How Assessment Types Impact ty Student Learning Practice

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ASTRONOMY & PHYSICS EDUCATION

Introduction

As higher education researchers, we place certain principles of assessment with high regard, for example the idea that assessment is authentic has been of great importance in recent years [1]. This is not always reflected in students' attitudes to assessment. This may be due to students prioritising good grades over the long-term learning and skill development that assessment provides [2]. This poster explores this by detailing findings from focus groups of Physics undergraduate students, investigating their perceptions on learning and assessment.

Focus Groups on Assessment

- First focus group (FG1) investigating student opinions on learning and assessment (L&A)
- Second focus group (FG2) focusing on how students prepare for assessment, but resulting in broader L&A themes which were comparable with the first focus group
- Important to note that the second focus group had different goals to the first, so data may not be perfectly comparable
- Both focus groups coded according to sixteen values for assessment design by Brown, Race and Smith [3] and additional codes were created for other common themes [4].
- Codes were split into three categories depending on their role in assessment Admin, Characteristic, & Impact, shown in Figure 1

"Whereas with labs, like in the past few years I still remember the content because we work on them for so long" – FG1

"It's mainly exams so we're learning it for the day and then forgetting it the day after" - FG1

"We had eight exams, and it was like you finish one and then it's gone and it's moving onto the next thing" – FG2

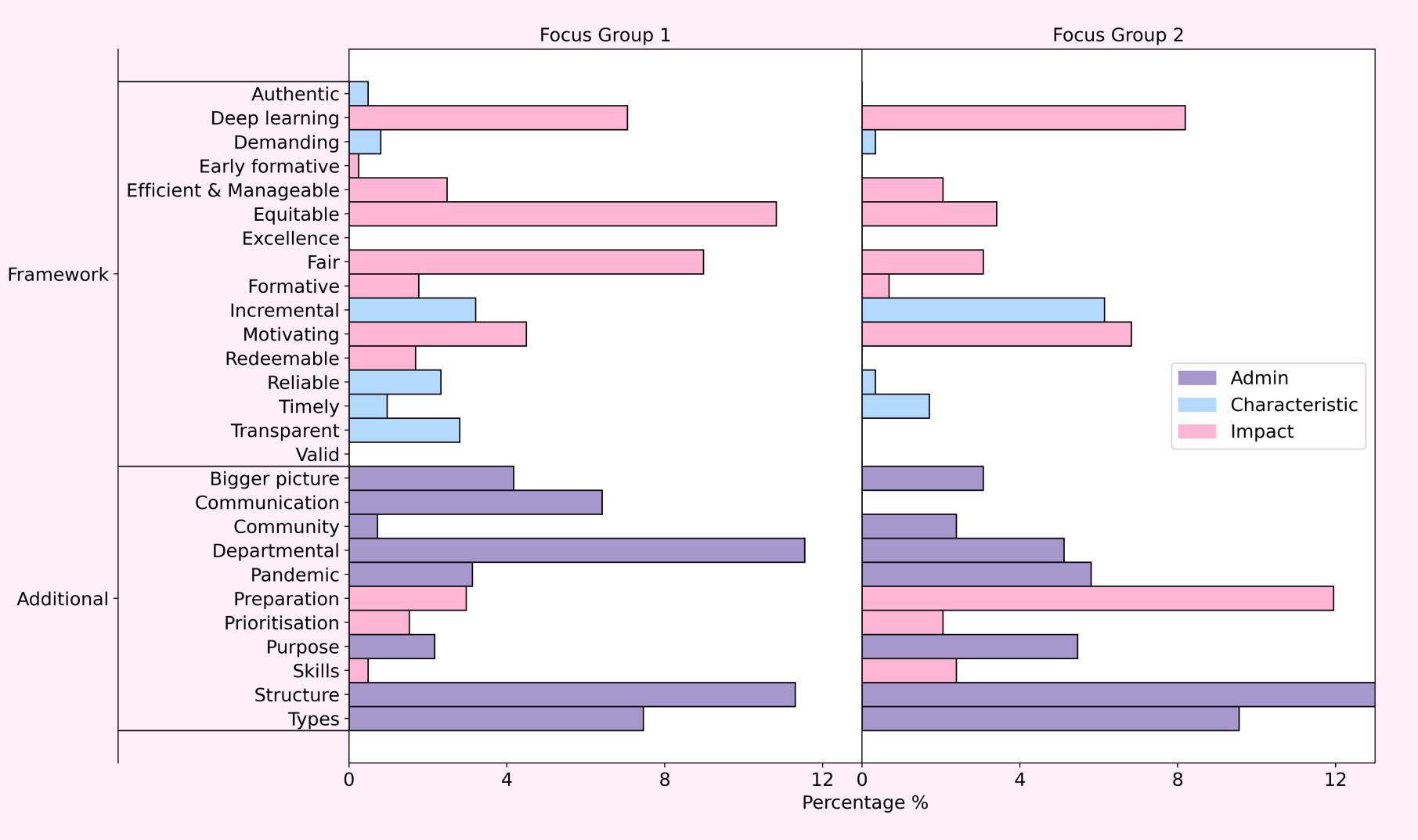


Figure 1: Percentage of total codes made up by each code assigned. Each code is assigned a category according to its role in assessment. Note that for the 'Structure' code in Focus Group 2, the percentage is ~20% but removed for clarity of the other data.

because (...) you end up just accidentally learning way more in depth" – FG2

"I always felt the

interviews [for

labs] were like so

much better

Main Findings

- Students feel that exams do not aid their long-term learning as much as other assessment types, for example reports and presentations of project work
- Students have a greater focus on Admin and Impact assessment features, rather than Characteristic ones
- Researchers/educators and students place principles at different levels of importance due to their varying goals of assessment

Students feel different assessment types change their learning practice and thus impact their long-term learning

References

- [1] Ashford-Rowe K., Herrington J., & Brown C. (2014). "Establishing the critical elements that determine authentic assessment". In: Assessment & Evaluation in Higher Education 39.2. Publisher: Routledge, pp. 205–222. issn: 0260-2938.
- [2] Healy M., McCutcheon M., & Doran J. (2014). "Student Views on Assessment Activities: Perspectives from their Experience on an Undergraduate Programme". In: Accounting Education 23.5. Publisher: Routledge, pp. 467–482. issn: 0963-9284.
- [3] Brown S., Race P., & Smith B. (2005). 500 Tips on Assessment. 2nd ed. Routledge. isbn: 978-1-134-29201-1.
- [4] Madsen A., McKagan S.B., & Sayre E.C. (2015). "How physics instruction impacts students' beliefs about learning physics: A meta-analysis of 24 studies". In: Physical Review Physics Education Research 11.1. Publisher: American Physical Society, p. 010115.