Will you be using a TLRP ????

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What's the first problem with courseware ??

- Students simply provided with access to software over a network **DON'T USE IT**. Only 12% of students on a module actually accessed a piece of software associated with a module.

- This increased to:

- >40% when the software was demonstrated in class

- >70% when associated with a set task

- >90% when associated with an assessed task

- **There is a need to integrate software with the rest of the teaching material**

- **Analogy with the laboratory class**

What's the second problem ??

- **It takes time to produce material to integrate software into courses**

- **Do teachers have the time to do this along with the other pressures we all feel?**

- **86% of pharmacologists identified shortage of time and lack of recognition and reward from their institution as the prime reasons why they did not introduce innovative teaching methods into their teaching.**

[TIPS 19, 257-262 (1998)]

What's the third problem ??

- **A significant degree of experience and expertise is required to produce material to integrate software into courses**

- **Do all teachers have the expertise to do this?**

- **Attempts to integrate software into modules are often un-imaginative and do not enthuse students (e.g. look at the software and then answer these MCQ)**

- **Of 8 groups developing support material 6 found significant difficulty in thinking of types of innovative materials which integrated software into courses.**

- **All groups found devising methods for effective integration easier the second time around.**

So, what solves the problems?

- **A TLRP**

- **(teaching and learning resource pack)**

- a pre-prepared package of editable materials supplying teachers with a choice of methods with which to integrate software packages into a course

  - an editable wrap-around for a software package

What do they contain?

- **Prepared editable exercises and tasks - complete with questions, answers, instructions, marking schedules,**

- everything you need -

- **e.g. MCQ, EMSQ (questions, answers, explanations, instructions to set, provided stems)**
- **poster titles, web pages, crosswords, fill-ins, workbooks**
- **PBL tasks, guided scenarios, drug profiles, disease profiles**
- **essay titles, practical schedules and marking schedules, glossary construction, definitions……………,**

Do they work for staff & students?

- **TLRPs evaluated in**
  - staff & students in <u>development</u> universities
  - staff & students in universities <u>external</u> to project
    - pre- and post-TLRP use questionnaires
    - structured interviews
    - knowledge tests
    - staff diaries/logs of development process

Evaluation - Results

- **Students** (data from 12 universities)
  - positive about using CAL/TLRP as adjunct to normal teaching rather than replacement
  - liked explicit learning objectives
  - some preferred CAL practical to the 'real thing'
  - some had concerns about loss of tutor contact
  - good scores in knowledge assessments
    - mean marks (% $\pm$ SD, n); 76 $\pm$ 13 (42); 53 $\pm$ 16 (55); 58 $\pm$ 7 (6); 61 $\pm$ 13 (60)

Evaluation - Results

- **Staff (developing TLRPs)**
  - enjoyed collaboration with colleagues
  - enjoyed the intellectual challenge
  - each TLRP takes an average of 70h to put together
  - the development time is shortened with experience

- **Staff (using TLRPs)**
  - need to use new teaching methods and student-centred learning
  - very positive about the resulting teaching sessions
  - TLRP made introducing CAL and new teaching methods easier
  - big reduction in time needed to prepare materials:------
    - **Simulation; 8-10 hours ---> 2 hours**
    - **Problem based learning; 30 hours ---> 3 hours**
    - **Case study; 60 hours ---> 2 hours**
    - **Work book; 32 hours --->0.5 hours**

The big test
- are TLRPs useful to new users?

- **Carried out in-depth interviews with 6 purchasers (first time users).**
  - found out about them through BPS Bulletin, TLRP events - good dissemination; LTSN Bioscience now also involved (knowledgebase)
  - all found them really helpful - good example of how to use CAL e.g. good activities, ideas, assessments; good practical schedules; liked the glossaries
  - saved them considerable time - several days work achieved in a few hours
  - stimulated them to write their own TLRPs for other CAL programs
  - would definitely choose future CAL programs if TLRP available

So, where are we going?

- 1994-1999 - development/production of CAL materials

21st century

integration/implementation of learning resources in courses

- NOT just of CAL materials - of all types of learning resources
- NOT doing this individually - but collaboratively
- LTSN can support and facilitate this

Teaching and learning resource packs (TLRPs)

- **Developed collaboratively to provide editable shared materials to introduce new teaching into a course with minimal time commitment from the teacher**
  - **Can you afford not to be using one?**
  - **Can you contribute to the development of one?**
    - **Your LTSN will support you (£££!)**