Introduction
This QAA Scotland Collaborative Cluster project seeks to explore the value of diagnostic testing as a mechanism to support transition and initial experience of university, and thereby improve student resilience. The PARC project partners are Abertay, Birmingham City, Dublin City, Glasgow Caledonian, UHI and Warwick Universities.

Helping students to Develop resilience through targeted support at transition
Standard approaches to university admission see students meet the criteria for acceptance and then receive a standardised cohort experience through their induction and initial learning journey. However, as a sector, we are well aware that students enter our universities with a diverse range of confidence, abilities and skills. Effective support structures that accommodate this diversity are vital this year, when most students entering University in 2021 will have had 18 months of a disrupted school or college experience. Diagnostic approaches provide an opportunity to respond to our students’ individual needs.

Resilience and retention are current concerns derived from the Covid-related disruption and digital challenges that many prospective and current students have faced. Consequently, there could be gaps in knowledge as well as in study skills (coupled with the unknown impact on confidence to transfer between education systems). This may heighten student anxiety about their capacity to cope with learning.

Key to retention is the students’ perceptions of their own academic mastery and their academic achievements (Bandura, 1997). Their beliefs in this regard may enable them to achieve academic and professional goals through developing skills such as self and interpersonal awareness, critical reflection and raising levels of self-efficacy and well-being. Implementing diagnostic testing has the potential to help academics identify students’ unique learning needs and deliver tailored support thus potentially improving students’ motivation and retention.

The bioecological model of human development (Bronfenbrenner and Ceci, 1994) explores individuals’ development from four defining properties: (1) process, (2) person, (3) context, and (4) time. The theory divides the role of environmental systems on human development over time into five layers of microsystem (immediate environment like classroom and peers), mesosystem (interaction between two microsystems), exosystem (indirect but prominent influences such as socio-economic status), macrosystem (institutional customs, beliefs, and policies), and chronosystem (transitional influences over the lifespan, for example growing up during social changes or pandemic).

In the area of diagnostic assessments (DA), the theoretical frameworks focus primarily on the principles and robustness of the DA model in tracking the current state of student knowledge and skills as well as the process of knowledge and skills progression in academic and real-world applications. Designing and conducting a diagnostic, the results can be used in a wide range of ways to achieve many different objectives beyond typical knowledge-based questions to include items that assess students’ experience, their motivations and interests, or their personal and academic needs.
The PARC Approach

PARC will focus on developing our understanding of the use and value of diagnostic testing at transition to Higher Education. We have explored the potential of diagnostic testing at macro (institutional), meso (school or faculty) and micro (programme/module/student) levels, producing three brief Discussion Papers to stimulate further discussion and debate within the community.

Project partners will use this new understanding of the potential of diagnostic testing to develop diagnostic testing approaches that suits their particular institutional circumstances, and the needs of their students and staff. A range of scenarios will be piloted, some focusing on a single postgraduate course, others on an entire Year One intake across all subjects.

Diagnostic questions build upon best practice and replicate those that have been used across the sector for many years within institutional and sectoral questionnaires. The questions provide a blend of confidence-based questions for students to consider together with some that actually assess their skills and competence. The diagnostic tests will be tailored to each institution and may include a range of components that consider academic skills, numeracy, digital competence and wellbeing.

Students who access diagnostic tests receive an automatically-generated personalised student outcome (not a mark) which provides guidance on how the student can address any areas of identified weakness. It is a developmental tool that starts to engage students in taking charge of their own development, their own learning path, and sow the seeds that engaging with wider developmental/support services should be seen as ‘normal’ and not something that concerns only weaker students.

Sectoral engagement and collaboration

The partners, with QAA Scotland, will be holding an online workshop on 15th June 2021 to discuss initial work and explore the challenges of diagnostic testing at micro, meso, and macro-level. Participants at the workshop will help shape a community of practice in this space and guide the project as we begin to pilot diagnostic approaches across the community. This work will serve to increase our understanding of the value of this diagnostic approach that aims to help our students better understand their strengths and develop the confidence to succeed.

References