

# 18. Enhancement of Technology to Support Assessment

## Rethinking Assessment

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### Introduction

Society and medicine are changing at an ever-accelerating rate. Publications have highlighted the critical importance of evolution in the education of our doctors, to ensure they are equipped to:

1. Work effectively in an ever-changing society
2. Provide leadership as part of the medical world
3. Support the development of health systems

Recognising this need, RCSI published its Transforming Healthcare Education, Research and Service (2018 – 2022) strategy in 2018. This strategy outlined how RCSI intends to deliver an unrivalled student experience, through the transformation of its medical education. As part of this transformation, a dedicated group of subject matter experts were brought together to lead the “Transforming Healthcare Education Project” (THEP2). As the key aspect of the new Medical curriculum focussed on a Programmatic Assessment model, new technology platforms were required to support these needs.

### Initiative

Technology and access to “real-time” information is to play a key role in supporting RCSI’s medical students through a programmatic assessment journey, in the delivery of the new curriculum. To support this “little and often” assessment approach, RCSI needed to identify solutions that would support students to complete examinations and to get a quick turnaround on assessment performance via a centralised Student Dashboard.

In 2019, meetings took place with other international universities, to understand contemporary practice and identify exceptional practice. Meetings were also held with IT providers to identify possible solutions. Most importantly, a series of workshops were held with staff and students, to understand the various “must-have” system functionality items and of course the value-added extras for the development of a new curriculum technology solution.

As RCSI’s curriculum is delivered across multiple campuses, stakeholders from Dublin and Bahrain were recruited to contribute their input across key work-streams:

1. Teaching and Learning
2. Assessment
3. Personal Tutor Programme
4. Learning Environment
5. Clinical Placement
6. Student Choice

Three new applications were identified to support assessment of the new curriculum; Practique, Kaizen and InPlace. A project was then undertaken to develop these systems for RCSI’s needs and to embed and fully integrate them within RCSI’s systems. Cross-institutional collaboration was required to implement this project and key stakeholders included IT, Student Academic and Regulatory Affairs (SARA), academic staff, clinicians, students and senior management. This project was governed by the THEP Implementation team, who reported to the Senior Management Team on a monthly basis, both on progress and on anticipated challenges. Updates were also provided at Academic Council and through RCSI’s International Education Forum, in order to secure cross-institutional input and buy in. Like many projects of this nature, there were a number of challenges experienced. These included:

- Securing key stakeholders for testing and piloting. A dedicated subject matter expert and project coordinator were seconded to the THEP Implementation team on a 2-year term to overcome this challenge.
- Change management. As these new systems and processes created a new way of working for staff, close collaboration with all academic departments was required as was their input in testing and piloting activities.

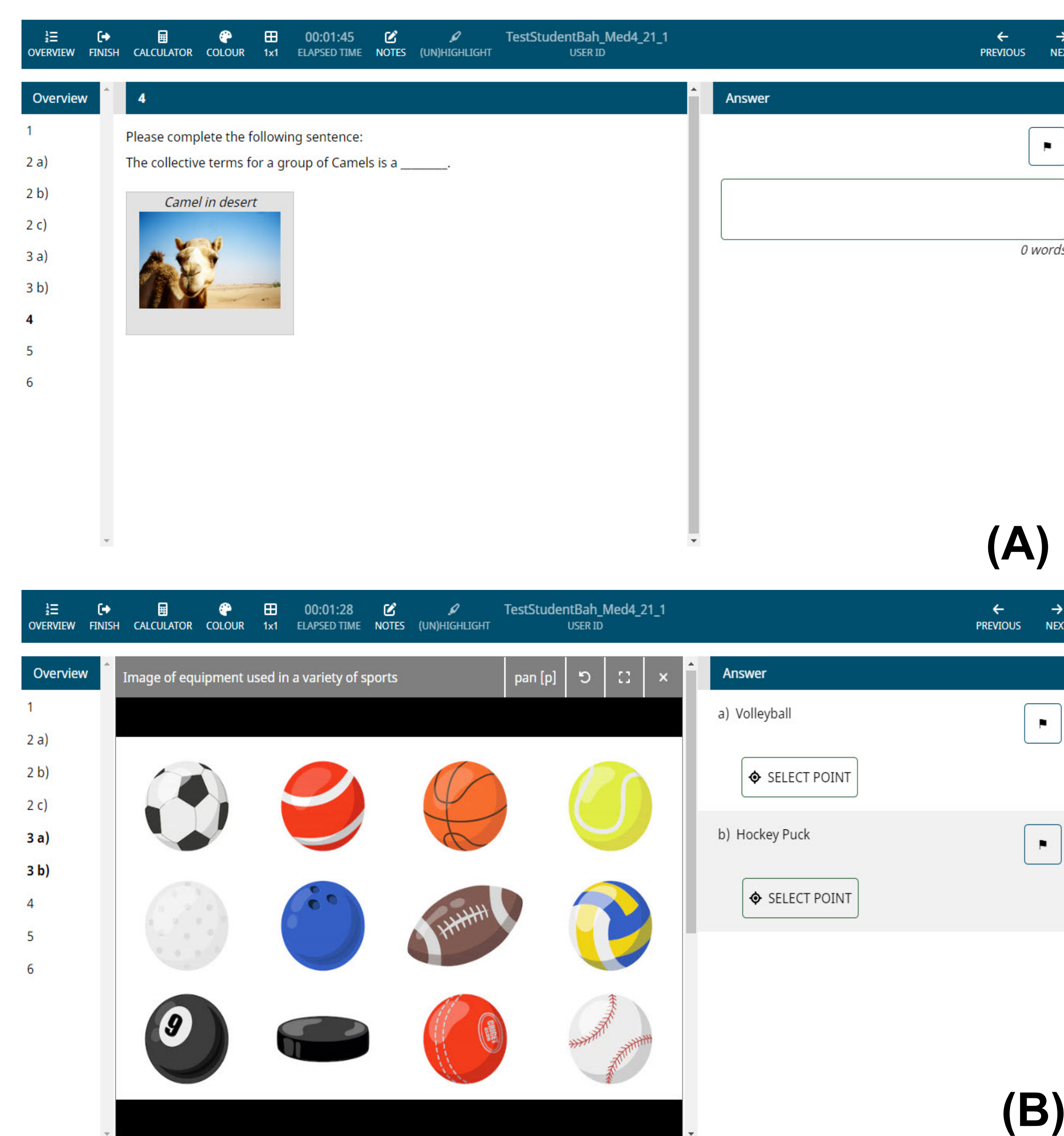


Figure 1. (A) Screenshot of Practique interface from student perspective, with example free text question, (B) Screenshot of Practique interface from student perspective, with example multiple choice question.

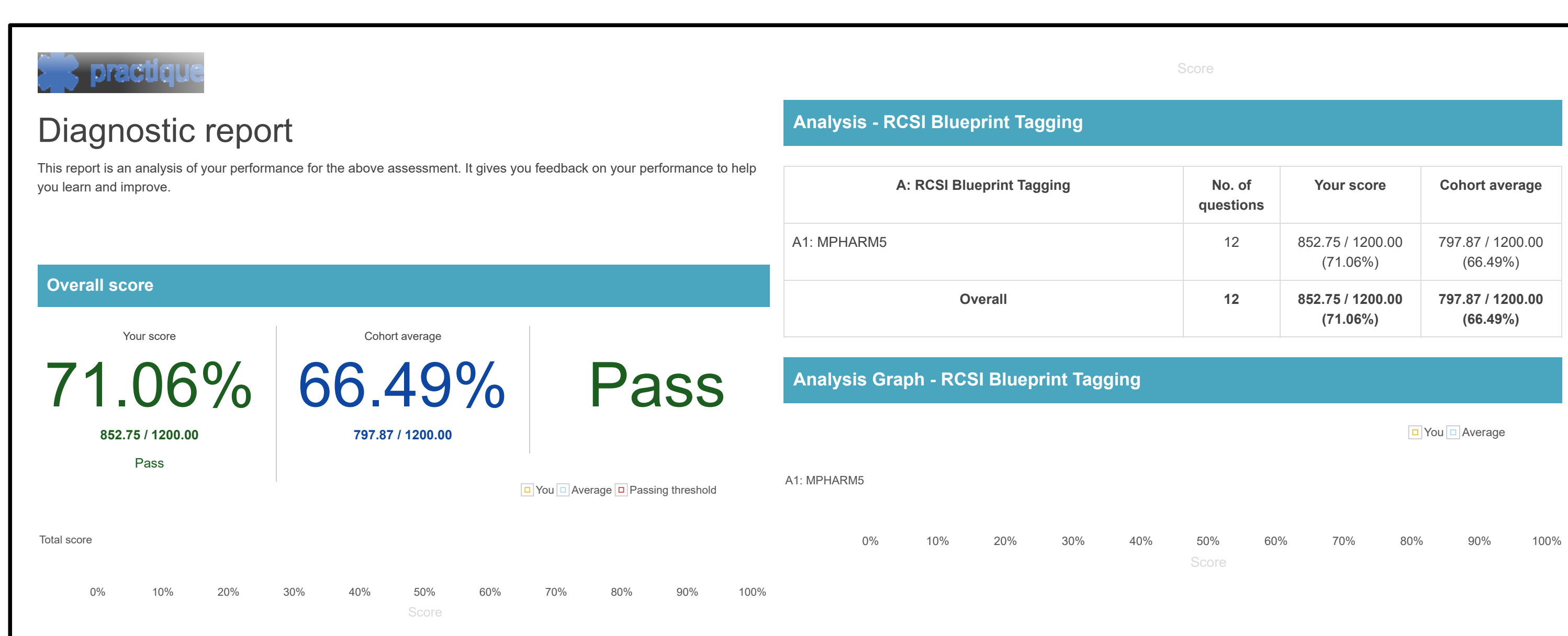


Figure 2. The first page of a diagnostic report generated for the student, containing information on feedback for assessment performance. Contains own student scores, and cohort averages.

### Outcome

These new technologies were ready for implementation in time for the September 2022 change in the medical curriculum. It is intended that they will increase active student engagement and facilitate assessment and individual feedback on an ongoing basis to support students to become healthcare professionals, who learn from feedback and develop on their academic journey. It is also hoped that the introduction of these new systems, will increase accuracy, as academic staff interact directly within the system, removing the “middle-person” required for data entry to provide students with results and feedback. Further use of these new technologies is now planned for additional academic programmes.