Question Banks: A tool for improving Higher Education Assessment across National Resource Networks: The Polytechnic of Malawi case study
UNIMA: The Polytechnic

Problem Statement

• “ICT provides a link between learning, teaching and assessment. In school, ICT is used to support learning. Currently, we have bizarre assessment practices where students use ICT tools such as word processors and graphics calculators as an integral part of learning, and are then restricted to paper and pencil when their ‘knowledge’ is assessed. (Ridgway et al., 2004)

Current Major ICT Systems in Place:
• Student Management Systems
• Virtual Learning Environments such as Moodle
Question Bank

Electronic Repository of Question Artifacts

Question Content
Question Weighting
Question Model Answers
Question Topics
Question Exam Codes
Question Subject
Used for Assessment

• **Educational assessment** is the process of documenting, usually in measurable terms, knowledge, skill, attitudes, and beliefs.

• **Assessment** is central to educational practice.
E-Assessment

• “The traditional forms of testing or assessment are objective, summative, diagnostic, formal and informal and others. These need to be carried over into the electronic and online world with the tools that come with computers used to the betterment of assessment (Scalter and Conole, 2006).”

Benefits:
• Online or Electronic Assessment Delivery
• Automated Marking and Reporting
• Adaptive Testing
Evaluation Approach

Learning-oriented assessment framework (King, 2009)
The Polytechnic Assessment Process

Assessor creates questions → Coordinator selects moderators → Moderators assess questions

If not accepted → Assessor edits questions → Coordinator compiles comments → Moderators fill out moderation form

Coordinator accepts paper and requests final version → Moderator submits
Actors

Assessor
Moderator
Assessment Coordinator
Student
Student Tasks

Welcome Screen

Search Screen
Assessor Tasks

Welcome Screen

Login Screen

Assessor Screen

Search Screen

Delete Record Screen

ErrorMessage Screen

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Assessor Tasks

Notifications Screen

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Moderator Tasks

- Welcome Screen
- Login Screen
- Moderation Screen
- Moderation Form Screen
- Moderation Form Bottom
Coordinator Tasks

- Welcome Screen
- Login Screen
- Register Screen
- Moderator Report Form
Discussion

• This is the first version of this system
• Lessons from other Test Banks
  – University of Southampton's “Large Scale Test Bank” (White and Davies, 2000).
• It allows for a defined moderation system to be followed in assessment creation
• It allows to an extent for adherence to good principals of learner centered assessment concepts
Conclusion

• Future Work needs to be done
  – To create a assessment process that would work nationally across Universities
  – To work with organizations that will facilitate a structure and process creation that can be accepted across Institutions of Higher LEarning like the National Center for Higher Education (NCHE)
  – To use Malawi National Resource Network (MAREN) to ensure access this repository nationwide
References


• Sclater, Niall; Conole, Grainne; Warburton, Bill and Harvey, Jen (2006). 'E-assessment'. In: Conole, Grainne and Oliver, Martin eds. Contemporary Perspectives in E-Learning Research. Open and Flexible Learning Series. Abingdon: Routledge,

Thank you for your Attention