Determining Human Factor and Technical Parameters for the optimal rollout of Online Assessment across Teagasc education courses

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Rationale

- As the demand for education rises, the need for more accessible educational courses is required.
- Technology such as an online assessment (OA) can enhance agricultural education and learning, allowing students to receive feedback and results much quicker while also increasing their awareness of technology and problem solving skills.
- Compared to in class assessments, online assessment can offer a wide variety of benefits including flexible testing times and locations, randomization of questions and answers and a speedy rate of feedback results to both students and teachers.

Aim

To determine the parameters involved in the effective rollout of online assessment in Teagasc and provide recommendations on how best to roll this out across Teagasc education courses.

Objectives

1. **Identify** the factors impacting on online assessment in Teagasc
2. **Develop** a pilot online assessment system
3. **Outline** a set of recommendations for the optimal rollout of online assessment within Teagasc education
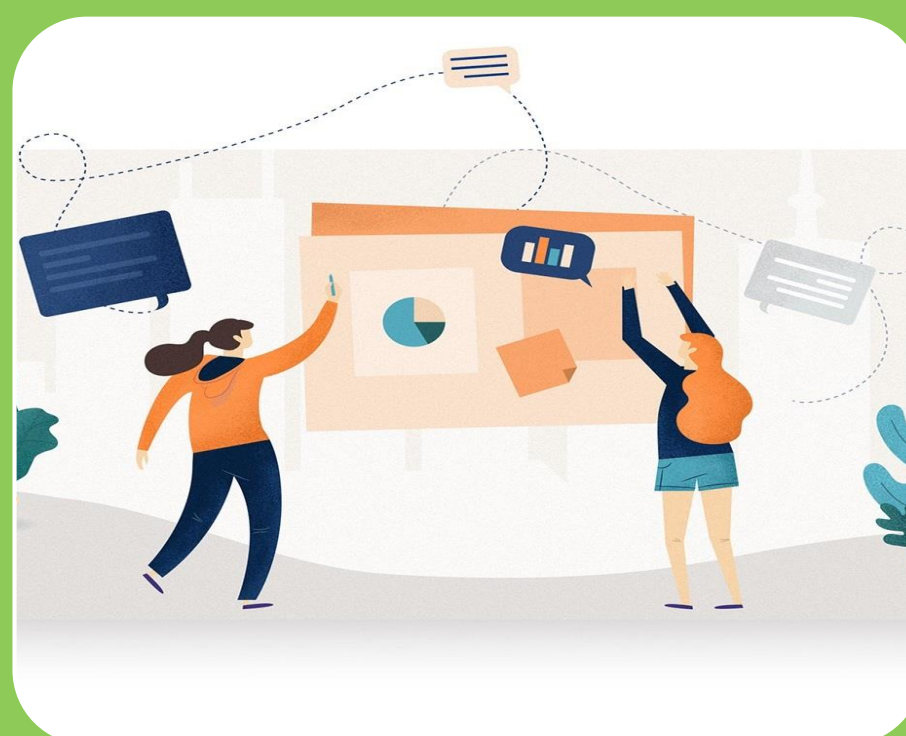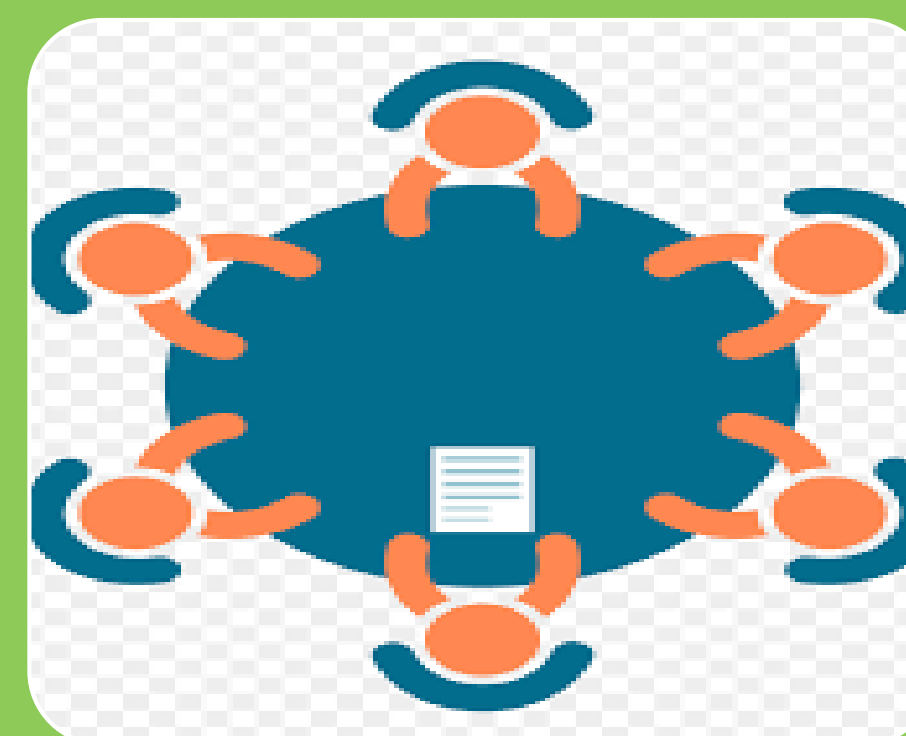
Methodology

| Literature Review | Semi Structured Interviews | Design Team Workshop | Student and Staff Survey | Focus Group | Pilot Online Assessment |

Key Findings

Semi Structured Interviews n=4

Human Parameters Identified:
- Learner Type
- Training
- Question Type
- Invigilation
- Feedback

Technical Parameters Identified:
- System Support
- Flexibility
- Hardware
- Software
- Question Bank
- Security

Student Survey n=98
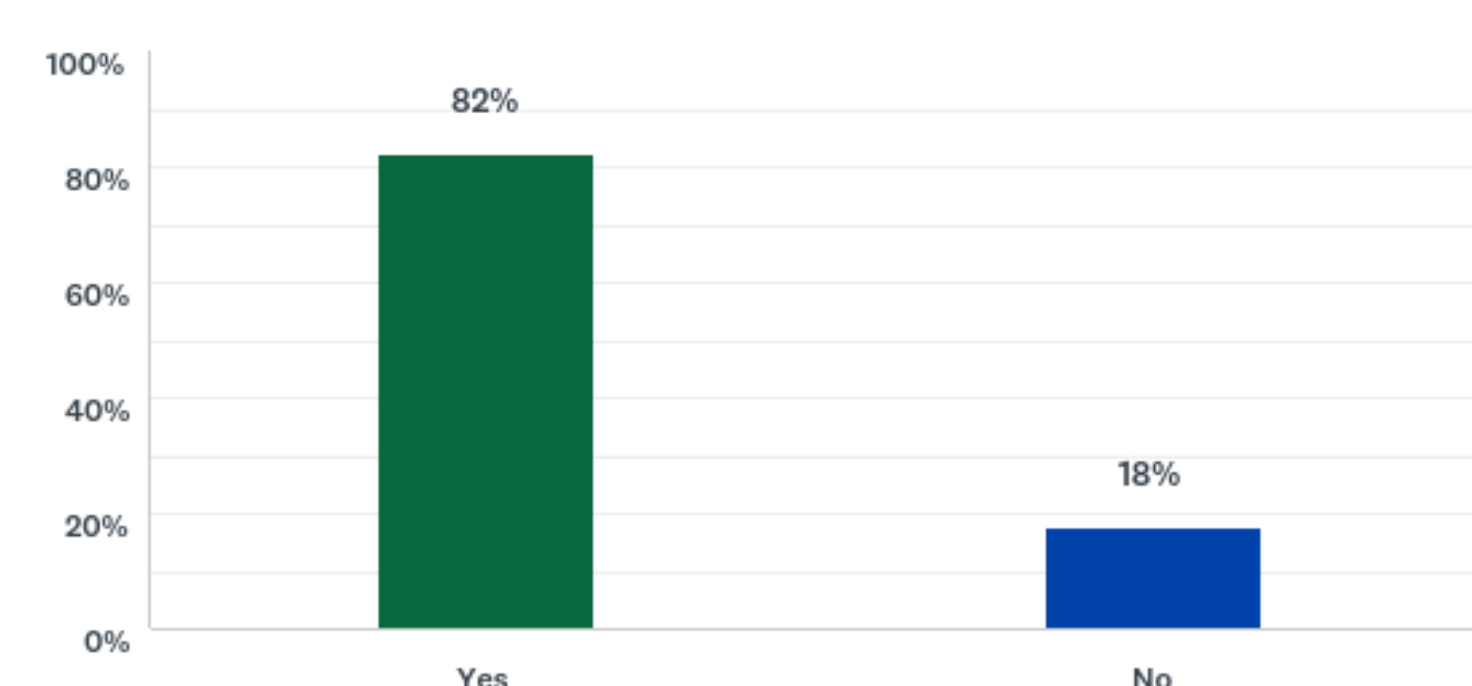
Fig.1. If given the option would you like to take part in online assessments as part of your course?

- 82% of students surveyed said that they would like to take part in OA in the future as part of their course.
- When asked what method they would they prefer to use OA, 67.7% of students stated they would rather use it as a revision tool than a final exam.
- When asked to rate their computer skills, students scored an average of 3 (1= Poor, 5=Excellent).

Staff Survey n=59

- 93.2% of staff stated that they would like to incorporate OA into their assessment methods in the future.
- When asked which method they would like to use OA in, 65.5% of staff surveyed said they would use OA as a means of formative assessment rather than summative assessment.
- When asked if they thought there were sufficient supports in place in their college/centre for students with learning difficulties, 50.8% of staff surveyed felt that there were not.

No 6.78% (4)
Yes 93.22% (55)
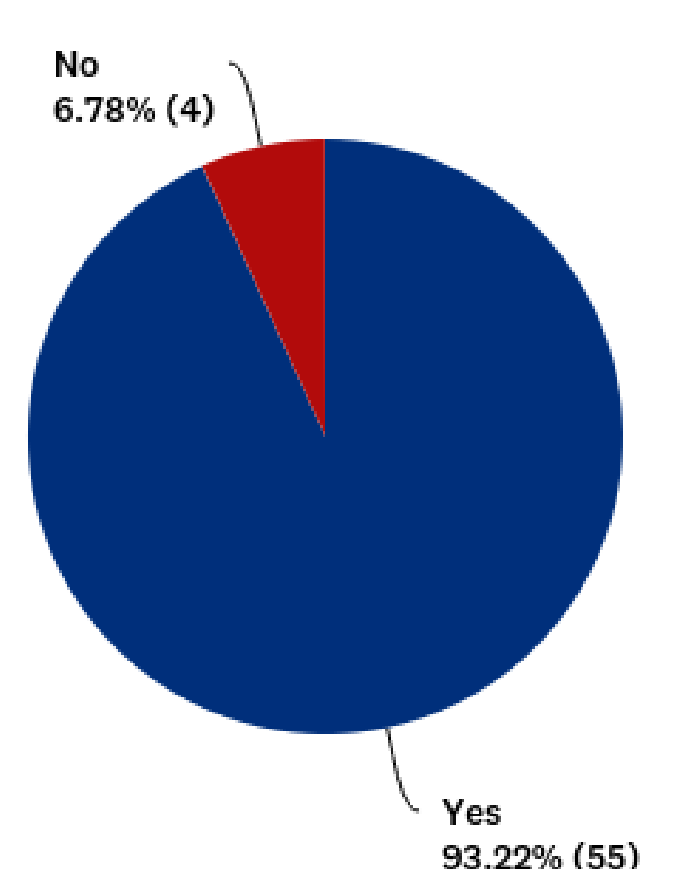
Fig. 2. Would you like to incorporate online assessment into your assessment process?

Key Conclusions and Recommendations

- Strong interest in both implementing and using online assessment in the future by staff and students.
- Lack of computer skills, unreliable equipment and a complicated OA system are some of the main concerns that students have, these need to be considered when designing and implementing OA in Teagasc.
- Intensive In-Service-Training, appropriate guidelines and policies for question structure and overall assessment procedure along with up to date IT and software systems, are some of the key features needed by staff when implementing OA in Teagasc education courses.
- An alternative VLE should be considered as both students and staff found the Moodle platform not very user friendly and easy to navigate.
- A working group should be set up with IT, CDSU and teaching staff to allow continual development and evaluation of the OA system in place.
- A risk assessment should be carried out to ensure sufficient learner support is provided to all students who require additional support.