

e-Exams

Faculty and Leadership Development Program (FLDP)

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Let's

COMMUNICATE.

 **INTRODUCE** 
YOURSELF

Ground Rules







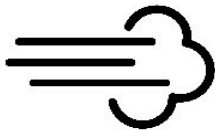
Have fun



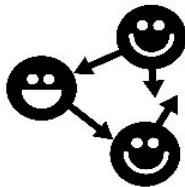
Encourage
wild ideas



Bring ideas
to life



Work fast



Work together,
no spectators



Done,
not perfect

Agenda

Contents

1. Training Methods
2. Evaluation
3. Expectations
4. Training Objectives
5. Training Plan
6. Day One
7. Let's Start
8. Summary

Training Methods

Training Methods

- 
1. Think - Pair - Share
 2. Discussions
 3. Brainstorming
 4. Active Lectures
 5. Case Study
 6. Workshops
 7. Practice

Evaluation



Expectations



Training Objectives

Training Objectives

1. Empower University Professors with e-Exam
2. Raise the differences between Assessments and Exams
3. Discuss the different types of Assessments
4. Raise the importance of e-Assessments
5. Case Study

Training Plan

Training Plan

1. Lectures
2. Activities
3. Practice

Day One

Day One

Session One - 01

1. Duration: 2h: 9.30 - 11.30 am
2. e-Assessment
 - 2.1 aka
 - 2.2 Definition
 - 2.3 Assessment Approaches
 - 2.4 Challenges
 - 2.5 Applications
 - 2.6 eAssessment and Psychology
 - 2.7 Online Assessment and e-Portfolio
 - 2.8 Types
 - 2.9 e-Marking

1. e-Exam

1.1 Short Definition

1.2 Definition

1.3 Emerging Models

1.4 Similar Systems

1.5 Stages

1.6 Benefits to Students

1.7 Challenges

1.8 Outcomes

1. Academic Dishonesty
 - 1.1 Traditional Cheating Methods
 - 1.2 Online Cheating Methods
 - 1.3 Common Academic Dishonesty Types

A green dashed clock face with a white center and a gray background. The clock face is circular with a green dashed border and a green dashed line for the hour and minute hands. The text "Time for a Break!!" is written in a red, cursive font across the center of the clock face.

Time for
a Break!!

Day One

Session Two

Case Study and Practice

1. Duration: 1h: 12:30 - 1:30 pm
2. Case Study
3. Practice
 - 3.1 Google Classroom
 - 3.2 Google Forms (Quiz)
 - 3.3 Kahoot

Let's Start

eAssessment

eAssessment

aka

1. Electronic assessment

1. Electronic assessment
2. e-assessment

1. Electronic assessment
2. e-assessment
3. online assessment

1. Electronic assessment
2. e-assessment
3. online assessment
4. computer assisted/mediated assessment

1. Electronic assessment
2. e-assessment
3. online assessment
4. computer assisted/mediated assessment
5. computer-based assessment

eAssessment

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Definition

1. The use of Information Technology (IT) in various forms of assessment such as educational assessment, health assessment, psychiatric assessment, and psychological assessment
2. May utilize an online computer connected to a network
3. This definition embraces a wide range of student activity ranging from the use of a word processor to on-screen testing
4. Specific types of e-assessment include
 - multiple choice
 - online/electronic submission
 - computerized adaptive testing
 - computerized classification testing

eAssessment

Assessment Approaches

Assessment Approaches ¹

1. Assessment of Learning
2. Assessment for Learning
3. Assessment as Learning

¹Earl, L., "Assessment As Learning: Using Classroom Assessment to Maximize Student Learning", Corwin Press, 2003, ISBN-13: 978-0761946267.

Assessment of Learning

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1. The predominant kind of assessment

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5. It takes the form of tests or exams that include questions drawn from the material studied during that time
6. Results are expressed symbolically, generally as marks or letter grades

²Black, P. & Wiliam, D., "Inside the Black Box", London : King's College, 1998.

1. Focuses on the gap between current learner orientation of the learning process and the desired goal of learning

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Assessment for Learning - 01

1. Focuses on the gap between current learner orientation of the learning process and the desired goal of learning
2. Activities undertaken by teachers and/or their students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged ²

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Assessment for Learning - 02

Learners learn best when they understand ³

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5. fully involved in deciding what needs to be done next
6. and who can give them help if they need it

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⁴Henderson, A., "The E-Learning Question and Answer Book: A Survival Guide for Trainers and Business Managers", AMACOM/American Management Association, 2003, ISBN-13: 978-0814471692.

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Assessment as Learning

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2. Learners and instructors ⁴
 - 2.1 set learning goals
 - 2.2 share learning intentions and success criteria
 - 2.3 and evaluate their learning through dialogue and self and peer assessment

⁴Henderson, A., "The E-Learning Question and Answer Book: A Survival Guide for Trainers and Business Managers", AMACOM/American Management Association, 2003, ISBN-13: 978-0814471692.

eAssessment

Challenges

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1. Necessary IT hardware to enable large numbers of student to sit an electronic examination at the same time

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2. The need to ensure a stringent level of security (Academic dishonesty)

eAssessment

Applications

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1. More widely used
2. International study centers (offer remote study courses)

Industry Assessment Bodies

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4. Both represent the growth in adoption of technology-enhanced assessment

eAssessment

eAssessment and Psychology

Psychiatric and Psychological Testing

eAssessment can be used to assess

⁵Cognition is "the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses". It encompasses many aspects of intellectual functions and processes such as attention, the formation of knowledge, memory and working memory, judgment and evaluation, reasoning and "computation", problem solving and decision making, comprehension and production of language. Cognitive processes use existing knowledge and generate new knowledge.

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3. Cognitive abilities are assessed using e-testing software, while practical abilities are assessed using e-portfolios or simulation software

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Online Assessment and e-Portfolio

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3. The first element that must be prepared when teaching an online course is assessment
4. Assessment is used to determine if learning is happening, to what extent and if changes need to be made

eAssessment

Types

Assessment Types

1. Independent Work
2. Group Work

Independent Work

1. Most students will not complete assignments unless there is an assessment (i.e. motivation)
2. It is the instructors role to catalyze student motivation
3. Appropriate feedback is the key to assessment, whether or not the assessment is graded

Group Work

1. Students are asked to work in groups (Graduation Projects)
2. Students can be evaluated using a collaborative learning model
3. Learning is driven by the students and/or a cooperative learning model where tasks are assigned and the instructor is involved in decisions

eAssessment

e-Marking

1. Cambridge International Examinations

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2. Innovations in technology to expedite the marking of examinations

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5. A. Shehab, M. Elhoseny and A. E. Hassanien, "A hybrid scheme for Automated Essay Grading based on LVQ and NLP techniques," 2016 12th International Computer Engineering Conference (ICENCO), Cairo, 2016, pp. 65-70. doi:10.1109/ICENCO.2016.7856447

e-Exam

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Short Definition

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1. Timed, supervised, summative assessment

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2. Conducted using each candidate's own computer running a standardized operating system
3. Such examinations have advantages over paper-based exams
4. Can include new multi-media, simulation and software test items
5. Give higher validity in respect of professional work practice

e-Exam

Definition

Definition - 01

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1. Fall into the category of eAssessment

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3. Form a distinct use of technology where a 'bring your own device' (BYOD) computer is started up (booted) from a USB flash drive
4. Because each computer is booted from a USB flash drive, every candidate uses the same full operating system and application programs, irrespective of those installed on the internal hard drive

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4. Because each computer is booted from a USB flash drive, every candidate uses the same full operating system and application programs, irrespective of those installed on the internal hard drive
5. Optionally include networking connections, but these are usually restricted or eliminated to prevent collusion

Definition - 02

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2. eExams are seen as having potential for curriculum transformation by changing the nature of assessment to fully incorporate computer technology
3. Autosave is a common feature of eExams, with intervals from 10 seconds to every 2 minutes
4. Some emerging models have been released into the public domain, and others are proprietary commercial material (with costs)

e-Exam

Emerging Models

First eExam System Usage

⁶<http://www.transformingexams.com/>

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5. The source code is available under open source GPL licences ⁶

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1. Mission of Abitti project is to transform all university entrance assessments in Finland to eExams by 2020
2. The source code is available under a GPLv3 license ⁷

⁷<https://github.com/digabi/digabi-os>

1. from Alpen-Adria-Universität Klagenfurt uses Moodle on a Knoppix-flavoured Linux distribution ⁸

⁸https://www.researchgate.net/publication/235355346_The_Secure_Exam_Environment_for_Online_Testing_at_the_Alpen-Adria-Universitat_Klagenfurt_Austria_Why_Online-Testing

e-Exam

Similar Systems

1. Requires each candidate to install proprietary software on their own computer and use it before the exam to download an encrypted question paper

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2. This is unlocked during the exam, revealing multiple choice and essay-style questions to which the candidate responds
3. After the fixed time period of the exam, candidates leave the venue and connect within a short time to an Examsoft web-site to upload the encrypted answerscript

1. Marketed as a secured word processing environment for high-stakes essay exams

Exam4

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2. Candidates install the software and respond to essay-style and/or multiple choice questions

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3. Software can be set to block access to the internet and local hard drives

Exam4

1. Marketed as a secured word processing environment for high-stakes essay exams
2. Candidates install the software and respond to essay-style and/or multiple choice questions
3. Software can be set to block access to the internet and local hard drives
4. At the end of the exam, candidate responses are uploaded to a server for decryption and marking



brain STORMING



e-Exam

Stages

Stages

Stages

1. The teacher adds the questions and basic exam data in the eExam application

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3. The student receives a confirmation e-mail about the booking

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2. The student signs up for the exam in the eExam application
3. The student receives a confirmation e-mail about the booking
4. The student completes the exam in the eExam room

Stages

1. The teacher adds the questions and basic exam data in the eExam application
2. The student signs up for the exam in the eExam application
3. The student receives a confirmation e-mail about the booking
4. The student completes the exam in the eExam room
5. The teacher receives an e-mail notification of a submitted exam

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5. The teacher receives an e-mail notification of a submitted exam
6. The teacher evaluates and grades the exam

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4. The student completes the exam in the eExam room
5. The teacher receives an e-mail notification of a submitted exam
6. The teacher evaluates and grades the exam
7. The student receives an e-mail notification that the exam has been evaluated

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4. The student completes the exam in the eExam room
5. The teacher receives an e-mail notification of a submitted exam
6. The teacher evaluates and grades the exam
7. The student receives an e-mail notification that the exam has been evaluated
8. The student can sign in to eExam to see the grade and the feedback

e-Exam

Benefits to Students

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1. It is easier for students to space out their studies

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2. Students can choose the most suitable exam time

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2. Students can choose the most suitable exam time
3. Better availability of course books
4. The exam setting is more peaceful
5. Computers can be used for the exam

e-Exam

Challenges



Challenges

1. Unreliability of computer equipment or the potential for cheating

⁹<http://ojs.bibsys.no/index.php/NISK/article/view/298>

Challenges

1. Unreliability of computer equipment or the potential for cheating
2. Some 'hacks' against eExams use cooling of the computer RAM to 0 degrees Celsius, when the contents can be preserved for about 45 seconds

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Challenges

1. Unreliability of computer equipment or the potential for cheating
2. Some 'hacks' against eExams use cooling of the computer RAM to 0 degrees Celsius, when the contents can be preserved for about 45 seconds
3. This is irrelevant if the exam question paper is published after the assessment and open source software is used (since the material is put in the public domain anyway)

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3. This is irrelevant if the exam question paper is published after the assessment and open source software is used (since the material is put in the public domain anyway)
4. Note the Difference between eExam and Results in Hacking

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4. Note the Difference between eExam and Results in Hacking
5. "E-exams versus paper exams: A comparative analysis of cheating-related security threats and countermeasures" ⁹

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e-Exam

Outcomes

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5. Curriculum reform appears possible, but few published studies have illustrated this to any great degree

Academic Dishonesty

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1. Cheating

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3. In traditional, and in online classrooms

THINK - PAIR - SHARE

Academic Dishonesty

Traditional Cheating Methods

Traditional Classrooms Cheating Methods

1. Various forms

- Hidden prepared notes not permitted to be used
- Looking at another student's paper during an exam
- Copying homework from one another
- Copying from a book, article or media without properly citing the source

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- cultural behavior
- misunderstanding of plagiarism

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Online Cheating Methods

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 - Projects

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Common Academic Dishonesty Types

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1. Identity Fraud
2. Plagiarism

Identity Fraud

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2. higher chance in online classes due to the lack of proctored exams or instructor-student interaction
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 - phone or video conferencing techniques

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3. It is not only the exact wordage, but the thought or idea
4. It is important to learn to properly cite a source when using someone else's work

Summary

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1. eAssessment
2. eExams
3. Academic Dishonesty

Summary

1. e-Assessment

1.1 aka

1.2 Definition

1.3 Assessment Approaches

1.4 Challenges

1.5 Applications

1.6 eAssessment and Psychology

1.7 Online Assessment and e-Portfolio

1.8 Types

1.9 e-Marking

Summary

1. e-Exam

1.1 Short Definition

1.2 Definition

1.3 Emerging Models

1.4 Similar Systems

1.5 Stages

1.6 Benefits to Students

1.7 Challenges

1.8 Outcomes

1. Academic Dishonesty
 - 1.1 Traditional Cheating Methods
 - 1.2 Online Cheating Methods
 - 1.3 Common Academic Dishonesty Types

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