

**Using UKES results and institutional award marks to explore the relationship between student engagement and academic achievement**

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## | The Sheffield Hallam University Context

- Sheffield Hallam is one of the largest universities in the UK, with 34,718 students
- 79% of students are undergraduate
- 31% of students are mature
- 28% of students are part time
- 12% are international students (China and Malaysia)
- 46% are from Yorkshire and Humberside



## | Engagement Surveys at SHU

2011 - Piloted a SHU engagement survey

- 18,184 students 24% response rate

2013 - Faculty of Development and Society Engagement Survey

- Level 4
- 819 students 40% response rate

2014 - Participated in the 2<sup>nd</sup> year Pilot of UKES

- Level 5 students
- 5,967 students 24% response rate
- NSS questions added

2015 - UKES

- Level 4 & 5
- 12,748 students 13% response rate to date
- NSS questions added

## | NSSE

"The NSSE is specifically designed to assess the extent to which college students are engaged in empirically vetted good practices in undergraduate education... the greater students' engagement in or exposure to these educationally effective practices in college, the greater their development—or so the logic goes."

*(Pascarella, Seifert & Blaich, 2010)*



## | Rationale

The purpose of this research project was to explore how differences in key areas of student engagement, namely those included in the UKES, relate to academic achievement in the context of Level 5 students at Sheffield Hallam University.

The University is striving to embed effective engagement practices into its teaching and it was anticipated this research would help to develop an understanding of the critical significance of student engagement.

## | Methodology

1. Sample
2. UKES 2014 scales used
  - Higher-order learning
  - Course challenge
  - Collaborative learning
  - Academic integration
  - Reflective and integrative learning
  - Skills development
  - Engagement with research
3. Quantitative analytical techniques
  - Multiple regression analysis
  - Correlational analysis

## | Analysis: Multiple Regression

Student engagement scales accounted for 8% of the variance in academic achievement.

The significant individual predictor variables were **course challenge** and **collaborative learning**.

## | Analysis: Correlational

### Items that are weakly correlated with academic achievement

Item	Scale	Correlation coefficient
Come to taught sessions prepared (e.g. completed assignments, readings, report, etc.)	Course Challenge	.26*
Explained course material to one or more students	Collaborative Learning	.23*
Asked questions or contributed to course discussion in other ways	Academic Integration	.22*
To what extent has your course challenged you to do your best work?	Course Challenge	.18*
Worked with other students on course projects or assignments	Collaborative Learning	.17*
Thinking critically and analytically	Skills Development	.17*

\*Items which were significantly related to academic achievement ( $p < .05$ )

## | Analysis: Correlational

### Items that are not correlated with academic achievement

Item	Scale	Correlation coefficient
Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	Reflective and Integrative Learning	.04
Connecting your learning to societal problems or issues	Reflective and Integrative Learning	.03
Examined the strengths and weaknesses of your own views on a topic or issue	Reflective and Integrative Learning	.03
Worked with teaching staff on activities other than coursework	Academic Integration	.02
Understanding people of other backgrounds	Skills Development	.01
Analysing numerical and statistical information	Skills Development	.00

\*Items which were significantly related to academic achievement ( $p < .05$ )

## | Reflecting on the Analysis

- The findings indicate that the extent to which students feel they have been challenged by their course, were prepared for their class and interacted with their peers are indicators of academic achievement.
- Pascarella and Terenzini (2005) reported that students' level of academic challenge and extent of collaborative learning are closely related to educational gains. These aspects are also outlined in Chickering and Gamson's (1987) 'Seven principles of good practice in undergraduate education'.
- The UKES scales predicted a small but significant proportion of academic achievement. This corresponds with existing research which has used alternative student engagement scales (Gunuc, 2014).

## | Future Considerations

- To examine whether there are notable differences in attainment and engagement between specific groups of students, for example, home-domiciled students and international students.
- To monitor changes in student engagement from first year to the second year and beyond.
- To treat the responses on a scale as distinct categories rather than assuming that relationships between each category can be predicted (Boone, 2012).
- To include standardised award marks in the analysis.

## | References

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## | Questions and Discussion