



# Digital assessment

## Introduction to Assessment and Digital Assessment



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VOCAL - Vocational Online Collaboration for Active Learning

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Erasmus+

# INTRODUCTION TO ASSESSMENT AND DIGITAL ASSESSMENT

- In the learning process assessment plays a very important role and is at the center of the learning process.
- Assessment is defined as “any processes that appraise an individual’s knowledge, understanding, abilities or skills. There are many different forms of assessment, serving a variety of purposes” (QAA Quality Code (2012), Chapter B6).



References: QAA Code of Practice for Academic Quality and Standards of Higher Education 2000

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# INTRODUCTION TO ASSESSMENT AND DIGITAL ASSESSMENT

- Purposes of assessment:
- To encourage students learning by providing feedback;
- To assess student knowledge, understanding and skills;
- To give a mark or degree to determine student's performance;
- To enable the public (including employers) and higher education institutions to understand that a person has achieved an appropriate level of achievement

References: QAA Code of Practice for Academic Quality and Standards of Higher Education 2000



# INTRODUCTION TO ASSESSMENT AND DIGITAL ASSESSMENT

**Types of assessment: watch the video**

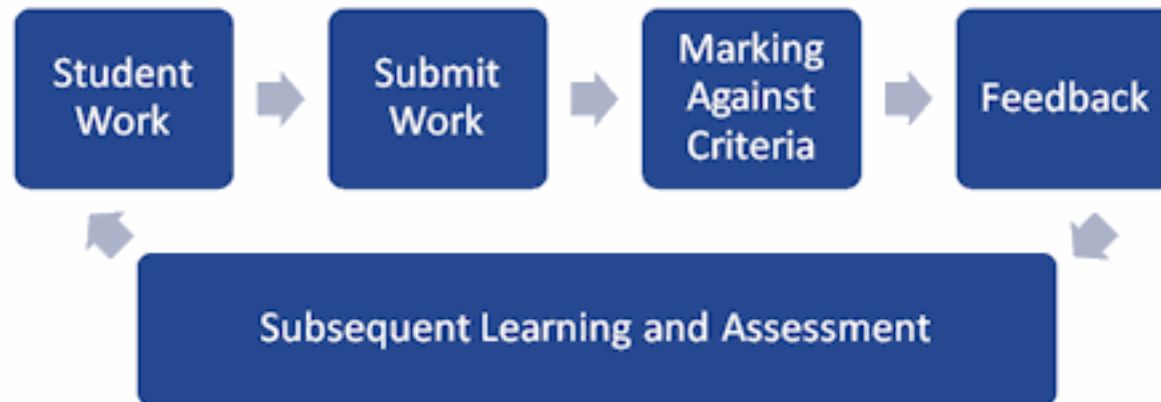


[https://youtu.be/Xd\\_QgdtFn54](https://youtu.be/Xd_QgdtFn54)



# ASSESSMENT FEEDBACK CYCLE

Online assessment has digital approaches as core components of formal submission, marking, feedback or assignment-handling processes



References: <https://elearningyork.wordpress.com/learning-design-and-development/technology-enhanced-learning-handbook/york-tel-handbook-6-assessment-and-feedback/6-1-digital-assessment>



# Why? What? How?

## Why Assess?

- It encourages learning:
- It provides feedback:
- It develops skills and abilities;
- It allows to be graded or ranked
- It validates certification procedures for professional practice.

References: <https://www.adelaide.edu.au/learning/teaching/assessment/introduction>



# Why? What? How?

## What Assess?

- Cognitive Skills and Capabilities;
- Affective Skills and Capabilities;
- Psychomotor Skills and Capabilities;
- Communication Skills and Capabilities.

References: <https://www.adelaide.edu.au/learning/teaching/assessment/introduction>



# Why? What? How?

## How Assess?

### Assessment could contain the following sections:

- Assessing Group Work
- Quality and Standards
- Academic Honesty
- Online Assessment
- Assessing Large Classes
- Assisting International Students.

References: <https://www.adelaide.edu.au/learning/teaching/assessment/introduction>





# BENEFITS OF DIGITAL ASSESSMENT

- Provide immediate feedback;
- Potentially increase learners' autonomy, agency and self-regulation;
- Support for collaborative learning;
- Provide authenticity;
- Widen range of measurement;
- Flexible and appropriate responses;
- Increase efficiency and reduce teachers' workloads;

Based on: JISC 2010; Pellegrino & Quellmalz 2010; Winkley 2010; Schwartz and Arena 2009; Angus and Watson, 2009; Whitelock and Watt, 2008; Whitelock et al., 2006



# BENEFITS OF DIGITAL ASSESSMENT

- Improve student performance;
- Integrate formative and summative assessments;
- Improve assessment validity and reliability.

Based on: JISC 2010; Pellegrino & Quellmalz 2010; Winkley 2010; Schwartz and Arena 2009; Angus and Watson, 2009; Whitelock and Watt, 2008; Whitelock et al., 2006



# CHALLENGES/BARRIERS TO DIGITAL ASSESSMENT

- Practitioners' concerns about the problem of plagiarism detection and invigilation;
- Difficulties in scalability and transferability of practices, especially HE, where different departments often have independent, separate work practices and cultures;
- Concern about the reliability and validity of a high risk assessment (eg, How to ensure that all students receive equivalent tests if questions are randomly selected from a question bar);
- User authentication and security issues;

Based on: Moge, 2011; Mansell, 2009; Whitelock and Watt, 2008; Ripley, 2007; Whitelock et al, 2006; Whitelock and Brasher, 2006



# CHALLENGES/BARRIERS TO DIGITAL ASSESSMENT

- Lack of staffing time and training in order to review the evaluation strategies and how to use technology from a technological and pedagogical perspective;
- Investment costs. New technologies and their systems requires significant investment in training, support and interoperability. In addition, certain tools require high capital investment and infrastructure that many institutions do not want to prioritize (for example, having enough computers to conduct screening tests);
- The expert councils and exam boards are very concerned that standards will not be affected;

Based on: Moge, 2011; Mansell, 2009; Whitelock and Watt, 2008; Ripley, 2007; Whitelock et al, 2006; Whitelock and Brasher, 2006



# CHALLENGES/BARRIERS TO DIGITAL ASSESSMENT

- Lack of political leadership and the whole system;
- Limitations to the exam system, especially in secondary and FE sectors;
- Lack of suitable physical spaces for advanced technologies that are not designed to meet the needs and objectives of technology enhanced assessment.

Based on: Moge, 2011; Mansell, 2009; Whitelock and Watt, 2008; Ripley, 2007; Whitelock et al, 2006; Whitelock and Brasher, 2006



# References

- QAA Quality Code (2012), Chapter B6;
- Angus, S.D. and Watson, J. (2009) 'Does regular online testing enhance student learning in the numerical sciences? Robust evidence from a large data set'. *British Journal of Educational Technology*, 40 (2), pp.255-272
- JISC (2010) *Effective Assessment in a Digital Age*. A JISC report. Available from [http://www.jisc.ac.uk/media/documents/programmes/elearning/digiassass\\_eada.pdf](http://www.jisc.ac.uk/media/documents/programmes/elearning/digiassass_eada.pdf)
- Moge, N. (2011) 'What is it that is really acting as a barrier to widespread use of summative e-assessment in UK higher education?' *International Journal of e-Assessment*, 1(1).
- Pellegrino, J. W. & Quellmalz, E.S. (2010) 'Perspectives on the Integration of Technology and Assessment'. *Journal of Research on Technology in Education*, 43 (2), pp. 119-134
- Ripley, M. (2007). *E-assessment – an update on research, policy and practice: Report 10 update*. Futurelab. Available online at <http://archive.futurelab.org.uk/resources/publications-reports-articles/literature-reviews/Literature-Review204> 39 *Technology Enhanced Assessment: Review of the Literature*



# References

- Whitelock, D. (2010) 'Activating Assessment for Learning: are we on the way with Web 2.0?' In Lee, M.J.W. and McLoughlin, C. (Eds.) Web 2.0-Based-E-Learning: Applying Social Informatics for Tertiary Teaching. IGI Global. pp. 319–342. 40 Technology Enhanced Assessment: Review of the literature-assessment
- Whitelock, D. and Watt, S. (2008) 'Reframing e-assessment: adopting new media and adapting old frameworks'. Learning, Media and Technology, 33 (3), pp. 151-154
- Whitelock, D. and Brasher, A. (2006) Roadmap for e-assessment. A JISC report. Available from: <http://www.jiscinfonet.ac.uk/InfoKits/effective-use-of-VLEs/resources/roadmap-for-assessment>
- Winkley, J. (2010) E-assessment and innovation. A Becta report. Available from: [emergingtechnologies.becta.org.uk](http://emergingtechnologies.becta.org.uk)
- Schwartz, D.L. & Arena, D. (2009) Choice-Based Assessments for the Digital Age. Stanford University. Available from: [http://dmlcentral.net/sites/dmlcentral/files/resource\\_files/ChoiceSchwartzArenaAUGUST232009.pdf](http://dmlcentral.net/sites/dmlcentral/files/resource_files/ChoiceSchwartzArenaAUGUST232009.pdf)



# References

- <https://www.adelaide.edu.au/learning/teaching/assessment/introduction;>
- <https://elearningyork.wordpress.com/learning-design-and-development/technology-enhanced-learning-handbook/york-tel-handbook-6-assessment-and-feedback/6-1-digital-assessment/>

