

# SSEUK

## Final report

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## Introduction

Insofar as it is desirable to collect quantitative data on students' feelings about Universities, there are two principal methodologies in current use in the English-speaking world that one might adopt. Student Satisfaction Surveys, notably the National Student Survey (NSS), are widely used in the UK. The alternatives are Surveys of Student Engagement, principally the National Survey of Student Engagement (NSSE) in North America and the Australian Universities Survey of Student Engagement (AUSSE) employed in Australia and New Zealand.

According to Surridge (2009):

*The NSS was developed as part of the revised Quality Assurance Framework for higher education, which came about at the end of subject review as conducted by the Quality Assurance Agency for Higher Education (QAA). The original briefing document states that the aims of the NSS are:*

- 1. to inform the choices of future students, alongside other sources of information about teaching quality*
- 2. to contribute to public accountability by supporting external audits of institutions by the QAA.*

Surridge concludes that the NSS shows us that 'the vast majority of students rate their higher education experiences positively, and the vast majority of institutions are not statistically different from each other in this regard.' Indeed the most interesting differences in the NSS are between discipline rather than institution. As Surridge points out, this may be linked to different pedagogies in these disciplines. Unfortunately, we cannot discern pedagogic practice from the NSS results. By contrast, the NSSE was designed to emphasise 'the important link between effective educational practices and collegiate quality' (Kuh, 2001) and it might therefore be expected to be better suited to exploring disciplinary pedagogies.

Surridge notes that one of the great successes of the NSS has been the sector-wide observations one can make on the 'complexity of differences according to ethnic group'. This leads in turn to questions about how students are engaged with their institution, which Coates (2010) identifies as a key driver for introduction of the AUSSE.

With our interests in critical, student-engaged pedagogies (Taylor & Wilding, 2009; Lambert *et al.*, 2011) we were drawn to Surveys of Student Engagement (SSEs). We believed that the more fine-grained, pedagogically based survey questions would allow us to probe the interesting variations between disciplines observed in the NSS and identify good practice. Furthermore, we believed there would be interesting comparisons to be made between the experiences of UK students and their counterparts in North America and Australia/New Zealand, in an international 'benchmarking' exercise. These studies could be done using data from just one University.

Finally, since one other English University has piloted a SSE (Creighton *et al.*), we had the opportunity to investigate in a limited way whether a UK variant of the SSE, which we dub SSEUK, would make useful distinctions between UK institutions.

## References

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- Taylor, P. and D. Wilding (2009), *Rethinking the values of higher education – the student as collaborator and producer? Undergraduate research as a case study*, Gloucester: The Quality Assurance Agency for Higher Education, <http://www.qaa.ac.uk/students/studentEngagement/Undergraduate.pdf>

## Acknowledgements

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## Methodology

All calculations and graphics in the following report were compiled using Microsoft Excel 2003, Open Office Calc, Tibco Spotfire S+ and its open-source equivalent, R. These were selected for their versatility and their ready availability either online or through the University of Warwick.

The SSEUK survey questions are shown in Appendix 1. For the purposes of numerical analysis, responses to these questions were encoded as follows.

### Questions 1, 2 and 4

0 – Very little / Not at all

1 – Some

2 – Quite a bit

3 – Very much

### Question 3

0 – Not possible

1 – Not decided

2 – Do not plan to do

3 – Plan to do

4 – Done

### Further Questions

1-7 as worded in the question

Response rates to the survey were satisfactory, with plenty of responses across genders, ethnicities and years of study. Students on postgraduate Masters courses were the only group among which response rates were low. A detailed breakdown is provided across the page. Student figures have been taken from the Academic Statistics publication for 2010 on the Warwick University website.<sup>1</sup> Aggregating over all of the rates gives an overall response rate of 8.5% of students. It should also be noted that the responses were classified solely on the basis of a user response to an open field in the

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<http://www2.warwick.ac.uk/services/mip/businesinformation/academicstatistics/2010/>

Responses	Year 1	Year 2	Year 3	Year 4	PG	Total
UK/EU	109	125	108	33	7	382
Other	14	4	17	2	1	38
<b>Total</b>						
UK/EU	761	689	582	244	172	2448
Other	16	18	19	1	97	151
<b>Percentage</b>						
UK/EU	14.3%	18.1%	18.6%	13.5%	4.1%	15.6%
Other	87.5%	22.2%	89.5%	200.0%	1.0%	25.2%

### Faculty of Medicine

Responses	Year 1	Year 2	Year 3	Year 4	PG	Total
UK/EU	35	29	24	26	4	118
Other	4	2	1	0	1	8
<b>Total</b>						
UK/EU	366	165	148	169	579	1427
Other	14	15	19	10	225	283
<b>Percentage</b>						
UK/EU	9.6%	17.6%	16.2%	15.4%	0.7%	8.3%
Other	28.6%	13.3%	5.3%	0.0%	0.4%	2.8%

### Faculty of Science

Responses	Year 1	Year 2	Year 3	Year 4	PG	Total
UK/EU	239	196	162	65	3	665
Other	36	40	24	1	10	111
<b>Total</b>						
UK/EU	1404	1095	1116	419	575	4609
Other	301	326	198	32	990	1847
<b>Percentage</b>						
UK/EU	17.0%	17.9%	14.5%	15.5%	0.5%	14.4%
Other	12.0%	12.3%	12.1%	3.1%	1.0%	6.0%

### Faculty of Social Science

Responses	Year 1	Year 2	Year 3	Year 4	PG	Total
UK/EU	107	113	93	28	12	353
Other	66	76	56	9	20	227
<b>Total</b>						
UK/EU	1084	1081	834	209	3762	6970
Other	563	519	383	23	1840	3328
<b>Percentage</b>						
UK/EU	9.9%	10.5%	11.2%	13.4%	0.3%	5.1%
Other	11.7%	14.6%	14.6%	39.1%	1.1%	6.8%

survey. As such, they are likely to contain errors and should be treated as approximate.

After a preliminary analysis of survey results, two one-hour focus groups were conducted, with approximately 10 people attending, each of whom had filled in the survey. The participants were selected to be as representative as possible of gender, home department, year of study and status as a home or international student.

The objective of these focus groups was to confirm whether issues highlighted by the survey were in fact those that students felt were important. To establish this, five topics were drafted and read out to the group, followed by 10 minutes of group discussion on each topic. The topics are given below.

### **1. Group Based Learning**

When you think about the university teaching and learning process, what comes to mind?

Do you prefer working as an individual or a team?

### **2. Integrating Ideas**

Do you feel your course has provided a balanced view of diverse perspectives and opinions?

Do you feel a more inclusive approach would be beneficial?

### **3. Applying Theories to Practical Problems**

Do you think that your course allows you to apply the theories and concepts that you learn to practical problems or in new situations?

### **4. Acquiring a Broad Education**

What does acquiring a broad education mean to you?

Do you agree that this university enables you to achieve this objective?

### **5. Structure of the Course**

When you think about the structure of the course, what changes would you like to see?

What about the good points?

Details of the findings from these two focus groups are included in Appendix 2.

Throughout the collection of both the quantitative and qualitative data, respondents were assured that their individual answers would not be published in such a way as to make them identifiable. Only aggregate scores across groups of students would be analysed, or if an individual statement was included, they would be appropriately anonymised.

## Comparison with Reading University

This section follows Chapter 3 of the 2008 report (Creighton *et al.*, 2008) of a similar survey conducted at the University of Reading. The survey questions were divided amongst seven benchmarks as follows.

### Level of Academic Challenge [LAC]

#### Active and Collaborative Learning [ACL]

1a 1b 1c 1f 2a 2b  
2c 2d 2e 3b 3d

#### Student Interaction with Academics [SIA]

1d 1e 3a

#### Social Inclusion and Internationalisation [SII]

3c 4a 4b 4c 4d 4e

#### Engagement with E-Learning [EEL]

1g

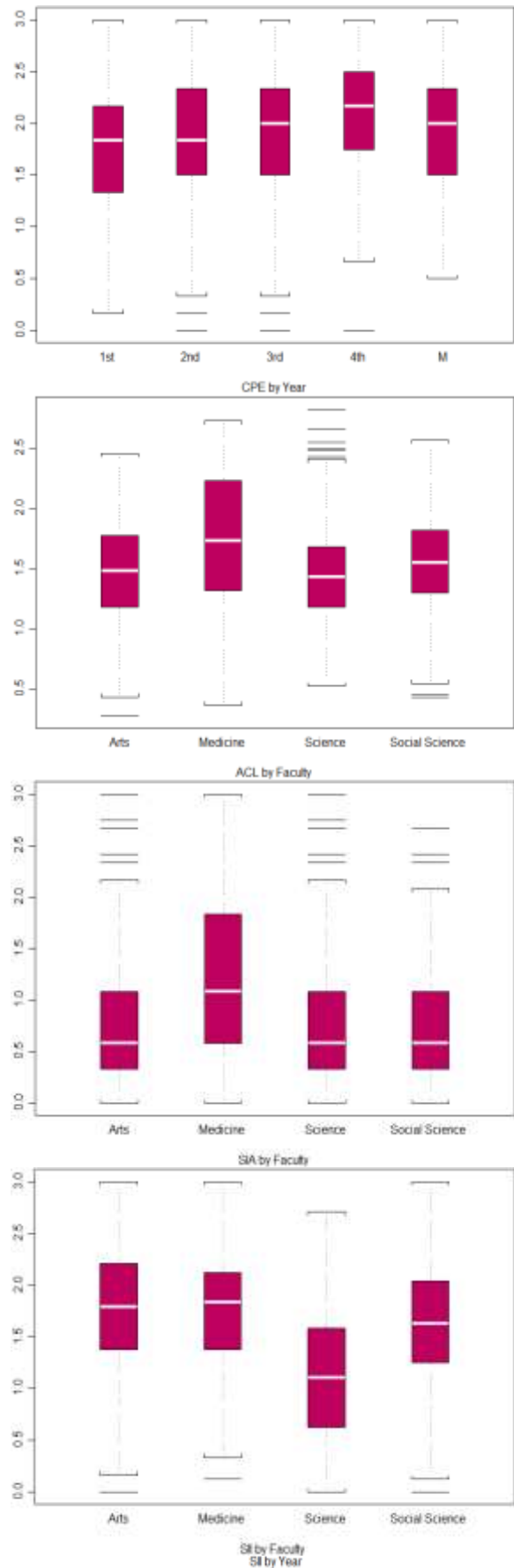
#### Supportive Campus Environment [SCE]

#### Career Prospects and Employability [CPE]

1h 4f 4g 4h 4i 4j

The two benchmarks which are empty were disregarded. Responses to all parts of Question 3 were multiplied by  $\frac{3}{4}$  to occupy a range between 0 and 3, and the numbering of responses to Question 2a was reversed to maintain consistency with other questions.

A score in each benchmark was computed for every survey response by averaging over the questions listed above. Box-and-whisker plots of these scores are shown across the page, with the first four columns referring to undergraduates and the fifth to Masters students. For each entry, the central line is the median score, the edges of the boxes are the medians of their respective halves, and the whiskers are drawn at a distance 2.5 times the total box length away from the central median. This drawing gives robust estimates of



approximate 5%, 25%, 50%, 75% and 95% centiles. Lines outside of the whiskers represent individual observations outside the central 90% range.

The EEL benchmark has not been included beyond the first summary box plot, as results for all groups were virtually identical and, with only one question falling under the benchmark, were not of interest.

In addition to partitioning scores by year, it is of interest to see how responses vary across faculties. To answer this question, each of the 37 distinct answers appearing in the “Department” field of the questionnaire was assigned to one of the four faculties within Warwick University as follows. The number of respondents within each faculty is also given.

<b>Faculty</b>	<b>Fields from survey</b>
<b>Arts</b> 420	Classics & Ancient History Comparative American Studies English and Comparative Literary Studies Film and Television Studies French Studies German Studies History History of Art Italian Centre for Lifelong Learning School of Theatre Studies French City College Coventry (The Butts Center)
<b>Medicine</b> 126	WMS- Institute of Clinical Education Medicine Warwick HRI
<b>Science</b> 776	Chemistry Computer Science Biological Sciences Life Sciences Mathematics Physics Psychology Statistics School of Engineering Warwick Manufacturing Group
<b>Social Sciences</b> 580	Centre for Applied Linguistics Economics School of Health & Social Studies School of Law Law Philosophy Politics & International Studies Sociology Warwick Business School History and Sociology Institute of Education

These benchmarks are all standalone measures and cannot be directly compared to each other; the purpose is to establish whether the same measure can be compared across two universities.

The ACL scores are stable across years. The increasing shape seen in results from Reading is not present. The only clearly distinct faculty is the Faculty of Medicine, which seems consistently better at engaging its students. Otherwise level of student engagement is moderate.

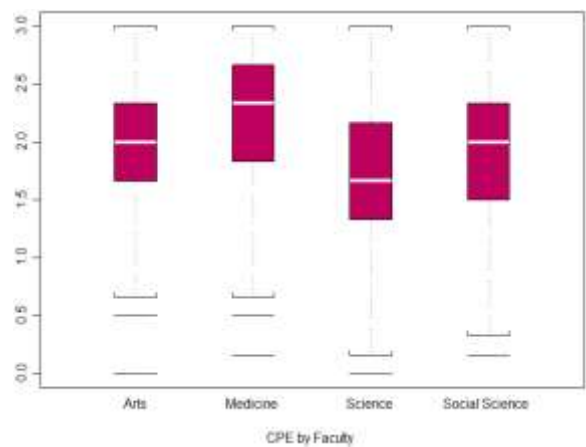
SIA consistently lies at a very low level. There is some increase with year of study, and again the Faculty of Medicine appears to be doing more to create interaction between students and academics.

The Warwick SII scores across years are stable and at a reasonable level. The results across faculties show a significant fall within the Faculty of Science, but positive results otherwise. A similar pattern is seen in the results from Reading, although the difference between Faculties of Arts and Science in particular is not as striking.

The CPE scale shows an increasing trend with the year of respondents. This might reflect accrual of skills and development as students progress on their courses. It does raise the question of whether more career-oriented services should be provided earlier, particularly since students often begin looking into careers through internships in their second undergraduate year. Nevertheless, CPE scores are consistently high, and this is a clear strength of Warwick University.

The spread of results is consistently larger than that observed in Reading, making direct comparisons difficult. However, similar patterns are present in both universities, and observed differences could be used to guide policy decisions. It seems likely that a standardised set of questions and scales would allow reliable

comparisons across UK universities.





## Correlation with NSS

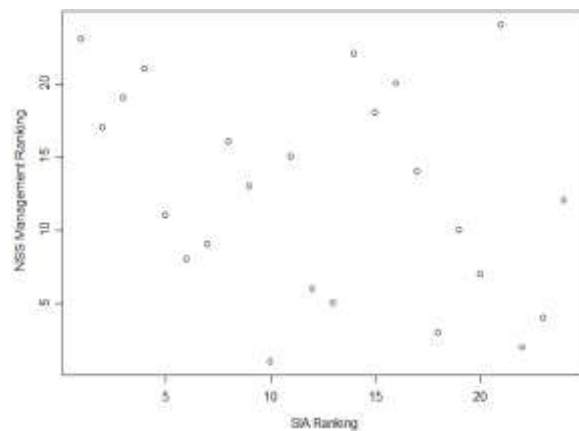
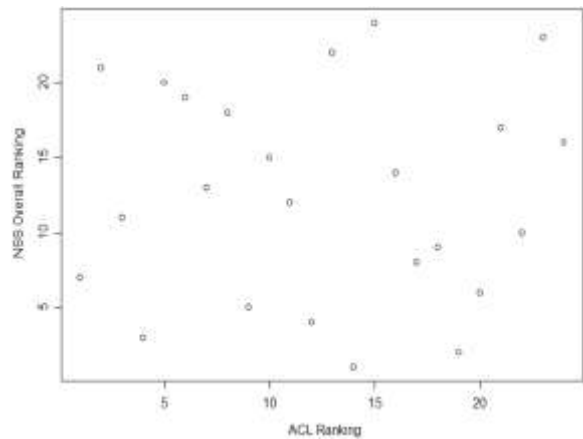
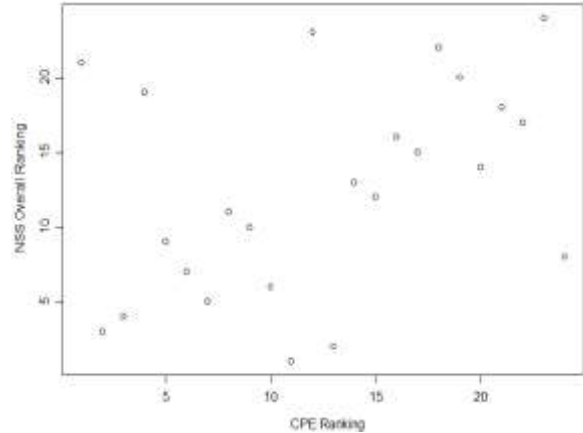
Having established that the SSEUK might be used to compare UK institutions in a meaningful way, it is of interest to establish the degree to which it correlates with existing surveys, namely the National Student Survey.

To answer this question, for the University of Warwick NSS results<sup>2</sup> were used to create rankings in 7 indices for 24 departments. The scores on each index are arithmetic means of the mean answers to the questions listed alongside the index below.

1. Overall Q1
2. Teaching Q2 – Q5
3. Feedback Q6 – Q10
4. Support Q11 – Q13
5. Management Q14 – Q16
6. Resources Q17 – Q19
7. Development Q20 – Q22

The 24 departments have been selected based on the pooling of data by the NSS by matching each SSEUK survey response to the nearest equivalent NSS pool. Note that the Centre for Lifelong Learning and the Coventry City College (Butts Arena) could not be reasonably matched to any NSS pool, and responses listing either of these as department have been discarded for the purpose of this comparison. The full list of NSS departments, and the survey responses allocated to each department, is given in Appendix 3.

Ranking these departments on each of the above indices, as well as the four benchmarks from the previous section (ACL, SIA, SII and CPE) and plotting each index against every benchmark gives the following 28 scatter plots. If there is a relationship between SSEUK and NSS result, it will show up as a pattern within these plots. Shown here are three of the 28



plots, the uppermost one being the only plot with any semblance of a pattern. All other plots are consistent with zero correlation, and are included in Appendix 4 (available on request).

There appears to be close to zero correlation between the results of the NSS and those of the SSE. This supports the previous study from the University of Reading, which also found no relationship between the NSS and SSE results.

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[http://downloads.unistats.com/currentYear/public/Unistats\\_10007163\\_3-30-2011.xls](http://downloads.unistats.com/currentYear/public/Unistats_10007163_3-30-2011.xls)

## Benchmarking Against NSSE and AUSSE

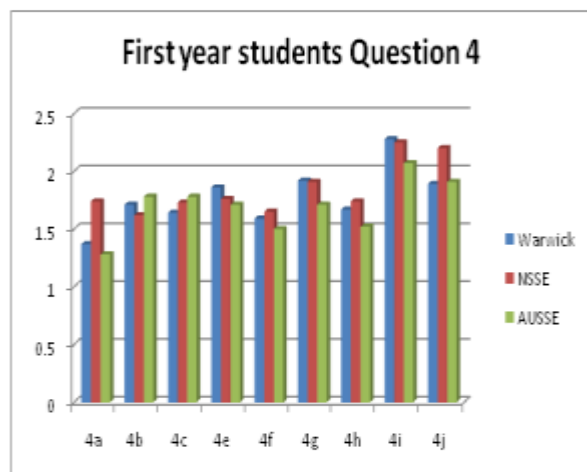
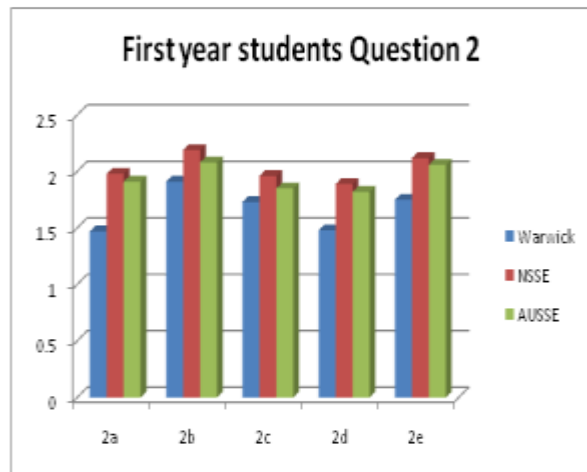
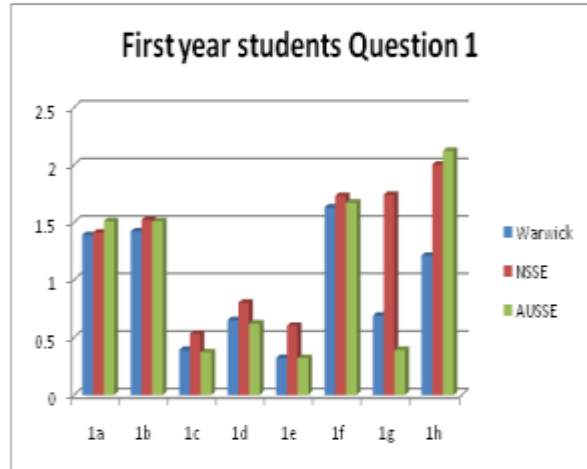
The objective of this section is to demonstrate a key advantage of the Survey of Student Engagement: that it lends itself to benchmarking UK institutions against those in North America (NSSE) and Australasia (AUSSE). All comparisons and benchmarking in this section have been made with publicly available data.

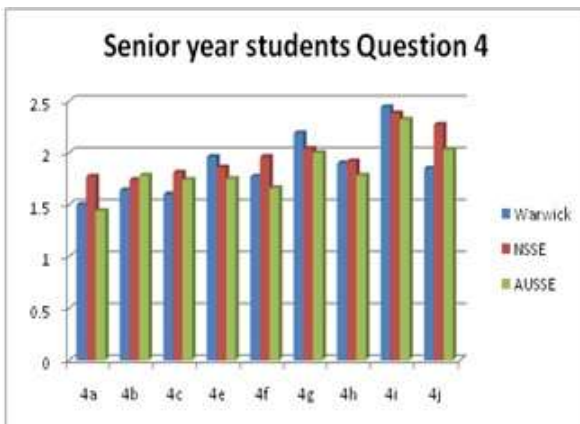
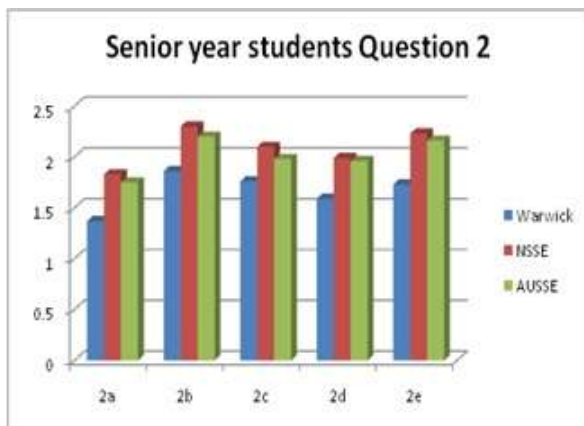
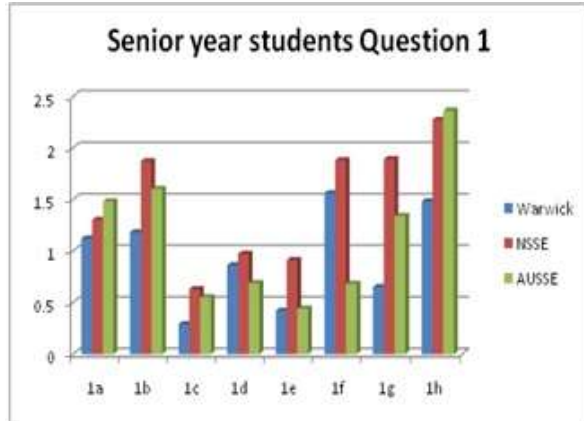
The SSEUK Question 3 does not appear in the NSSE or AUSSE questionnaires, and hence comparisons have only been made of Questions 1, 2 and 4.

The NSSE and AUSSE collect data only from first year (FY) and senior year (SY) students, whereas our survey received participants across all years of study. Since the University of Warwick is a research-intensive institution, we will use the Carnegie classification of Research University / Very High (RU/VH) as the relevant NSSE benchmark.

### Comparisons by Year

The following graphs depict the differences across all three common survey questions. The variations within the results suggest that both the NSSE and AUSSE can be used to benchmark UK institutions. The broad trends in responses are very similar, but sufficient differences can be seen to warrant further investigation.





### Comparisons by Faculty

The AUSSE survey results are not freely available at the faculty level. Hence comparisons will be based on the relevant Warwick faculty score, the Warwick overall score and the NSSE faculty score.

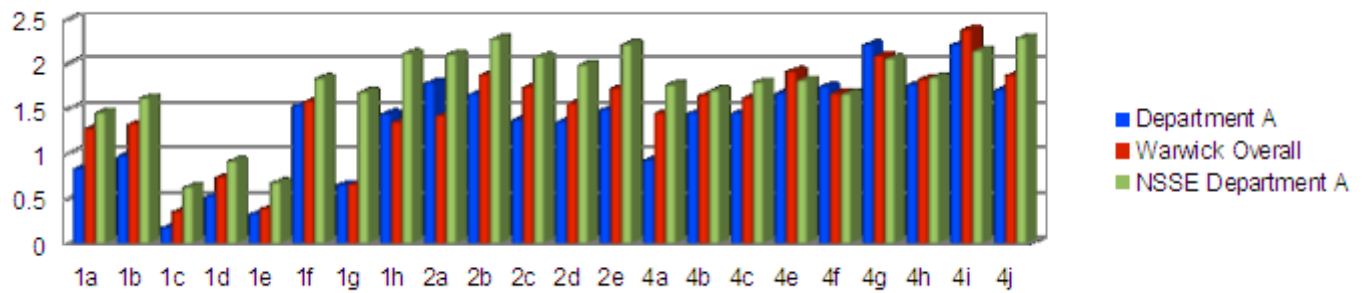
The classification has been done by matching Warwick departments to the NSSE classification of faculties. The following table explains the classification.

Faculty	Fields from survey
Arts and Humanities	Classics and Ancient History Comparative American Studies English and Comparative Literary Film and Television Studies French Studies German Studies History History of Art Italian Centre for Lifelong Learning School of Theatre Studies City College Coventry
Biological Sciences	Biological Sciences Warwick HRI Life Sciences
Business	Warwick Business School
Education	Institute of Education
Engineering	School of Engineering Warwick Manufacturing Group
Physical Sciences	Physics Chemistry Mathematics Statistics
Professional	Institute of Clinical Education School of Law
Social Sciences	Centre for Applied Linguistics Economics Philosophy Politics and International Studies Psychology School of Health and Social Studies Sociology

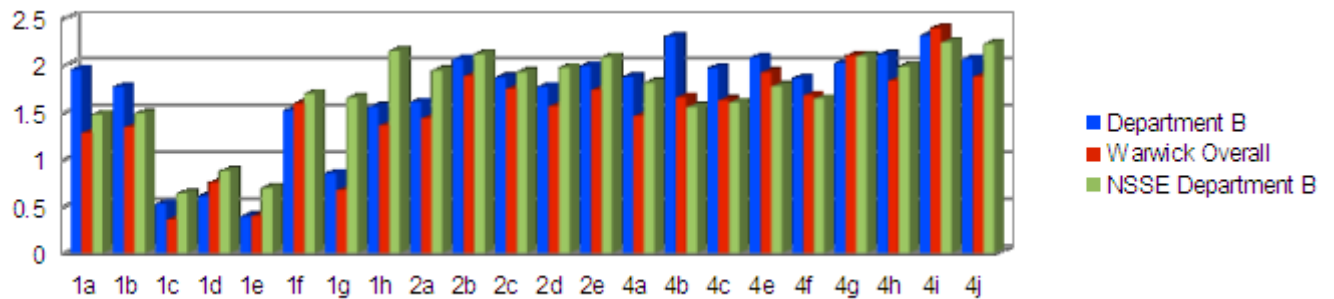
A total of 8 bar charts were plotted. Shown here are two cases where we see clear differences between Warwick and the NSSE. All of the charts are available in Appendix 5 (available on request).

The bar charts indicate that Warwick’s Faculty A is performing below par in comparison to its NSSE equivalent. It is also lagging behind the overall level across departments at Warwick. The focus groups supported these findings, with students from Faculty A bringing up similar issues.

Faculty B is regarded as one of the leading organisations of its type in Europe. Hence, it is no surprise to see that it scores well in comparison to both the Warwick overall and its NSSE counterpart. Findings in focus groups were



consistent with these findings.



## Conclusion

Our conclusions are fourfold.

Firstly, we find that there is insufficient evidence to suggest that there is a correlation between the SSE and NSS results as shown in the earlier part of the report. As mentioned above, this confirms earlier findings from Reading (Creighton *et al.*, 2008) and suggests that the two surveys are measuring very different aspects of the student experience.

Second, we find that SSEUK can be used to compare the student experience at different UK institutions, although this is based on just two universities (Reading and Warwick). UK institutions and conclude that in fact we can do comparisons with SSEUK across all

Thirdly, we find that SSEUK can be used to benchmark against NSSE and AUSSE institutions and that this benchmarking is robust enough to allow comparisons of individual departments. From a pedagogic perspective this is interesting, since the benchmarking process will readily identify areas where pedagogic practice is strong in the UK and areas where there is opportunity to explore good practice overseas.

Finally, we find that simple qualitative studies (focus groups in our case) can support, triangulate and enrich the quantitative data, confirming that Warwick achieves strongly compared to NSSE in critical thinking and communicating ideas, but less strongly in collaborative activities.