



Towards an Effective e-Assessment System and Framework: Documentation, Reflection and Application



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UP Open University

University of the Philippines Open University (UPOU) is one of the constituent units of the University of the Philippines (UP) – the National University of the Philippines

UP is the only Philippine university that is a member of the Association of Pacific Rim Universities (APRU)

UP is also the only Philippine university in the ASEAN-European University Network and a member of the ASEAN University Network (AUN)

UP Open University

UPOU has been designated as the National eLearning Competency Center by the Information Technology and eCommerce Council and assigned as the Commission on Higher Education's National Center of Excellence in Open and Distance Education.

MyPortal or UPOU's Virtual classroom, was also adjudged by the APEC Digital Opportunity Center as one of the top 10 best in e-practice in Asia.



Assessment is a very important component of student learning experience

Assessment is more than grades; it provides feedback for both instructors and students

Assessment drives student learning

Assessment drives course development

In developing assessment, the following should be taken into consideration:

- Uniqueness of an online learning environment
- Procedure in the conduct of e-exam
- Assess needed information and training materials for e-examination

E-assessment is “the end-to-end electronic assessment processes where ICT is used for the presentation of assessment activity and the recording of responses. This includes the end-to-end assessment process from the perspective of learners, tutors, learning establishments, awarding bodies and regulators, and the general public” (Busuttil-Reynaud & Winkley, 2006).

E-test is an “assessment presented to the candidate on-screen” (Busuttill-Reynaud & Winkley, 2006).

Computer-based Assessment “which refers to an assessment in which the questions or tasks are delivered to a student via a computer terminal” (Busuttill-Reynaud & Winkley, 2006).

Issues in e-learning assessment:

- Security
- Reliability and validity
- Feedback
- Invigilation system
- Technical requirements



UPOU's Current e-Assessment Practices

- ◎ UPOU does not have a centralized assessment unit
- ◎ e-Assessment is limited to the initiative of UPOU's faculty member through the MyPortal (Moodle LMS) or other online platforms
- ◎ Online proctoring is through video conferencing system i.e. Skype
- ◎ Sit-down, proctored exam in Learning Centers and Testing Centers

Reliable – produces consistent scores among different testing conditions or versions used

Valid – if it can be demonstrated to measure the traits, knowledge or skills it is intended to measure

Fair – if no group of students is either advantaged or disadvantaged due to factors such as the language or content of the questions.

(Educational Testing Services 2013)

Development of an e-assessment

- ◎ Part of research as a faculty member
- ◎ To help address the sending of a number of paper-based exam to students based offshore
- ◎ To ensure reliable, valid and fair examination
- ◎ Help decrease marking loads
- ◎ To help in administrative efficiency

Objective of the Study

To determine the issues and challenges on the development and implementation of e-assessment system encountered by the teachers, assessment expert, developer as well as the students enrolled in graduate online courses.

Development of an e-assessment system



Constitution of an assessment team

- Project leader (responsible for initiating the e-assessment system, coordinates efforts, monitors progress)
- Assessment expert (responsible for ensuring assessment principles are followed)
- Technical expert (responsible for developing the e-assessment system)
- Faculty member working with the learner (pilot tests the system and gathers feedback)

Framework

Develop e-
assessment system

Conceptual

Create exam
questions

External Reviewer



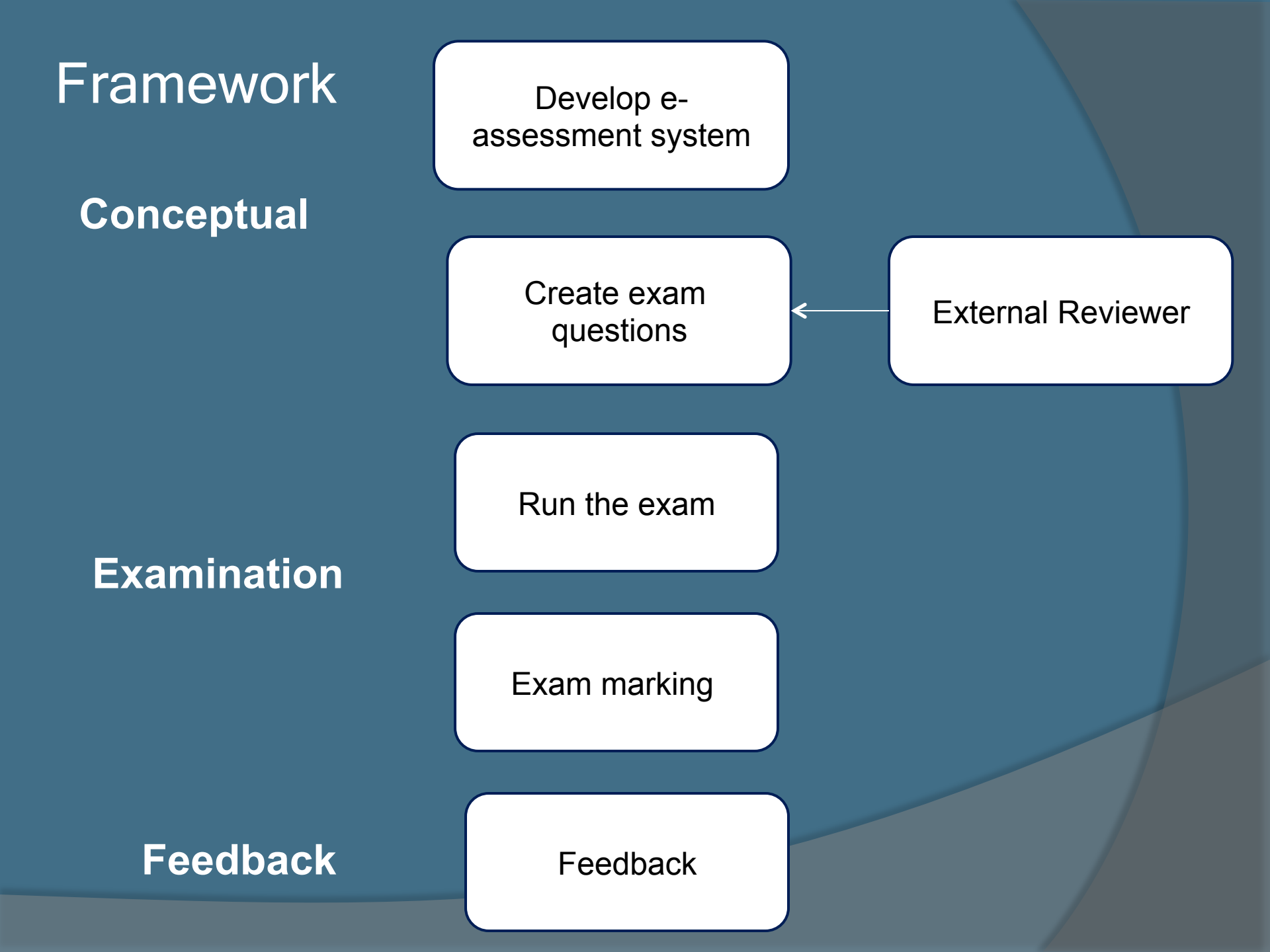
Examination

Run the exam

Exam marking

Feedback

Feedback



Version 1

- Students need to download and install MyODBC connector and Online Exam application
- Screen lock

Untitled Document - Google Chrome

fmds.upou.edu.ph/exam/

Apps Programme Outline ... UPOU-AIMS - Facult... Flipgrid Administrati...

Online Exam System Installation

Download and install MyODBC Connector

[MyODBC Connector 32 bit](#) (Windows XP / Windows 7)

[MyODBC Connector 64 bit](#) (Windows 7 64bit / Windows 8)

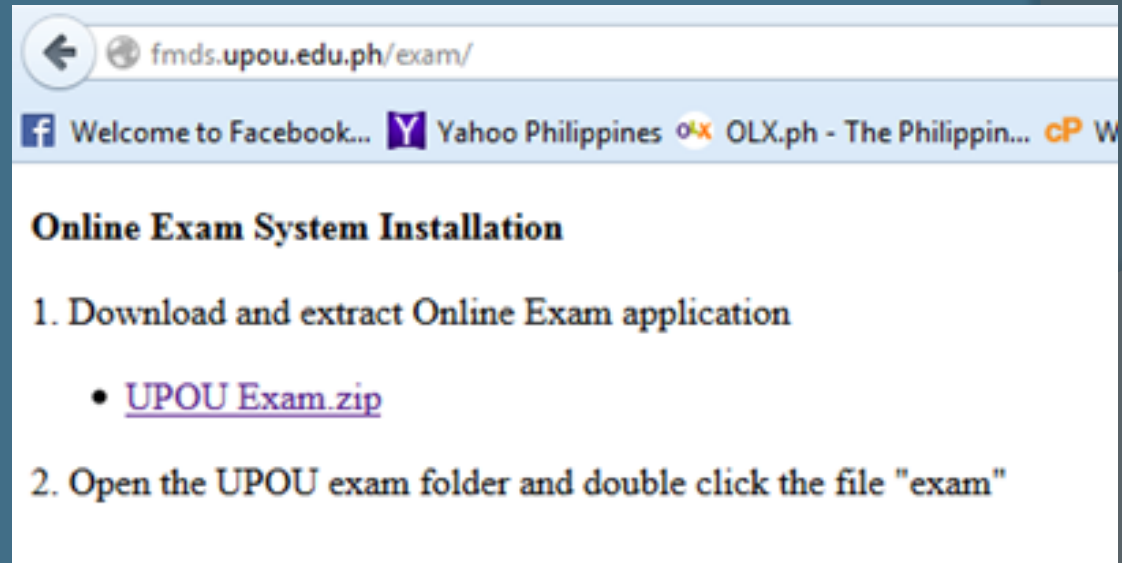
Download and extract Online Exam application

[Online Exam System \(zip file\)](#)

After the MyODBC connector is installed, open the UPOU exam folder and double click the file "exam"

Version 2

- Students need to download and install Online Exam application only
- Combination of desktop application and web-based
- Proctored (f2f)





University of the Philippines Open University
Online Exam System

Login

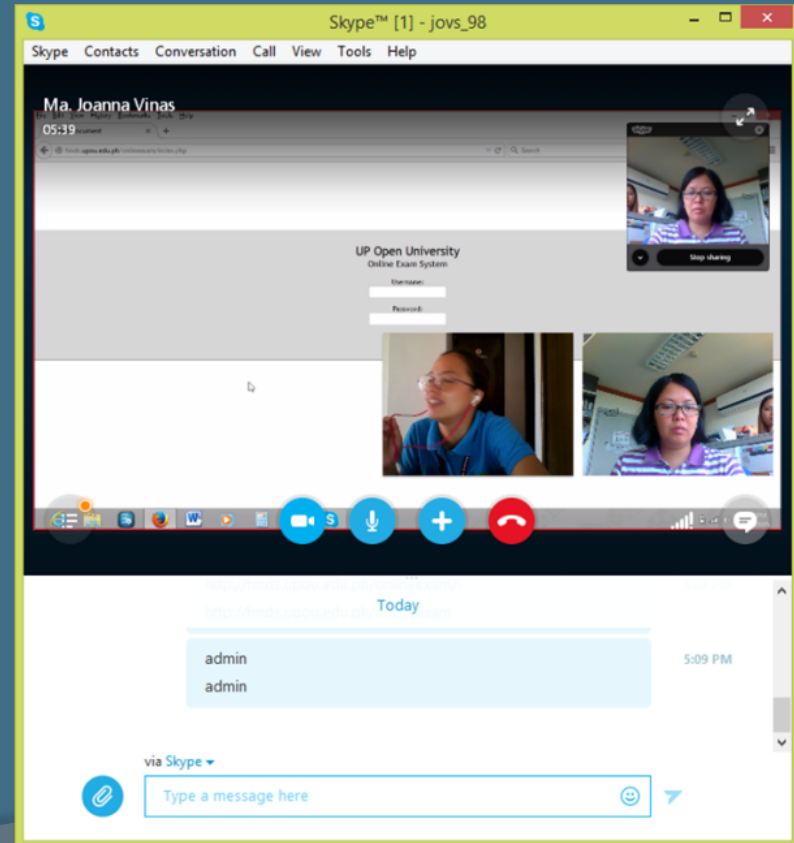
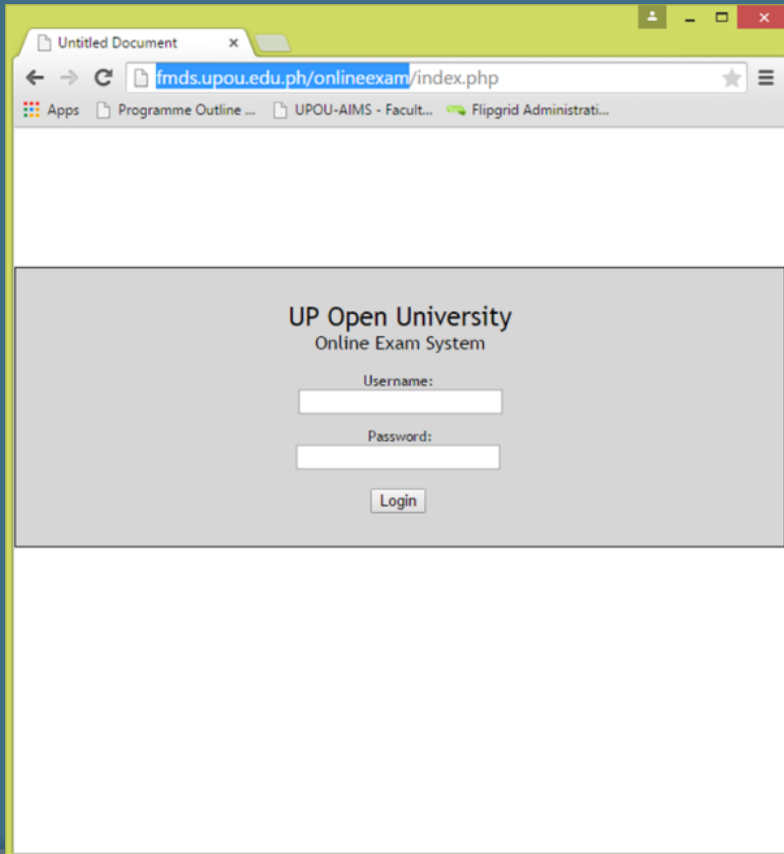
Username:

Password:

- Screen locks upon log in
- Student cannot brose other sites

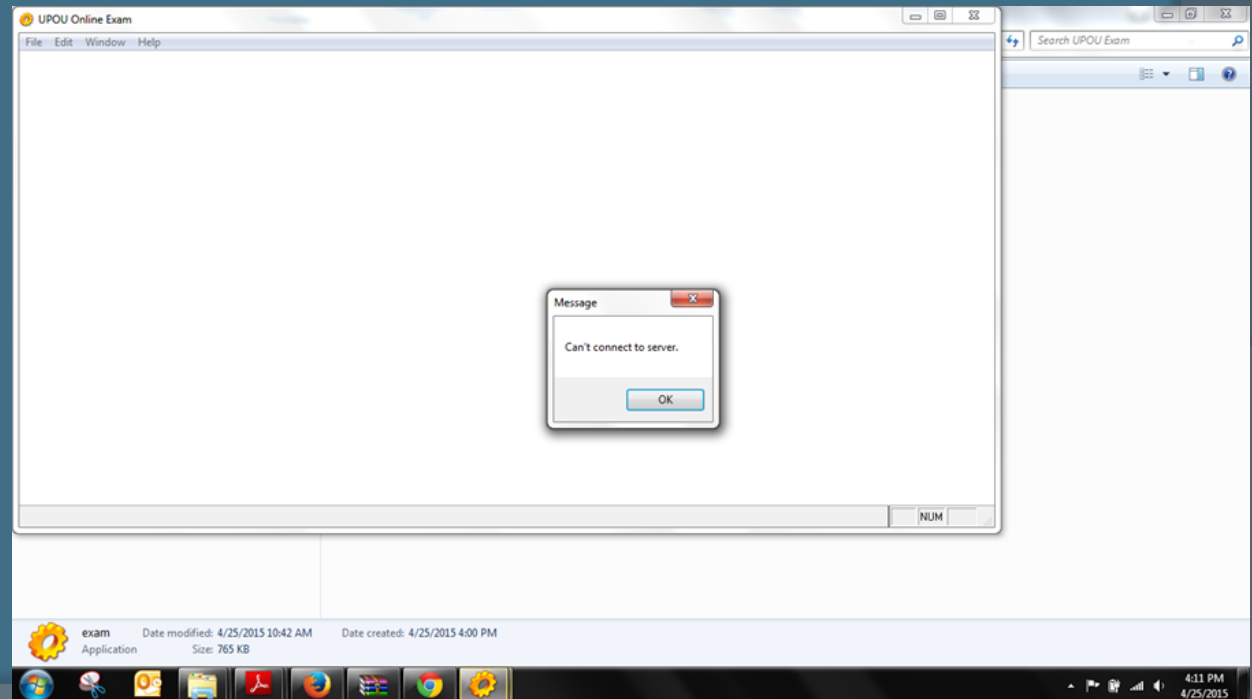
Version 3

- Web-based
- Proctored using skype



Problems encountered by the students in Version 1:

- Failed to connect to the server
- Exam file is empty
- ‘Frozen’ screen



Experiences in using Version 2:

- Exam sites: Chicago, Bahrain, Dubai, Riyadh, Philippines
- Forgotten password; some logged in using their LMS password
- Exam just hang
- Poor internet connection on site and on the part of the server
- Flooded with calls and chats

Reflections

- Initial implementation is time-consuming
- Assessment system must be carefully and continuously monitored, before, during and after examination
- Students must be briefed about the system, technical skills required of them, and what to expect
- Proctors should also be given orientation about the system

Reflections

- Close coordination among the assessment team members, proctor and students
- Type of assessment is quite limited (multiple choice, essay)

More reflections on training staff involved in assessment

- Learning Centers, Testing Centers, and Proctors must be given proper orientation on the importance of security measures
- They should be familiar with the assessment system or software
- Problems encountered must be documented by them and submit to the team

Conclusion

Development of an e-assessment system proved to be a challenge.

System must undergo intensive pilot testing and examination must be carefully monitored to avoid problems.

Students must be technology adept to avoid problems and speculations, fear

Invigilators needs training

High level of coordination and monitoring is required

Assessment type is limited

Next Steps

- Develop a manual for the e-assessment system with the following topics:
 - Coordinating e-examination
 - Preparing the learners for e-examination
 - Administering e-examination
 - Technical support for e-examination
 - Invigilating e-examination
- Continue to improve the system