2024 Masters in Agricultural Innovation Support

Project Summary

1. Project Title and Associated Programme	
Project title	Universal Design for Learning to promote Access, Diversity, Inclusion, and Equality in Teagasc education programmes.

2. Project background

This project will co-develop and adapt methods and materials to enable staff to reconfigure the Teagasc further education and training curriculum in accordance with Universal Design for Learning (UDL) to promote access, diversity, inclusion, and equality among staff and learners on Teagasc education programmes.

Universal Design for Learning is a set of principles that help teachers develop curricula and materials to meet the diverse needs of all learners. Although UDL was originally intended to increase access to learning by reducing barriers to learning (physical, cognitive, intellectual, and organizational), these principles also lend themselves to implementing inclusionary practices.

The Teagasc learner demography is changing and is set to become even more diverse into the future. However, Teagasc education materials (memoranda, module specifications, workbooks, videos, websites, software tools) have evolved over the years to be subject-focussed, mostly delivering and assessing knowledge and skills to a mainstream, young, male, from a farming background.

The proposed research builds directly on the findings of three previous MAIS projects, which have together described the context, concerns, and training required to accommodate diverse requirements within the mainstream pathways through Teagasc education. The current proposal will meet the challenge we now face, of re-developing the curriculum for Access, Diversity, Inclusion, and Equality.

3. Project aims and objectives

The project objectives are:
- Review Universal Design for Learning (UDL) principles and determine their applicability to the Teagasc education mission
- Characterise the types of Teagasc education resources (memoranda, module specifications, workbooks, videos, websites etc.) that could be reconfigured in accordance with UDL principles

- Co-develop, with Curriculum Development specialist, teachers, Education Officers (EOs), administrators, managers, and learners on full time, part time, and distance education courses across different enterprises methods [workshops, discussion groups, interventions] and materials [guidance documents, explanatory materials, recommendations, examples, training materials] across print and digital media and for the classroom
- Pilot test the co-developed methods and materials by re-configuring some courseware, in collaboration with a teacher/EO, and evaluate the outcomes with a teacher, EO, and learners
- Make recommendations on how the co-developed methods and materials could be used to enable Teagasc education staff to reconfigure teaching and assessment materials in accordance with UDL to promote Diversity, Inclusion, and Equality among staff and learners on Teagasc education programmes

4. Suggestions for methodology

- Literature review: synthesise from previous MAIS research on the context of Diversity and Inclusion within a Teagasc vocational education setting; the Diversity and Inclusion concerns of learners; and the essential features of Diversity and Inclusion training materials co-developed for delivery to Teagasc education staff and learners.
- Formal training and reflection: Undertake an online training course in Universal Design for Learning (UDL) principles, critique the principles and determine their applicability to the Teagasc education mission
- Immersion / Ethnographic research: establish confidential, trust relationships with staff and students at a Teagasc college and develop means of engaging them on access, diversity, inclusion and equality issues, such as during classroom presentations, workshops, discussion groups, online events etc.
- Co-creation: engage with Curriculum Development specialist, teachers, Education Officers, administrators, managers, and learners on full time, part time, and distance education courses across different enterprises to re-configure teaching and assessment methods and materials in accordance with UDL principles
- Participatory Action Research: pilot test the co-developed methods and materials by re-configuring some courseware, in collaboration with a teacher/EO, and evaluating the outcomes with a teacher, EO, and learners

5. Expected impact of the project

The research project accords with several Teagasc objectives:

- The Teagasc 2021 Statement of Strategy specifies an ongoing theme to "Implement the commitments to gender equality and the promotion of diversity and inclusion set out in the People Strategy." (Teagasc, 2021, p. 67)
- The 2018 "Teagasc Education Vision - meeting future needs" report specifies that Teagasc will improve support for a diversity of learners, broaden the diversity of the student body, and take actions for gender diversity. (Teagasc 2018, p. 50)
- The 2018 Teagasc People Strategy has as one of its core principles "Diversity, equality and inclusiveness enhance our core purpose." (Teagasc, 2018, p. 14)

The research project will also address developing issues within Teagasc Education. Currently, our learner population is relatively uniform, particularly in agriculture courses. But the potential learner population is increasingly diverse, including a range of nationalities, abilities, and lived experiences. And an increasing number of our learners require learning support.

The proposed research will develop methods and materials to enable staff to reconfigure the Teagasc further education and training curriculum in accordance with Universal Design for Learning (UDL), which will promote access, diversity, inclusion, and equality among staff and learners on Teagasc education programmes.

The methods co-developed in the research may also be applicable to re-configuring other aspects of the Teagasc KT offering to promote access, diversity, inclusion, and equality.

6. Other relevant information

Universal Design for Learning provides a structure that enables educators to develop methods and materials to meet the diverse needs of all learners. a structure (https://en.wikipedia.org/wiki/Universal_Design_for_Learning)

The three UDL principles are:
- Provide multiple means of representation
- Provide multiple means of action and expression
- Provide multiple means of engagement

These three principles subtend a number of guidelines, such as "provide options for physical action", "provide options for expressive skills and fluency", and "provide options for self-regulation." These guidelines indicate how an educational curriculum, materials and methods, can be developed to meet the needs of learners. Originally, UDL principles and guidelines were developed to increase learner access by overcoming physical, cognitive, organisational and other barriers. But UDL has also been show to increase inclusivity.

Reconfiguring the Teagasc curriculum in accordance with UDL promises to promote access, diversity, inclusion, and equality among staff and learners on Teagasc education programmes. This research project aims to determine how this might be brought about, to pilot test the reconfigured materials, and to issue recommendations on UDL for Teagasc education.