The road towards exams on demand
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Outline
• Overview of the week’s activities
• Observations and outcomes
• Conclusions and recommendations

Objective of the week
• Finally: a road map to develop a system for exams on demand and eventually on-line examinations
• First step: analyse the exact problems OUT has in redefining its examination system
  – a short training to the academic staff on drafting qualitatively valid examination questions, which can be incorporated in the examination database.
  – Explore the details of the examinations systems redesign problems and discuss possible solutions
  – Write a report and propose the way forward.

Meetings during the week
• Dr. Jabiri Bakari, director of the Institute of Educational Technology (IET)
• Abdillah Abdulrahamani and Said Ally, Software development (examination databank system)
• Ms. Magreth Mushi, head of ODEL laboratory
• Dr. Honorata Mushi, dean of the faculty of Education.
• Mr. Paul Kihwelo, head of quality assurance
• About 35 staff members from several faculties of OUT for the training
• University management and heads of departments

Analyses: strong aspects (1/3)
• OUT is open for students all over the country
• The educational system fits with exams on demand: open and flexible learning
• OUT is the only university in Tanzania with a central examination syndicate
• Through centralisation of exams in the examination syndicate no leakage of questions to students anymore.
• The organisation is used to the centralised organisation round exams
• Faculties are open to deal with contemporary aspects.
• The faculty of Education, department curriculum and instruction has experts on question and test construction.

Analyses: strong aspects (2/3)
• Teachers are motivated to care for the development of OUT.
• IET is technical able to deliver all the answers to question about functionalities, software, network, reports.
• The examination syndicate in cooperation with the faculty of science, technology and environmental studies started with one pilot on exam on demand: a exam of the course OCP 100.
• Exams on demand are applicable for all courses with closed and open ended questions.
Analyses: strong aspects (3/3)

- Exams on demand fits into a global trend
- Attitude at IET towards exams on demand is positive
- Teamwork in marking examinations
- Specific strong points in relation to online testing:
  - Availability of several ODEL labs
  - Reliable internet connectivity
  - Students have access to a computer outside OUT
  - Attitudes towards computers by the students; students have good ICT skills and are open to exams on demand

Analyses: weaknesses (1/2)

- Receiving well designed questions (reliable and valid).
- Delivering of exams on time
- No evaluation/analyses of the questions’ quality after the exam
- No evaluation forms for the student to fill in after examination.
- Training programmes for staff on question and exam construction are not available

Analyses: weaknesses (2/2)

- The faculties are scared to lose their work
- Part of the staff may not be interested in exams on demand
- Attitude in the faculty towards exams on demand; faculties want to be sure that validity is not threatened.
- No extra funding by the government available for training
- Specific weak points in relation to online testing:
  - Accommodation
  - Infrastructure
  - Electricity
  - Computer literacy of the staff; afraid of the technology

Opportunities

- If question pools are available, too late delivery of exams is no longer an issue
- Exams on demand may create more flexibility (more independence of time and place)
- Time is now ready
- Automated marking and scoring of the closed questions to be implemented; qualification units for staff
- May contribute to OUT’s image as an innovative institution
- Sharing of best ‘exams on demand’ practices among staff
- Teamwork in constructing questions
- ‘Exams on demand’ may create study discipline

Threats

- Training is not available
- By giving the questions with the student after the exam, the questions will get known for other students
- Budget / resources for writing enough questions
- Part of the students may not be interested in exams on demand
- Specific threats for online testing:
  - Number of computers
  - Infrastructure
  - Availability of broadband
  - Lack of ‘online testing’ support/help desk
  - Modernization (ICT, online testing) is often equated to the negative aspects of globalisation; decrease of personal contact

Consultants’ conclusions and recommendations (1)

- Valid exams
  Exams on demand will not be a threat for the reliability or validity of the exams. Reliability and validity can be improved.
- Usable and reliable exams
  Number of questions within the time frame and as much as questions as possible. Guidelines are given.
- Construction of question pools
  Life span of a course * number of exams a year * number of items in one exam secret versus public exams
Consultants’ conclusions and recommendations (2)

- **Lack of staff time**
  - construction in panels
  - reuse of question from other universities (i.e. OU NL)
  - efficiency in marking by digitalizing the closed questions
  - only closed answer questions exam if possible
- **Efficiency**
  - secret exams by little number of students
- **Training**
  - Training is needed. Make use of existing expertise in your organisation.
- **Quality assurance**
  - statistic analyses of the results and student evaluation

The road ahead

- Further elaboration of the pilot study at the faculty of science, technology and environmental studies on course OOP 100. This means:
  - start with setting up the Blue print for the exam
  - build a database structure
  - Construct questions
  - Develop software to randomly select question from the prestructured database
  - Random selection of items
  - Print exam on demand at the examination syndicate
  - Evaluate the pilot
- Define a training program on question and test construction by the faculty members of Education
- Broaden the results of the pilot to other courses
  - Setting up blue prints for each exam
  - Database structure
  - Question construction (find partners) for question pools

Questions or remarks?

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