfamiliar Objects



Tongs redesign

Probing the scope for creative engagements in D&T activities



Grandma's problem

Ara, et al. In International conference on "designing for children - <http://www.designingforchildren.net/papers/farhat-ara-designingforchildren.pdf>

Outcome



Sugra



Chitra

- Established the first research group in India for D&T in school
- Pioneered development of D&T curricular units
- Positioned India on the global D&T research map, International D&T journals



Swati Mahrotra



Ritesh Khunyakari



Farhat Ara



Saurav Shome

Future plans

- Documentation for teachers, schools
- S&T Education & Diversity (STED)
 - Address gender, other socio-cultural aspects of D&T
- Develop classroom strategies
 - Assessment of learning processes & implementation of activities
- Design Environmentally Sustainable Solutions (DESS)
 - Activity modules for design/making while integrating sustainability and appropriateness concepts