Systemic Design principles of e-Learning systems using Ubiquitous technologies to enable Capsule based learning.

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Contents

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Background to My Research

• Conception of a concept known as “Edutorium” and developing unique set of design principles.

“Edutorium” can be defined as

“A theoretical construction of a learning environment using the ubiquitous technologies for paving way to a capsule based learning to achieve the highest level of learning experience virtually.”
Mental Impression of an “Edutorium”
Research Questions?

- What factors are holding Universities like Sheffield, Nottingham Trent and Liverpool, back from implementing the latest Ubiquitous technologies in their virtual learning systems?
- Can a design framework be developed for incorporating Ubiquitous technologies into Universities? And What are the key factors to be looked at for developing this framework?
- How can systems approach and practice help in evaluating the adoption of ubiquitous technologies into creation of a learning system “Edutorium” to achieve the desired learning outcomes at Universities?
- How can ubiquitous technologies used in developing the “Edutorium” help in creating a personalized learning environment for its users?
My Approach to Research Methodology
Initially... hmm

Thinking... Thinking... Still thinking...
To the Rescue, Saunders et al. (2003)
Research Philosophy

• Ontology
  • Worldview is “subjective” to social actors who are a part of my reality.

• Epistemology
  • For my research I had to “interpret” the opinions of those social actors.

• Axiology
  • My own “values” were based on me being a Software Engineer, A Business tutor at University of Liverpool and As PhD student at University of Sheffield.
Research Approach: Induction

• Will enable the researcher to *understand* the context of the use of learning systems in Universities, initial development process of designing a learning system and the expectations of the students and tutor have towards using such systems.

• Gives rise to a more *flexible structure* to permit changes which could be carried out as the research progresses.

• Makes a researcher *feel* that he/she is a part of the whole research and is less concern about the need to develop a general theory at the end of research.

• Inductive research like Systems approach also assist in looking at the *inter relationships* between the various social elements in the research system.
Research Strategy: Action Research.

- It is Change Oriented and seeking to introduce practical changes.
- Helps to engage with Participants in a collaborative process of critical inquiry into the problems of social practice in a virtual learning environment.
- It enables the researcher not only to solve the problem but also develop theory out of the practice.
- It helps in rethinking my thinking again and again.
Action Research: Observation, Reflection and Intervention Cycle.
Time Horizons

• “Cross Sectional” in nature cause I am trying to understand the perception of users and designers of existing E-Learning systems at the chosen Universities.

• These perceptions will help in deriving design principles for the “Edutorium”
Research Methods: Multi Method.

Focus Group

Observation
Perceived Problems

- Planning of the whole research to avoid it being called ambitious.
- Managing the Stakeholders
  - Students
  - Lecturers
  - Instructional Designers at BlackBoard, Moodle and Google Education.
  - L&D team at the Universities.
- Time is the biggest Constraint
- Scope of the research
- Research is Cyclic in nature would be difficult to decide, when to Stop
- Finding relevant literature.
- Cost of doing this research.
That’s it!!

phew...i iz soo exhausted

Thank You for Listening!!