# Conceptualizing & Designing Multimedia and Online Modules





Dr Mike Keppell

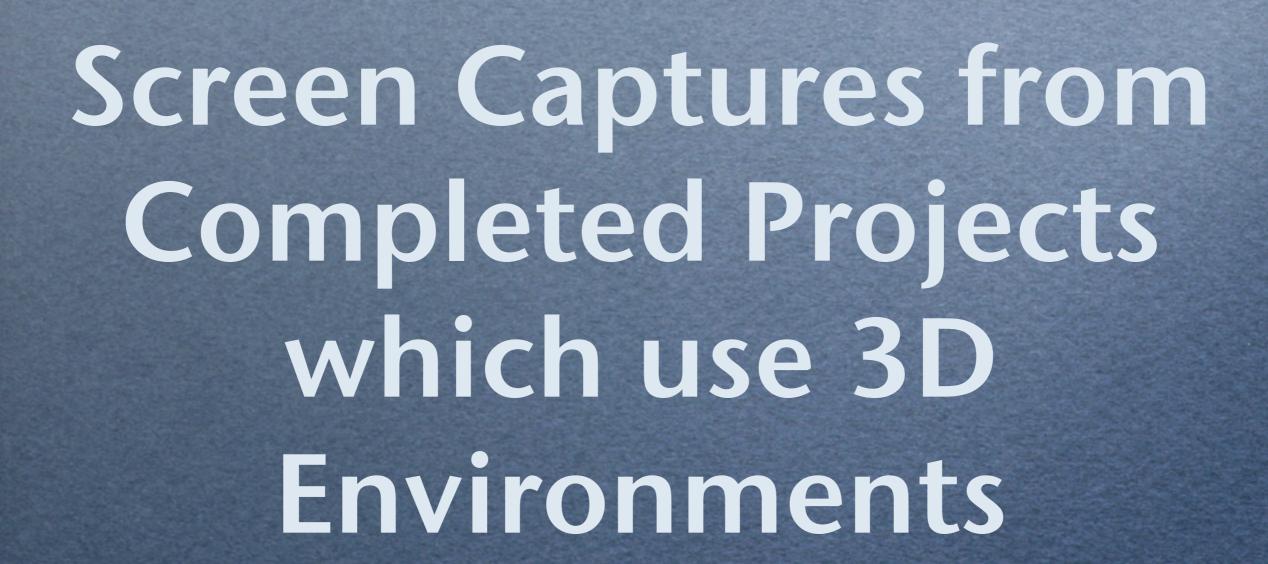
Head, Centre for Integrating Technology in Education
Hong Kong Institute of Education

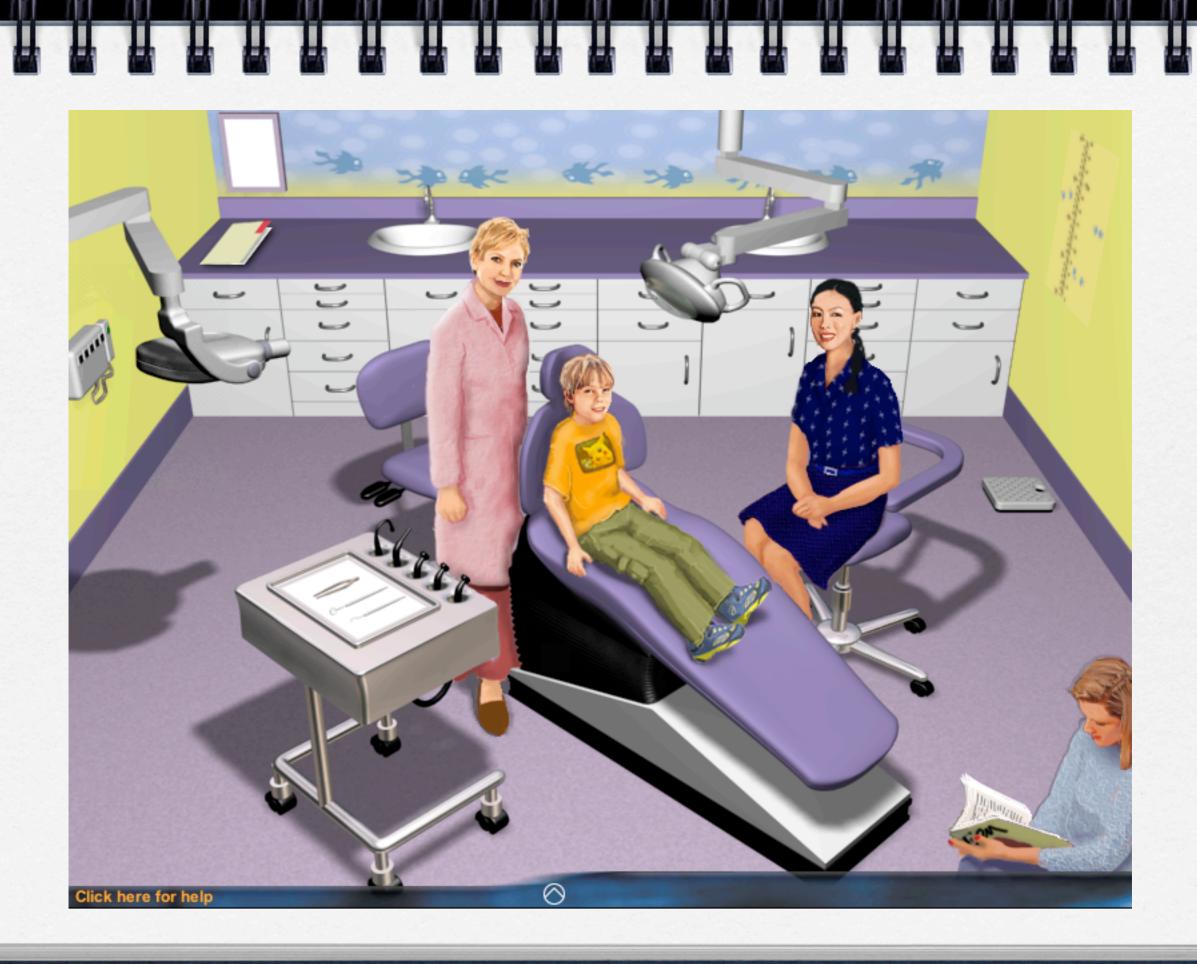
### My background

- 🗆 Instructional design
- 1 300 projects in diverse content areas
- O conceptualizing projects
- □ Interacting with content experts
- Authentic cases
- D Problem-based, project-based learning
- Online communities

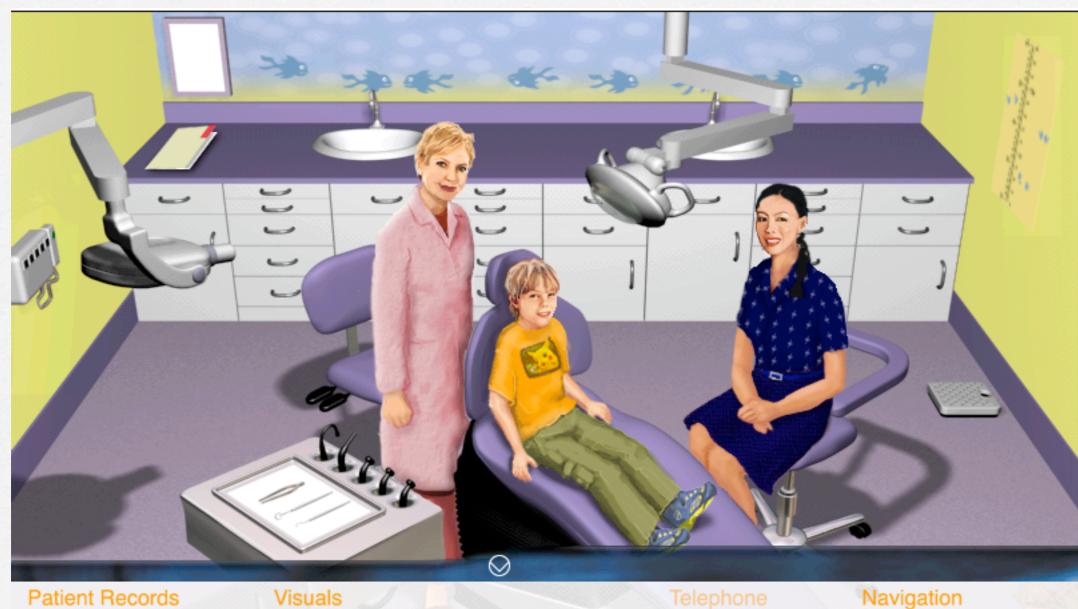
# Your background

- □ Academic department?
- □ Multimedia/visualization project?
- Online project?
- □ Full subject?
- D Partial subject (1 hour, 1 week, 2-3 weeks)?









Radiographs

Left BW

Right BW

OPG

- patient information
- medical history
- height & weight
- dental history
- social history

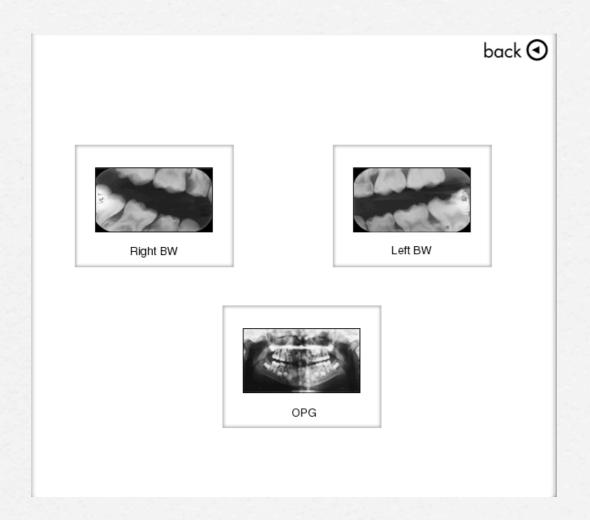
#### Clinical slides

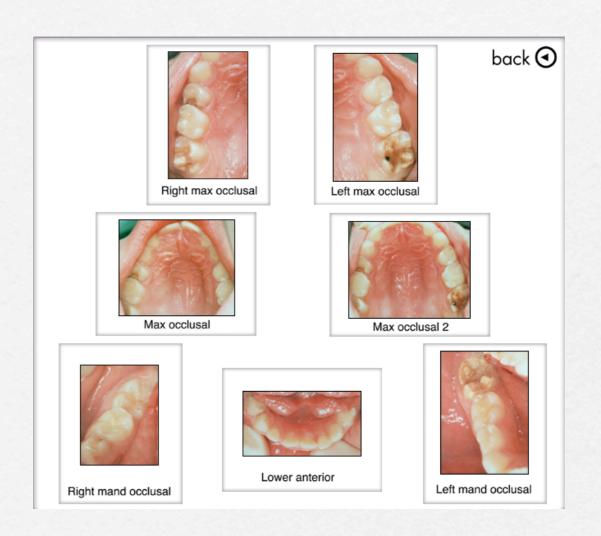
- Left maxillary occlusal
- Right maxillary occlusal
- Maxillary occlusal A
- Maxillary occlusal B
- Left mandibular occlusal
- Right mandibular occlusal
- Lower anterior

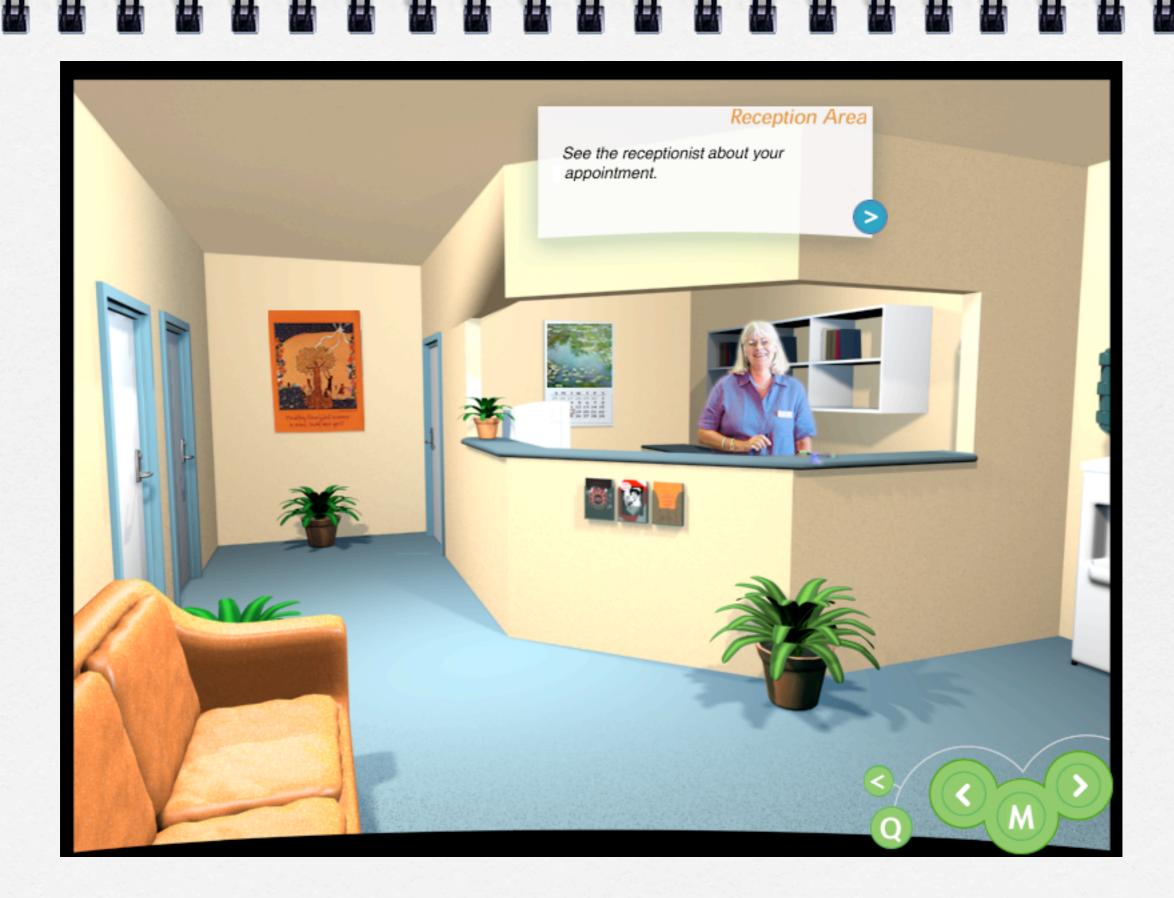
- specialist teacher
- psychologist

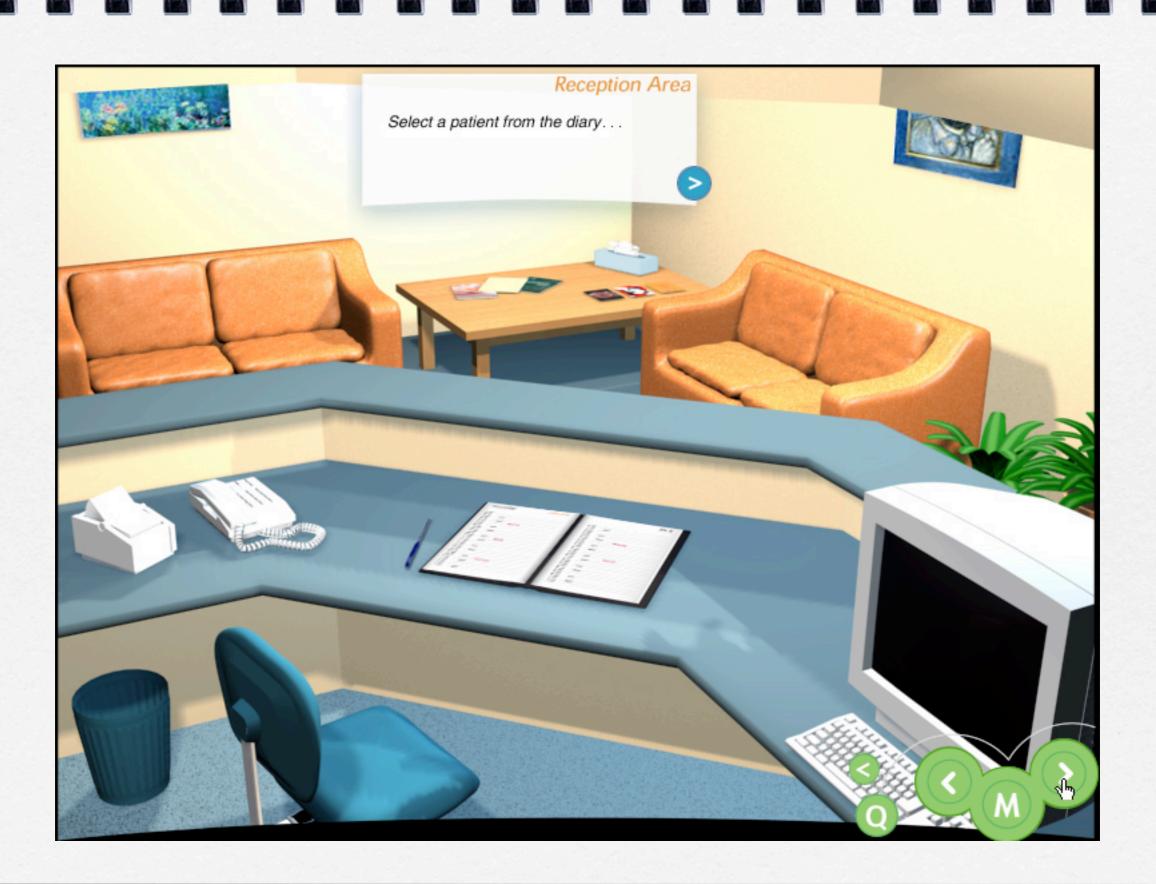
- go to office
- help

exit











# Learning Tools Embedded in the Multimedia Environment

#### introduction

#### A B C D E F G H I J K L M N O P Q R S T U V W × Y Z

A - Z

glossary

Term: Abnormal Pap test

About 1 in 10 Pap tests show an abnormality. This may be caused by infections, inflammation, or abnormal cell growth.

Abnormal Pap test

Aceto-white

Aged standard rate

AHW

AICHS

Atrophic vaginitis

Atypia

- Age Standardized Rate
- Australia
  - New Zealand
    - United Kingdom
    - U.S.A.

- Iceland
- Finland
  - East Africa
  - Melanesia
    - South Eastern Asia

#### infroduction

#### International Perspective

As you work through the module keep in mind that screening, if completed regularly will help prevent most cases of cervical cancer.

However, organised approaches to screening vary throughout the world. Cervical cancer is the third most common cancer worldwide and the leading cause of death from cancer among women from developing

#### library

#### MDC

LDC

Cases

- What is a Pap Test
- Risk Factors for Cervical Cancer
- → Barriers to Screening
  - Patient
  - Provider
  - Strategies for addressing the above barriers
- Cervical Abnormalities
  - Cervical Screening Pathway
  - Sexually Transmitted Infections

#### Communication skills

Even though GPs feel unable to convince women to have a Pap test, studies find that often it is enough for a GP to suggest to a woman that she have a Pap test

Reminder letters and recall systems

Having a system in the practice

Supportive practice organisation

LDC Deaths

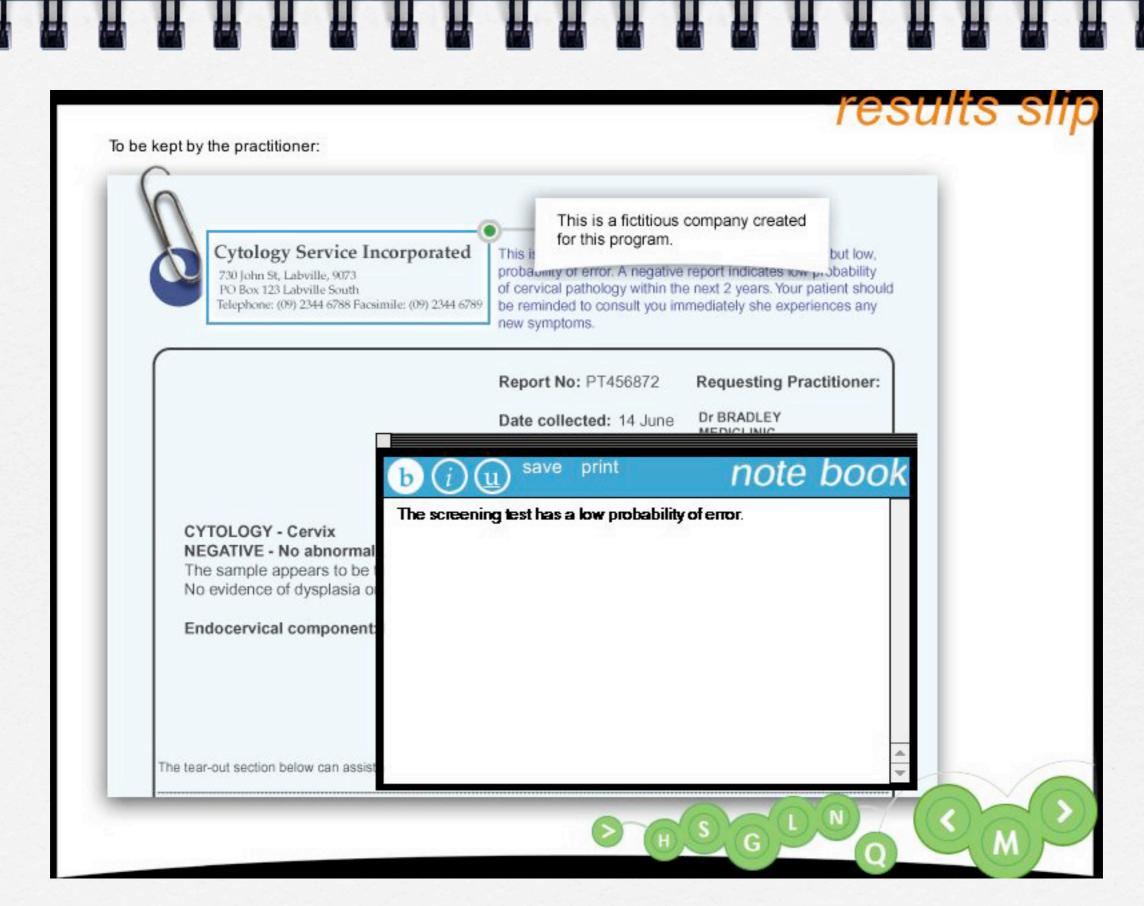
MDC Deaths

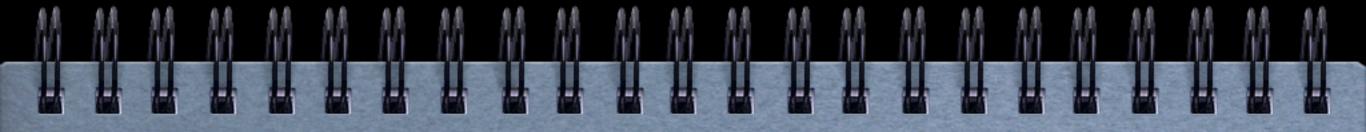
lotal 470,606

world

MDC More Developed Countries







# Online Discussion









My Institution

Courses

Community

Services

System Admin

COURSES > IIT5007GP51E61E 2003S1

Announcements

Course Information

Staff Information

Course Material

Assignments

Communication

**External Links** 

Tools

Course Map

Control Panel

#### **Discussion Board**



Add Forum

What is your theory of learning and teaching?

Provide a personal description of your own theory of teaching and learning. Why have [47 Messages ] these strategies worked? Why is it important that we understand our own theory of [All read ] teaching and learning?

Remove

Remove

Remove

Modify

Modify

Modify

Write at least four to five sentences to explain your viewpoint.

Portals, Networks, Interest Groups, Communities - What's the Difference?

Stuckey, Lockyer and Hedberg (2001) suggest that these structures are different in [57 Messages] what they offer online learners yet they are often used interchangeably with [All read] 'community'

Find an example of each of the four types and write 2 sentences about each one.

Discuss the benefits of creating a prototype of a virtual learning community before implementation.

Find a definition of prototype on the internet and include the URL in your response for [13 Messages] [All read ] others to view.



# Developing Innovative Projects?

### Content experts/developers

- D Being aware of epistemological beliefs
- □ Bain, McNaught & Mills (1998) suggest that academics differed on a wide range of beliefs about knowledge which influenced the methods used in their teaching.
- These beliefs also influenced the creation of technology-enhanced teaching and learning resources.

### Jonassen & Land (2000)

#### Instruction Student-centred learning environments

transmission, acquisition	interpretation, construction
mastery, performance	meaning making
external reality	internal reality
abstract, symbolic	contextualized, authentic, experiential
individually interpreted	socially negotiated, co-constructed
individual	collaborative
encoding, retention, retrieval	articulation and reflection
symbolic reasoning	situated learning
psychology	anthropology, sociology, ethnography
laboratory	in situ
well-structured	ill-structured
decontexualized	embedded in experience

### Implicit assumptions

- Deproduct assumption focus is on obtaining an 'end-product'
- D Prescriptive focus prescribe advice which may be accepted
- Ocollaborative focus mutually agreed goal





### Media affordances

- □ Photographs?
- □ vídeo?
- □ Animations?
- □ Multimedia?
- Online?





# Underestimating the time required

- □ Multimedia 300-500 hours per hour
- □ Focus on complex and difficult content or misconceptions
- □ can this be completed using another teaching method?

# Completing projects in a team-based environment

Content
expert

Instructional designers

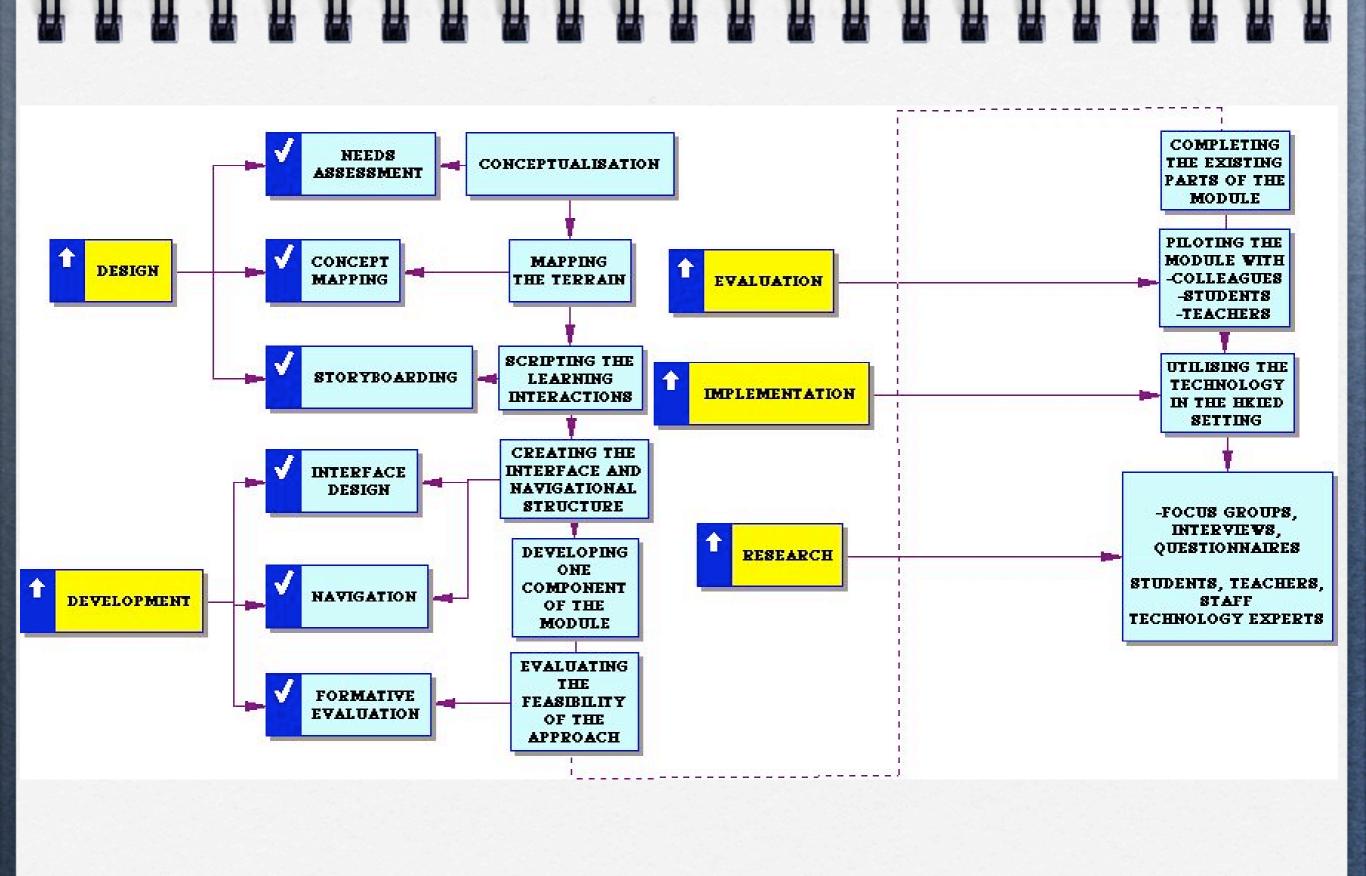
Graphic designers

project manager

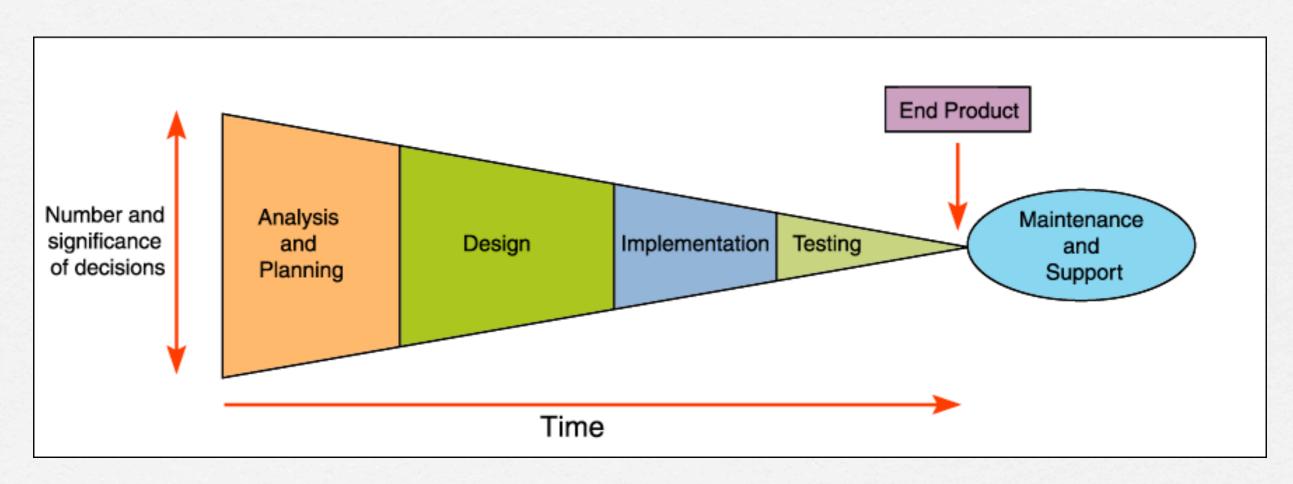
Photographers

Programmers

Videographers



# Project Decisions



(Strauss, (1997) Managing Multimedia Projects, p.95)

# Communities of practice

"Groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger, McDermott, Snyder, 2002, p.4).

"Learners inevitably participate in communities of practitioners and that the mastery of knowledge and skills requires newcomers to move toward full participation in the sociocultural practices of the community" (Lave & Wenger, 1991, p.29).

In this process - newcomers become part of a community of practice



# Questions?