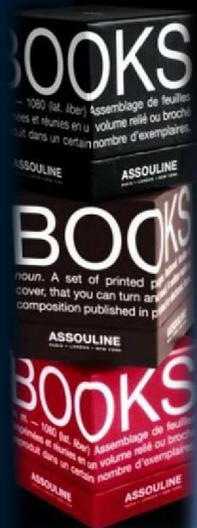




PhD Research Focus/Problem Statement:

“Simulators in Medical Education: A Case study of mannequins as learning artefacts in the Indian context.”



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Education: Need of the Hour/Cutting Edge



Mr Johnston didn't realise that the teachers were actually using the technology in their classrooms till they started sending children to his office as email attachments.

Contents:

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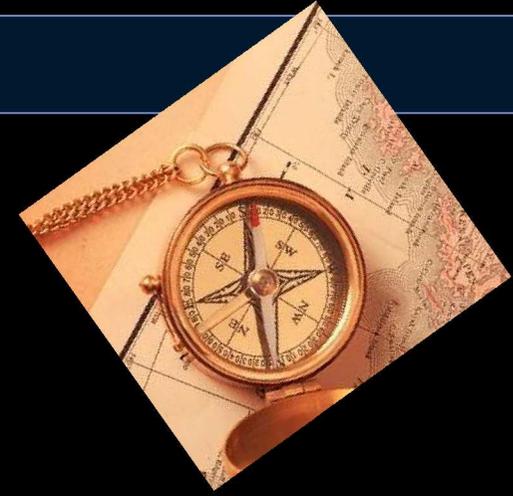


Aim & Objective

1. Finding out the underlying assumptions and interpretations of the teachers and learners using the mannequins in a medical education learning environment in the Indian context.
2. Looking at technology in medical education from a STS perspective.
3. Employing Bijker's SCOT approach.
4. Use of simulations in medical education is a growing field and the study will add to the knowledge of this growing field as well to the knowledge of STS.

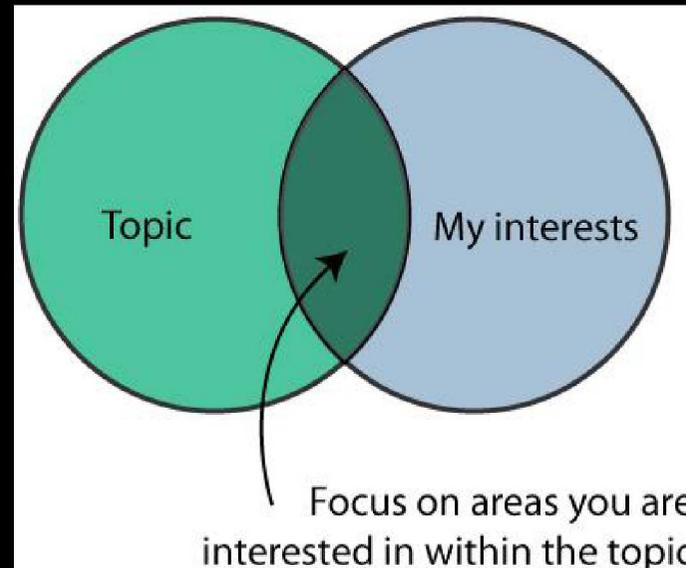


Scope & Significance



1. In the *post-normal science* era where accountability, uncertainty and sustainability are important factors and importance of stakeholders in the era of multidisciplinary approach.
2. Science & technology on one hand and society on the other hand, condition and influence each other will be the scope of the study.
3. From a STS perspective this study will illuminate designer-user interface
4. The study will show how the assumptions of the designers on one side and the trainers and learners on the other side assume the real world patient or human body perceptions?

Research Questions



1. In what ways and how do medical professionals shape technology employed in medical education and vice versa?
2. How do simulations help in treating people?
3. How to make simulations imitate a sick human being?
4. To what extent, designers, developers, theory of building mannequins/dummies incorporate real world situations?
5. What are the gaps between the real world and artificial world in reference to dummies or mannequins in medical education environment in India?



Literature Review Contd.



1. Bijker, W. E., Hughes, T.P. & Pinch, T.J. (Eds.) (1987). *The Social Construction of Technological Systems New Directions in the Sociology and History of Technology*. Cambridge, Massachusetts, London, England: The MIT Press.
2. Kjølberg, K.L. & Wickson, F. (Eds.) (2010). *Nano Meets Macro Social perspectives on nanoscale sciences and technologies*. Singapore: Pan Stanford Publishing Pte. Ltd.
3. Kuhn, T. S. (1962). *The Structure of scientific revolutions*. Chicago: The university of Chicago Press.
4. The *Resusci-Anne in the 1960s* was first developed by a successful Norwegian Toy manufacturer to be used for training the mouth-to-mouth ventilation. This study was able to give a good insight in the historical background of simulations.(source: http://qualitysafety.bmj.com/content/13/suppl_1/i11.full)

Conclusion

1. Highlighting the assumptions of identified stakeholders and addressing the issues and problems underlying the interface of science, technology, and society is the focus of this Ph.D. research problem.



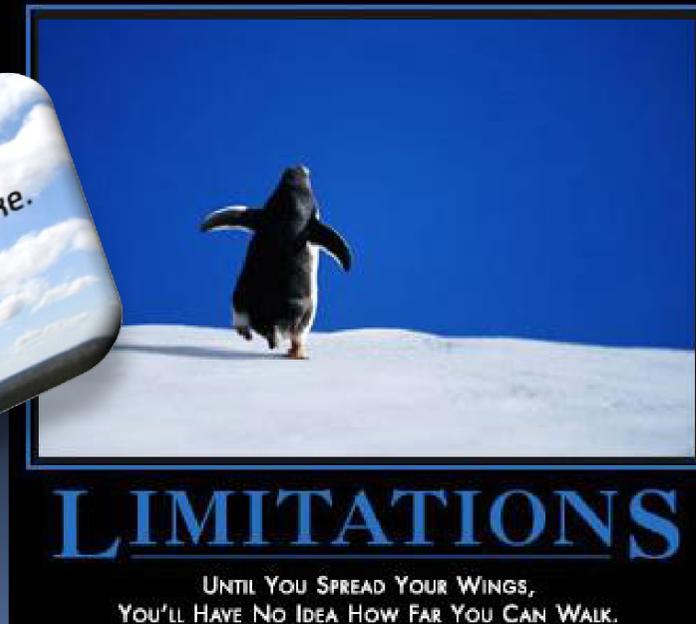
Further recommendations & Limitations:

Further recommendations:

- The study can further be done in longitudinal way and using many more sources of primary data and other strands of this research can further be dissected and researched further.

Limitations:

- Not much literature is available in this multidisciplinary approach in STS so though a challenge but could open doors for further research.



Questions to you all:

1. Also, the ethical aspects of using dummies in medical education have many implications both positive and negative so from a positive side how can I make use of ethics to support my study or be a part of it?
2. What journals and reading materials, can I read to know what is going on in my research area as this is multidisciplinary and relating with education?
3. What method of qualitative research method should I employ in this study?



Questions?

