

Engagement for enhancement

Full qualitative testing report of a UK survey pilot

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I. Overview

Recent work has stressed the important links between educational gain and the pedagogical practices undertaken within institutions (Gibbs 2010, 2012). This led to a pilot Higher Education Academy (HEA) project exploring the viability of using items derived from the National Survey of Student Engagement (NSSE) in the UK. NSSE aims to evaluate student engagement with activities likely to enhance their learning outcomes (Kuh 2001) and was established in 2000 with around 329,000 students having completed it in 2012.

Items from NSSE have been cognitively tested (Kuh 2001; Ouimet et al 2001), but not extensively in a UK context. The pilot HEA project made modifications to the NSSE items to reflect the different context, leading to 14 Student Engagement items. Testing was required to evaluate the robustness and validity of these Student Engagement items.

This report provides an evaluation of student understanding and validity of a selection of Student Engagement items derived from NSSE, across a range of institutional, subject and student characteristics. The aim of the report is to inform development of the items and institutional understanding of results of the national pilot. The full report on the pilot, as well as a set of case studies and other supporting resources, are available at:

http://www.heacademy.ac.uk/resources/detail/nss/engagement_for_enhancement

I.1 Key findings

- Students found the survey questions rigorous and thought they reflected important aspects of their academic student experience. Students overall had a positive response to the survey, particularly for the items in the scales for Academic Integration and Collaborative Learning which focused on what students have done in the current academic year.
- The items in the Course Challenge scale were widely interpreted, indicating that students' responses reflect a range of understandings of the questions. Students found that some of the Critical Thinking scale items appear to be either interrelated or too similar to each other. The final questionnaire draft appeared to have resolved the majority of issues surrounding interpretation of most of these items.
- Students prefer shorter questions with fewer examples, and found them less prone to misinterpretation.
- When shown different versions and layouts of the survey, students favoured the one that included a wider range of choices in the response scale, but one which did not require students to recall how many times they had done a particular activity. In the response categories, for some students 'sometimes' and 'often' meant a couple of times in a period of two years and for others it meant a few times a month.
- Students voiced a concern of how their responses would reflect on their course since they did not want to appear to be criticising it.
- It was important for students that their institution took their views and experiences into consideration.

I.2 Introduction

This research project took a mixed methods approach, combining an analysis of the literature and related international efforts to modify student experience survey questions, in addition to new primary data collection through individual interviews, to explore student understanding of the survey items used in this project. Established research methods were rigorously applied, providing a wide set of data to validate and refine the student engagement questions. The research was designed to supplement the analysis of the data yielded by the pilot, to evaluate the validity and reliability of the original 14 items, and the four scales that they constitute, and make recommendations for improvements.

Key questions that informed the review

1. How do students understand the individual questions?

2. What do students mean by their response to survey questions?
3. How are the questions answered both with and without prompted response categories?
4. How do students interpret the questions as cohesive benchmarks?
5. Do students think these are important questions?
6. Do students have suggestions for changes or additional questions?
7. How do students respond to similar questions?

Participant selection

The aim was to include students from a diverse range of institutions, from research-intensive to teaching-intensive institutions, from across the UK. Contacts were made through various regional and national networks as well as through individual contacts in different Higher Education Institutions. A detailed email was sent to different universities explaining the purpose of the research. The research timeline, which necessitated interviewing students during the summer months, presented the researchers with a challenge since most students, both home and international, tend to go back home or travel during these months. However, the initial aim of interviewing 40 students was slightly surpassed; 43 students from ten different institutions were interviewed.

The majority of interviews were conducted at the interviewee's own institution. The researchers, based at King's College London (KCL), were able to take advantage of its central location, and managed to interview some of the students from institutions other than KCL at King's. Interviews were held either in a room provided by the Students' Union of the institution visited, or in a room provided by the Education Development department of the institution. These were, in most cases, places students had visited before and therefore provided a familiar environment for them. Some of the interviewees for this evaluation had taken part in the pilot survey projects at their own institutions.

To incentivise participation in the summer months, a £20 voucher was given to every student who took part in the project. The project had the approval of the College Research Ethics Committee (REP(EM)/12/13-67) from King's College London. The issue of how to compensate students for their time in filling in the survey had been widely debated both between the two researchers involved in this project and with other members of staff in different departments at KCL. Some believe students should not be given any incentive to take part in any survey, as this may bias results and distract students from the main objective of the survey. Others believe that given some institutions have offered the chance to win an iPad in return for survey participation, we could also offer the chance to win a considerably high value prize. Finally, we adopted a midway solution. All students would be offered an incentive in the form of an on-line voucher which could contribute to them buying a book online.

Participants

Sites included a variety of institutional types, representing a diverse range of students. A total of 43 students were interviewed, with students from: King's College London (KCL), University of Warwick, Canterbury Christ Church University, University College London (UCL), University of Oxford, University of Bath, Glasgow Caledonian University, Birkbeck College University of London, University of Manchester and University of East Anglia. Five of these institutions took part in the survey pilot.

There was a mix of first, second, third, fourth and fifth year students interviewed, studying a variety of subjects: American studies, biochemistry, classics, computing, engineering (mechanical, biochemical, electrical power, mechanical & electrical), English language & communication, English literature, environmental management, film studies, history, law, mathematics, medicine, midwifery, music performance, pharmacy, photography, politics, psychology, radiotherapy & oncology, social sciences, social work, and theology & religious studies. There was an equal gender representation and participants included European Union (EU), international non-European Union, mature and part-time students.

Interview protocol

Before each interview the purposes of the research project were explained to students and they were given an information sheet with detailed information on the project, as well as a copy of the consent form for interview participants in research studies, which they were asked to sign and date. All participants were also informed that they could withdraw from the research project at any time without needing to give any reason. Finally, all students were asked if the researcher could record the interviews.

Interviews lasted between 25 and 50 minutes. These focussed mainly on the survey items and questionnaires which students completed. However, in many instances, discussions went beyond responding to the survey, and students were given the opportunity to discuss their institutional experience. It was also important for the researchers to understand both the subjective experience of individual students and the specificities of studying a particular subject in a particular institution, and how this impacted upon their responses to the survey items.

1.3 Methodology

The project was based on a review of the literature on student engagement, with a focus on student engagement surveys and the development of the National Survey of Student Engagement (NSSE) (Kuh 2001). Attention was paid to the redesign of the NSSE 2.0 survey. There was an analysis of international examples of adapting US-based NSSE items, particularly the efforts in Canada to amend NSSE items, Australia (through the Australian Survey of Student Engagement, AUSSE) (Coates 2010), South Africa (through South African Survey of Student Engagement, SASSE) and recent engagement pilot surveys in Ireland. Changes to wording (or not) and any accompanying analysis of validity were examined. Overall, there is a dearth of published validity and reliability testing of student experience surveys.

Stage 1

Individual interviews with students were conducted. Interviews followed in the tradition of Tourangeau (1984):

1. Comprehension of the question (question intent and meaning of terms)
2. Retrieval from memory of relevant information (recall strategy)
3. Decision processes (motivation and sensitivity/social desirability)
4. Response processes (mapping the response)

The 'think-aloud' method (Willis et al 1999) was used, which directs students to 'think aloud' as they respond to the question, with little interference from the interviewer. This was followed by using verbal prompts, such as "when you answered 'sometimes', how often does that mean?" The research protocol included scripted probes, although spontaneous probes were used as appropriate. Questions were asked with NSSE-based response categories, different versions of expanded response categories and without specified categories. Scripts and questionnaire versions were updated and tested as interviews progressed.

Students were initially asked to provide an overall comment on the survey, before moving on to the individual items. These comments, discussed below, were usually very positive and students stated they found the presentation of the items clear and instructions easy to follow. Some were surprised by the 'very short' survey they were given. It was again explained to them that we were testing some, and not all, of the items of a student engagement survey used in the US.

Students were then asked to fill in and reflect on each item in one group of questions (see survey versions in the Appendix). Following the interview scripts, firstly students were asked to fill in section one, followed by a discussion, then section 2, followed by a few questions, then section 3, after which we discussed the questions in this section. After this, students were asked to reflect on the survey again. Questions related to overall clarity and sequence of questions; whether there were unexpected questions; if they thought of different questions they should be asked in an engagement survey, and so on. Finally, students were shown two or three other versions of the survey and asked which one(s) they preferred and why.

Stage 2

Four versions of the survey were used (A, B, C and D) mainly to ascertain which types of response categories students would prefer. After the first set of (14) interviews it was clear that the preferred version was A. There were three further iterations of version A: 13 students filled in A1 version, 16 the A2 version, and 7 the A3 version. Six students filled in the C version and one student filled in version B. Students were asked in the interviews their opinions about the other versions. Version B was unanimously the least preferred one hence it was only tested once. Version D was only used to gain feedback on what additional categories students preferred.

After the initial set of 14 interviews, the original questionnaire (A) and alternative versions (B and C) were modified after initial comments from students, and new versions were created (A1 and B1). After another set of interviews we conducted a focus group with four students from different subjects and years of study. The questionnaires were then re-written and restructured based on the feedback of all interviews conducted up to that

point (A2). This aimed mainly at simplifying and shortening questions, as well as grouping them differently. This process was conducted for one further round, resulting in the recommended questions, order of items and response categories (A3), included in the Appendix.

The focus group was conducted with some of the King's College London students who had been previously interviewed, once at the beginning of the study and then again a few weeks after their interview. The focus group was also recorded. The participants in the group already knew each other and had done previous activities together as interns at King's Learning Institute; therefore they were familiar with each other, facilitating interaction between them. Before the focus group the researcher explained to them what the objectives were: to reflect upon each question, and eventually to re-write the questions based on their feedback and on the initial analysis of the first set of interviews. After reading each question they were asked how they interpreted it, then they were told what the students interviewed had responded, and finally we worked in trying to shorten and make each question as clear as possible. Since this group were students from different subjects (medicine, biochemistry, politics, theology) we also tried to ensure that questions made as much sense as possible for students in different subjects.

The final recommended set of questions for future use and all versions of the various questionnaires are included at the end of the report.

Stage 3

To measure validity, two methods of reliability were used:

- Test-retest reliability
- Alternate-form reliability

A test-retest method was used with a select group of students, who completed survey items at the beginning and end of data collection. Alternate-form reliability was done through asking questions with different response categories or slightly reworded questions. Analysis of the interview data was used to judge the validity and robustness of the items. Analysis was also conducted across the different institutional and student variables for any differences.

1.4 Analysis

In addition to adapting new versions of the survey based on students' responses, we analysed the data from all of the interviews at the end of data collection. Following from the work of Conrad & Blaire (1996), we looked at three main stages of students' responses and explored five potential problems when analysing the data from the cognitive interviews and focus groups. The three stages of answering a question are:

1. Understanding the survey question and response options

This is a measure of a student's comprehension of the questions. This includes how students comprehend each survey question and how they comprehend the response categories.

2. Performing the primary survey tasks

The second stage combines the judgment a student makes when answering the question and the process of answering it. This stage focuses on how students retrieve information, how they make deductions and draw conclusions from that information, and any associated mental arithmetic and computation necessary to retrieve the information.

3. Formatting responses

The last stage looks at how the students' deductions are put into the response categories. This includes mapping how responses from the second stage are put into the categories available, and also considering what response options are not available.

When analysing data in the three stages, the five problems below were explored:

1. Language problems – Including not knowing the meaning of words or phrases or how the question would apply in the students' own context (such as the meaning of 'evaluation' in mathematics)
2. Inclusion and exclusion problems – Students determining whether certain concepts are to be considered within the scope of an item (such as whether 'asking questions in class' includes asking questions in a laboratory setting, and whether a student included or excluded such experiences)
3. Temporal problems – This includes the time period to which the question applies (such if a third year student spoke about their career plans with an academic member of staff in their first year of study, would they answer 'sometimes' or 'never' for the related question)
4. Logical problems – Exploring how do students interpret phrases like 'and' and 'or' in survey questions (or for instance in response to the question 'has your course challenged you to do your best work', whether a student feels she challenges herself or the course provides the challenge)
5. Computational problems – Including difficult mental arithmetic or complicated syntax in questions (such as how students would know if they had worked harder than they thought they could)

I.5 Findings

Diversity of students' experiences and engagement

It was interesting to note how diverse the student experience was both in terms of subject-specific characteristics as well as how students related to their own institution. All students were very keen to demonstrate how different their degree is from almost all others taught at their university. This was particularly clear when explaining their answers to the different survey questions. Students were perhaps less aware how diverse the student experience can be in other institutions. There was one exception to this: the students interviewed in one of the research-intensive universities tended to expand on the particularities of their university more than they did on their particular subject, though the latter was still mentioned.

From the analysis of the interviews we draw some broad conclusions about the student experience of the respondents. These were not unexpected or novel, but we find it important to note. The level of one's identification to one's institution varies across different institutions. So, in some institutions students were mainly drawing from their experiences in relation to the institution. In other cases, it was clear that students felt much closer to their department and their course than to the institution as an entity. The latter was perhaps more evident for students who were studying on courses which were more technical and vocational. For students on more generalist courses, with a less clear relation between degree subject and subsequent profession, their identification tended to be more towards the institution.

It also emerged that students in different institutions expected different things from their lecturers/tutors. Tentatively, we note that in teaching-intensive institutions students felt closer to their departmental faculty than was the case for students in research-intensive institutions. In the former, there appeared to be more regular interaction between lecturers and students. In many cases, students in these institutions appeared to feel more at ease to contact their tutors/lecturers. These trends had an impact on what students expected from their experience and how they subsequently responded to the questions in the survey.

Students showed a certain concern not to give answers that could put their institution in a bad light. Many times students felt the need to explain why they had responded to an item with 'rarely' or 'never', such as because it was either due to their own lack of pro-activity or because they felt that in their discipline certain items were perhaps not very relevant, and their 'negative' response was not because their institution was failing them. With a few exceptions, students were quite vocal about their experience at their institution being a positive one.

Interestingly, some students had doubts about what their institution could do with some of the data being collected. They were not comfortable answering questions that they did not see as providing information that could affect change in their institution. It is also important to note that students questioned whether their responses to an engagement survey would be listened to and eventually that some action would be taken either by their department or by the institution as a whole if there appeared to be an issue that needed attention.

Institutions' feedback to and from students

Students were very positive about the fact that institutions were interested in exploring the various dimensions of student engagement with different elements of student life. Some did, however, voice their discontent with the fact that they thought their institution did not seem to do much, if anything, with the various forms of feedback they had provided to their institution.

Students expressed the view that they received far too many requests, usually by email, to respond to surveys. It was clear from the interviews that institutions need to address the issue of survey fatigue and perhaps streamline and manage the process of sending out surveys. Many interviewees also said that once they received an email with a request to fill in a survey, they often just deleted the email without actually reading it.

In the process of conducting the research, we asked some students in the different institutions where we conducted interviews to forward the email they received to course mates and friends who they thought might be interested in the topic of the research, and might be willing to take part in an interview. Many times to the students' own dismay, they found a high level of reluctance and considerable lack of interest from their peers in responding to a survey or request to participate in an interview.

Finally, the issue of how much thought is given by students when they fill in surveys was also discussed with the students. There were a variety of responses to this. Some students said they usually want to complete a survey as quickly as they can, so they do not give too much time thinking about answers to the different questions. Others believed students would just fill in the 'middle choice' (i.e. sometimes, a bit) throughout most questions in a survey (although the students who thought this did not follow this procedure in the interviews). However, what seemed to be unanimous was that students would engage the most with the surveys which were closer to their interest, or those that they believed would be listened to by the institution.

Overall findings about the survey

Students were very positive about the survey:

"It's got better answer choices than usual. Normally it is scaled and it's not very clear" (second year, mechanical engineering)

"Looks quite straightforward. Looks great!" (second year, English literature)

"I guess it's clearly organised" (Third year, history and politics)

"It's clear and clean" (fourth year, pharmacy)

"Survey quite self-explanatory and easy to use ... For a student survey it's very much bang on" (third year, politics)

After completing the survey many students stated that it had made them think about their own experiences, and in some cases more so than other surveys they had completed in the past. Students reflected that this had been a positive experience in itself.

A couple of students, as is usual in a student survey designed to be administrated across a broad spectrum of subjects, mentioned the fact that the survey was rather general and may perhaps not fully engage with the particularities of each different degree subject:

"One issue I have with this kind of survey is that questions are asked in an abstract way to fit across subjects" (third year, joint honours).

One note is that even though the questions asked 'in the current academic year', some students answered the question thinking about their overall experience at university rather than the current academic year.

Critical Thinking Scale

The grouping of the four items from the Critical Thinking scale was somewhat problematic. Firstly it was unclear for some students what 'coursework' actually meant. Students found some of the items were either inter-related or that each item was too similar to the others. Also, some responses pointed to the fact that the difference between 'analysing' and 'evaluating' was not clear, particularly for students outside of the social sciences and humanities. One student commented on the survey overall: "Pretty much bang on with exception of questions 2 c. and d. [evaluating and analysing]." (first year, politics). Originally, the items were phrased as follows:

'During the current academic year, how much has your coursework emphasised the following mental activities?' [Responses: Very much/ Quite a bit/ Some/ Very little]

- Item 1:** 'Analysing in depth an idea, experience or line of reasoning'
- Item 2:** 'Forming a new idea or understanding from various pieces of information'
- Item 3:** 'Evaluating a point of view, decision, or information source'
- Item 4:** 'Applying facts, theories, or methods to practical problems or new situations'

We recommend these be changed as follows:

'During the current academic year, how often has your coursework emphasised the following?'
[Responses: Very often/ Often/ Sometimes/ Rarely/ Never]

Item 1: 'Analysing ideas or theories in depth'

Item 3: 'Forming a new idea or understanding from various pieces of information'. However, we think that the following alternatives need to be seriously considered:

'Forming a new understanding from various pieces of information' or

'Forming a new idea from various pieces of information'

Item 2: 'Evaluating a point of view, decision, or information source'

Item 4: 'Applying knowledge to new situations'

After these items had been rephrased in modified versions of the survey, students seemed to have less doubt about what was being asked in each of them. Simpler, more direct and shorter questions appeared to have been preferred by all students, whether they were from the natural sciences or from the humanities. However, it is important to mention that disciplinary differences were noted in students' understanding of these four items.

Many science students stated it was not their role as undergraduate science students to analyse, evaluate, form new ideas or even to apply knowledge to new situations (though this last item was less controversial than the three previous ones). Students in the humanities and in the social sciences were slightly more confident in replying to these questions. Still, for the majority of students it remained unclear what the differences may be between analysis and evaluation. It may make more sense to collapse the two items into one.

We also observed during the interviews that these were the questions that took the longest for students to answer. In a few cases, students asked the interviewer what each question actually meant, others did not answer one or two of these questions, and some questioned what could actually be done with the responses to these questions. It is important to reiterate that every student interviewed made a comment on this set of items. It was also interesting that when asked how they had interpreted one of these questions, quite a few students changed their response to that particular question, or to other questions in this section.

These questions were potentially alienating to science students, particularly if they were made compulsory in a survey (or without a 'not applicable' response category). Considering the relatively low motivation students usually have to fill in surveys – as discussed above – if the questions are not clear, or their purpose is not clear, or even if they feel these are not mental activities they are required to engage with in their course, students may decide not to complete the remainder of the survey. Hence, it is recommended if these items are included, they be rephrased, with Items 1 and 3 collapsed, and perhaps placed near the end of the survey. Variation in interpretation of the different items is shown below.

Item 1: 'Analysing in depth an idea, experience or line of reasoning'

This question was the least problematic of the four Critical Thinking scale items in the sense that it was clear to students what it meant. However, students' interpretation of this item was relatively varied. Some students understood it as interpreting a theory or information, others understood it as critically engaging with ideas and experiences, and some saw it as synthesising a variety of information provided to them and making sense of the whole picture, for example:

"Responding to either the core text that we do the essay in or the primary literature surrounding [it]. We need to take a very critical look at it." (second year, English)

“There were ideas regarding physics, biology, maths, chemistry, so those ideas in that spectrum of science, we analysed them a lot” (first year, pharmacy)

“Sounds like some of the stuff I’ve answered to in [another] question ... the ‘evaluating’” (third year, social sciences)

As the responses above show, the variety of responses students gave reflect different types of intellectual operationalisation, which demonstrates the disparity of interpretations to this question. As noted above, for many students this item either meant the same thing or complemented Item 3 – ‘Evaluating a point of view, decision, or information source’.

Item 2: ‘Forming a new idea or understanding from various pieces of information’

This was one of the items that created the most diverse interpretations in the Critical Thinking scale. The quotes below reveal some of the different approaches students took when answering this item:

“This is important for me, especially with music, there are still lots of new ideas. When I look at a new piece with my teacher or by myself, and I keep playing it over and over, after a couple of months and months and there is something new coming up, so that’s for me a new idea” (second year, music)

“Taking other people’s idea and responding in your own way, being original but not totally original.” (second year, English)

“Builds on top of that [previous item on ‘Analysing’]. Analyse ideas and that and come to your own ideas. Come to a new coherent theory” ... “[Analysing and Forming a new idea] is all part of the same thing” (second year, joint honours)

Some students took this question to indicate whether they created new ideas as part of their coursework, and these students tended to respond ‘never’ or ‘rarely’ to this question. Others took it to mean building a new argument from a variety of sources, and in these cases – mostly in the humanities, arts and social sciences – students would answer ‘sometimes’, ‘often’ or ‘very often’.

In view of the responses to this question we recommend this item be changed. We have suggested two alternatives. For students, it clearly means quite different things to ask about ‘forming new understandings’ versus ‘forming new ideas’. We believe that asking about ‘new understandings’ rather than ‘new ideas’ would meet with less resistance from respondents and more clarity of responses. Such changes would certainly match better the experiences and perceptions of Science students than the original question.

Item 3: ‘Evaluating a point of view, decision, or information source’

This was the other item which was the most problematic in the Critical Thinking scale. For many science students, especially those in the first and second years, this question seemed almost nonsensical. For them science was about facts and therefore it is not up to them to evaluate facts. Some science students, especially those in their final year, interpreted this as probably talking about which sources – such as academic journals or websites – were academically more reliable and valid. For students in pharmacy this meant whether they had been asked to evaluate a mock doctor’s prescription and thus was an ‘easy’ question to answer. Below are some of the reactions this item prompted:

“I thought that meant looking at, if the evidence you are looking at is from a reliable source, a peer-reviewed journal” (third year, midwifery)

“Sometimes they will give us certain case studies that have been done in the past that will bridge legal issues in health care, they want to ask your point of view” (fourth year, pharmacy)

“You can form a new idea but then you have to apply the same method that you use to everyone’s ideas to your own ideas” (second year, English)

Item 4: ‘Applying facts, theories, or methods to practical problems or new situations’

For law, medicine, pharmacy and engineering students this item seemed to be relatively straightforward. However, for the students in other subjects, this was less the case. It was not that the item was not clear, but rather that many students thought this activity did not apply to their course subject. As the quote below demonstrates, some students interpreted this question as part and parcel of one single question (along with Item 3):

“That’s pretty much the same thing [as evaluating] but slightly different... look at similar sort of problems but applying to different settings... different problems”. (second year, joint honours)

Course Challenge

This scale consisted of three items, one about unpreparedness (using the ‘Very often-Never’ response categories) and two items asking about working hard, and being challenged by coursework (using the ‘Very much-Not at all’ response in the final draft). The latter two were the most troublesome questions for students. Some students were not clear what the questions were referring to, or what part of the question to respond to.

‘In your experience at your institution during the current academic year, about how often have you done the following?’ [Responses: Very often/ Often/ Sometimes/ Never]

Item 5: ‘Worked harder than you thought you could to meet a tutor’s/lecturer’s standards or expectations’ to be changed to: ‘Do you feel you have been pushed to work harder than you thought you could?’ [Responses: Very much/ Quite a bit/ Some/ Very little/ Not at all] or deleted.

This question was almost unanimously criticised for being unclear. Very few students were happy to respond to this question without questioning what it actually meant. However, in a couple of institutions, students were told by their personal tutor what grade they were expecting students to get by the end of the year, and this expectation acted as a benchmark for students’ answers to this item.

Students were not sure what ‘worked harder than you thought you could’ necessarily referred to, as students could not know their limits of working. Students were not sure if ‘worked harder’ referred to more quantity (reading more) or difficulty (more demanding texts and exercises).

Students were often not sure how they would know their tutor’s expectations, or what those would be if they did. However, all students except one referred to their own expectations of their effort, rather than the expectations of their tutor. Additionally, students’ responses depended on their background and level of preparation for their course, indicating the responses could be quite relative across courses. Also, students’ conceptions of expectations varied across institutions, particularly those between research-intensive and other institutions.

Below we provide a plethora of responses to illustrate the wide variety of responses to this item:

“That you’ve done better than you thought you could or you’ve done better than your target grade...When you have a meeting with your tutor they say “we’d expect you to get, like a 2.2 say for your first year or like that’s the average for first years to get a 2.2 or a 2.1.” (first year, psychology)

“Putting an extra effort...I mean harder than I thought I could...I don’t know if I ever really reflected on how hard I can work, but for exams it’s definitely been an extra effort” (third year, law)

“It seems like a strange question actually when you think about it...I think you can meet the standards of your tutor without actually less work than you think (...) I think it means putting extra effort”. (second year, joint honours)

“Yes, definitely. Especially in a course that I’ve been doing, cinema, it’s not something I had done before, because I had such a brilliant teacher, I was interested in it anyways, but I wasn’t sure how I would do in that subject cause I had never studied it before, but I found my teacher really inspiring so I ended up doing better than in my other subjects” (third year, American studies)

“Based on my midterm mark and spending the rest of the term trying to make it better” (second year, English)

“I wasn’t really sure what to make of that question...Usually I always think this turned out better than expected but I could have worked harder. I could have change [my answer] to never but I don’t know what it means: ‘harder than I could’.” (third year, joint honours)

Interpretations to this item varied greatly across all institutions and subjects. To some students it meant whether they had achieved the grades they were told they were expected to get – and for these students, and only for these students – the section ‘to meet a tutor’s/lecturer’s standards or expectations’ made some sense. For other students it meant whether they had improved on previous results. For some, the question was of what ‘work harder than you thought you could’ actually meant. And, perhaps even more importantly, how can one assess one’s ability to work. In a way all felt they could have perhaps have worked harder than they had, but could not assess their capacity beyond the level of what they have actually done.

Item 6: ‘During the current academic year, to what extent has your course challenged you to do your best work?’ [Responses: Very much/ Quite a bit/ Some/ Very little] to be changed to ‘Has your course challenged you to do your best work?’ [Responses: Very much/ Quite a bit/ Some/ Very little/ Not at all]

This item was not clear to students, with a few choosing not to answer it before discussing the purpose of the question with the interviewer. Some students responded to this question as ‘did you get the grades you’d like to’. Several students were unclear about what ‘challenge’ meant, usually referring to workload, and others were not sure what their ‘best work’ could be. One student remarked: “Being challenged is up to the individual...and possibly not to do with the coursework” (first year, film studies). Ultimately, because of the variety of interpretations, the meaning of the responses may not be clear.

“Ask students if they have thought about taking extra courses that might help them in their course” (e.g. help with academic writing) (third year, social sciences)

“How much has your course made you put the absolute best that you can do in paper and in everything else you do (...) It’s a bit of a strange question” (second year, joint honours)

“How much pressure has there been to perform” (third year, joint honours)

The quotes above demonstrate the variety of some of the interpretations to this item. There were students that interpreted this item as referring to their overall study experience, rather than their particular course, others interpreted it as meaning ‘did you work the hardest you could’? Others thought it asked whether their course was hard or not. One student suggested changing this question as follows:

“‘To what extent did you find the work challenging’. In that it says ‘did you find the work difficult’ which is probably not what the question is asking” (second year, English).

‘In your experience at your institution during the current academic year, about how often have you done the following?’ [Responses: Very often/ Often/ Sometimes/ Never]

Item 7: ‘Come to taught sessions unprepared (e.g. not completed assignments, readings, reports, etc.)’ to remain unchanged.

This item was generally well received and students found it easy to answer. For this item, students indicating they had come unprepared for sessions ‘sometimes’, ‘often’ or ‘very often’, mostly meant they had not prepared at all for individual sessions. However, some students regularly went to class only partially prepared, and thus indicated in their response ‘often’ or ‘very often’, even though they had prepared somewhat for sessions. Answers to this item were split between the students in sciences and engineering, and students in the arts, humanities and social sciences. The former were more likely not to have prepared at all for these sessions whereas the latter were more likely to have done some preparation for taught sessions. Science and engineering students thought of ‘taught sessions’ as lectures, and often said they went to lectures unprepared, although they did prepare for labs and tutorials.

“It’s never ‘not completed assignments’ I’ve always completed assignments... maybe not having read everything that is set in a reading list” (second year, joint honours).

“I didn’t read all of them” (second year, theology and religious studies)

There were two main ways in which students interpreted this question. For ‘taught sessions’ referring to lectures, in the sciences, engineering and maths, students interpreted ‘assignments, readings, reports, etc.’ as readings, and it was often the case the very few students had prepared for them. However, for tutorials or labs, being prepared meant completing assignments or doing a presentation, and in this case the majority of students had gone to class prepared.

Referring to lectures in the humanities, arts, and social sciences, coming prepared for lectures meant mainly doing reading – for Photography this may have also meant completed or work-in-progress projects – and the majority had, to some extent, come prepared. A couple of students however stated there had been instances where they had attended lectures fully unprepared. In tutorials though, the most usual response was that students had done, at least, some of the reading required for it.

Collaborative Learning

‘In your experience at your institution during the current academic year, about how often have you done the following?’ [Responses: Very often/ Often/ Sometimes/ Never]

Item 8: ‘Worked with other students on course projects or assignments’ to remain unchanged.

This question was generally interpreted similarly by all interviewees and seemed to be very clear. This was interpreted as either doing a class presentation with other students, or doing a group assignment or essay.

What appeared to be of relevance was that the practice of working with other students was extremely rare, whichever degree subject students were doing. Some students had worked with other students only once, and not in the current academic year (see note above on “current academic year” – even if students replied they had done this activity, and some even said ‘sometimes’ or ‘rarely’, this often meant ‘once’ in their whole degree experience and not necessarily in the ‘current academic year’).

‘In your experience at your institution during the current academic year, about how often have you done the following?’ [Responses: Very often/ Often/ Sometimes/ Never]

Item 9: ‘Explained course material to one or more students’ to remain unchanged.

This question was very clear and all students seemed to have interpreted this question in the same way. It was common practice that students at times explained some readings or concepts to other students, as well as having readings or concepts explained to them. These exchanges were very informal exchanges, and would mainly occur outside class, at home with flatmates (when they were from the same course), or over coffee and meals. In certain cases, students would also explain things and have things explained to them in specially created course-specific Facebook pages.

‘In your experience at your institution during the current academic year, about how often have you done the following?’ [Responses: Very often/ Often/ Sometimes/ Never]

Item 10: ‘Discussed ideas from your course with others outside of taught sessions (students, family members, co-workers, etc.), including by email/online’ to be either changed to ‘Discussed ideas from your course with others outside of taught sessions (e.g. students, family members, etc.), including by email’, or to be deleted.

Many students saw this question as being very similar, or even a repetition of Item 9: ‘Explained course material to one or more students’. Students in the social sciences and humanities more often indicated they had talked to family members about their course. However this was not the case for natural sciences and engineering students, who often felt their course material was too specialised for others outside their degree to understand.

Academic Integration

Overall students’ reactions to the items in this scale were positive. After analysis we recommend the following amendments:

‘In your experience at your institution during the current academic year, about how often have you done the following?’ [Responses: Very often/ Often/ Sometimes/ Never]

Item 11: ‘Asked questions or contributed to course discussions in other ways’ to be changed to ‘Asked questions in class’.

It is important to note that in the majority of cases students in the natural sciences, medical sciences and engineering stated they never asked questions in lectures because it was not the practice of their discipline. They asked questions in labs, seminars or tutorials, which some students reflected in their responses and others did not. For the humanities and the social sciences students the practice of asking questions in lectures was very common. With very few exceptions, the majority of interviewees asked questions in class – whether in lectures, tutorials or labs. Some of the comments to this item were as follows:

“When I used to attend seminars” (third year, politics)

“Participating in lectures... it’s very much discussion based (...) Everyone in class has to contribute to discussions” (second year, photography)

“Asking how often I actively engage in classes (...) Some of my lectures are quite intimate, there only 10 people, so we can ask questions during that. There are other classes where there are 50, 60, 70 people where you can’t really, there isn’t time...” (second year, English)

‘In your experience at your institution during the current academic year, about how often have you done the following?’ [Responses: Very often/ Often/ Sometimes/ Never]

Item 12: ‘Discussed your academic performance and/or feedback with teaching staff’ to remain unchanged.

Students seemed to find this question very clear. In many instances, students had only received written feedback from their tutor/lecturer and they did not feel there was *space* for them to directly contact their tutor to discuss the feedback. In one institution though, tutors/lecturers would set up individual meetings with their students to go over the feedback for each assignment. In another institution, essay feedback was discussed in tutorials, but there was not feedback for final exams.

Discussing academic performance seemed to be a very rare practice in the majority of institutions where we conducted interviews. There did not seem to be the opportunity for students to discuss feedback they had received either face-to-face or via email (although a couple of students mentioned they had emailed their tutor about feedback they had received). The majority of students seemed to find that their written feedback was enough, whereas in one institution the students did complain that the feedback they received was either very poor or non-existent.

‘In your experience at your institution during the current academic year, about how often have you done the following?’ [Responses: Very often/ Often/ Sometimes/ Never]

Item 13: ‘Discussed ideas from your course with teaching staff outside taught sessions, including by email/online’ to be changed to ‘Discussed ideas from your course with teaching staff outside taught sessions, including by email’.

Students rarely indicated discussion outside of class occurring, particularly in the sciences and engineering, but when students did, it was mainly by email. Students also often felt this was a long-winded question. There was one case where a student mentioned they would discuss ideas from their course with teaching staff when they casually met in a bar or corridor at their institution. It was also apparent that around half the students interviewed did not feel comfortable with the idea of initiating contact with a member of the faculty.

‘In your experience at your institution during the current academic year, about how often have you done the following?’ [Responses: Very often/ Often/ Sometimes/ Never]

Item 14: ‘Talked about your career plans with teaching staff or advisors’ to remain unchanged.

Students almost never talked about career plans with staff. Students in their first or second year did not appear to see this as important. This question was more relevant for final year students. There was one second year student that stated he did it ‘sometimes’ because he was considering progressing into a Masters course and therefore they would discuss career plans via email with his tutor. Also, in vocational courses, first and second year students seemed to be quite clear about their career path and perhaps did not find it necessary to discuss this with either teaching staff or advisors. There were no students who said they had had a discussion about their career plans with a careers advisor.

Response categories

Various response categories were tested, including four categories (e.g. Very often/ Often/ Sometimes/ Never), five categories (e.g. Very Often/ Often/ Sometimes/ Rarely/ Never), frequency expressed as 'number of times' (e.g. 1-2 times, 3-5 times) and open scales (e.g. Very often <-> Never). Students were least comfortable with open scales and those requiring them to count the number of times they had engaged in something. They were most comfortable and familiar with the item scales, and preferred the non-numeric category scales with five options:

Very Often/Often/Sometimes/Rarely/Never, and
Very Much/Quite a bit/Some/Very little/Not at all

Students felt that there was a rather large jump between the 'sometimes' and 'never' scale points in the original four-category scale. The addition of a 'rarely' category was also noted as part of previous cognitive interviewing conducted at King's College London.

However, what 'sometimes' meant to one student differed from what 'sometimes' meant to other students. Moreover, a student could reply 'often' to one question and 'often' to another and what they meant was considerably different, such as four times a year, or twice a month. Perhaps what are most important are the expectations of regularity and priority when students are surveyed about their experience and their perception of their experience. A student may answer one question with 'sometimes' and by this they mean 'weekly' because they perceive that particular item to be high on their perception of what their student experience should contain. For another item, the same student may reply 'sometimes' meaning they have done the activity once a term. This relates to items students perceive should happen less frequently, such as, for example, discussing career plans or academic performance with staff.

1.6 Recommendations

Overall

Unanimously, students were enthusiastic about the idea of engagement questions. Students felt engagement questions showed that the institution valued students' experiences. Therefore, student engagement survey questions seem to be a valid and valued measure of the student experience.

Final year students we interviewed were critical of the National Student Survey (NSS) they had filled in earlier in the year, and found that engagement survey items seemed to be more appropriate for providing a more accurate and detailed view of students' experiences and perceptions.

It is important that students understand what each item is actually asking, and what data does it provide. Therefore it could be advisable to perhaps have a clear and succinct preamble explaining what information is gathered (if using the Bristol On-line Survey (BOS) system this could be in the 'more info' button).

Students did not, or possibly could not, comment much on the cohesiveness of questions as benchmarks. Students reflected on their own experiences, and had difficulty thinking more broadly about the purpose and use of survey items as benchmarks. This is not criticism of the benchmarks (or students) but rather a note that the development of benchmarks may be outside of most students' concern.

Students were reluctant in answering items in a way that could seem like they were being critical of their institution. It is perhaps important to reiterate, at the beginning of the survey, that different disciplines have different practices and that, for example, not doing a lot of group work with one's course-mates does not necessarily mean that the institution or department is doing something 'wrong'.

It is **recommended** that institutions make clear to students that action has been taken if issues are flagged in a survey. Students often expressed they did not believe they were listened to when they provided feedback through surveys.

Scales

Although there was some confusion with the items, students valued the Critical Thinking questions. The **recommendation** is for these questions to be reordered and shortened, and possibly for the items related to 'analysing' and 'evaluating' to be combined. In light of disciplinary differences, these should be compared primarily

within subject groupings. We also **recommend** considering that Item 3 ‘Forming a new idea or understanding from various pieces of information’ be changed to ‘Forming a new understanding from various pieces of information’

We **recommend** that the Academic Challenge questions should be interpreted with caution, extra emphasis added (as in the final questionnaire) or deleted.

The scales for Academic Integration and Collaborative Learning presented few problematic issues for students. The main **recommendation** is to add an additional response category.

Response categories

It is **recommended** that the survey include a ‘rarely’ category for the frequency questions: Very often / Often / Sometimes / Rarely / Never. And amend the other scale to: Very much/ Quite a bit/ Some/ Very little/ Not at all.

When students were presented with these categories their response was very positive. One student mentioned that “It’s got better answer choices than usual. Normally it is scaled and it’s not very clear” (second year, mechanical engineering). And another stated that “I think it’s quite good they have words instead of ratings. Especially when it is 1 to 10, it’s quite arbitrary whether you choose 7 or 8” (final year, medicine).

1.7 Additional questions

Some additional questions were asked in the interviews, as well as through another cognitive research project associated with an institutional student experience questionnaire. One item that students felt strongly represented the challenge on their course was:

‘During the current academic year, how much has your coursework emphasised the following mental activities?’

Item A: ‘Becoming an independent learner’

(Responses Very much/ Quite a bit/ Some/ Very little/ Not at all)

Although this item is not on the NSSE survey, students in the UK (including home, European Union and international students) felt this was common terminology representing the purpose of their course.

Another question was designed to encourage students to reflect on their role in the feedback cycle:

‘In your experience at your institution during the current academic year, about how often have you done each of the following?’

Item B: ‘Made significant changes to your work based on feedback’

(Responses Very Often/Often/Sometimes/Rarely/Never)

This item, along with ‘coming to class unprepared’ can provoke students to think about how they engage, and in the case of this proposed item, how they use feedback, which goes beyond questions that ask if feedback is timely or if they would like more of it. This item, along with additional questions about discussing feedback and the timeliness, quantity and quality of feedback, can provide a useful starting point for discussion between staff and students about feedback and how it can be improved.

2. A Design for Further Cognitive Testing

Although usually used in the process of survey design, cognitive research testing and focus groups can be used to provide a deeper, more contextualised understanding of survey responses. Sharing information about what students have in mind when they respond to survey questions can help deepen discussions about student survey results by providing concrete examples of students' experiences and directions for student-led enhancement.

In addition, information gleaned from interviews and focus groups can:

1. Help determine how students interpret survey items and provide feedback for any changes to survey items.
2. Provide specific examples of what results mean in a particular context (such as what critical thinking looks like in mathematics).
3. Help to develop a deeper understanding of differences in the responses of particular groups of students (such as underrepresented students; students in specific subjects or courses; part-time students; non-traditional age students).
4. Provide additional evidence on topics of interest to the institution, such as specific local initiatives.
5. Help to enhance understanding of results to increase the likelihood that change efforts based on survey results would prove effective, and provide an opportunity for student-led enhancement.

With sufficient training, cognitive testing and focus groups can be an opportunity to get students involved in enhancement activities. Provided with training, scripts and survey forms, undergraduate and postgraduate students can conduct interviews and analyse data.

A further role for cognitive interviewing can be as an evaluation tool for the survey designers and those in charge of responding to the survey data. Asking the same type of questions of the survey designers and those responsible for the data can clarify the intent of the questions, and what they hope to achieve with the data from the questions (such as if it is possible to make any changes about the topics covered in certain questions).

The scripts in the following Appendices can be used as guides, with amendments based on the local survey context.

2.1 Further Resources

A Guide to Contextualizing Your NSSE Data: Cognitive Interviews and Focus Groups

http://nsse.iub.edu/pdf/Cognitive_interviews_facilitation_guide.pdf

Conrad, F., & Blair, J. (1996, August). From impressions to data: Increasing the objectivity of cognitive interviews. In *Proceedings of the Section on Survey Research Methods, Annual Meetings of the American Statistical Association* (pp. 1-10).

3. Final recommended versions of questions

Critical Thinking

During the current academic year, how often has your coursework emphasised the following?
(Response options: Very often / Often / Sometimes / Rarely / Never)

1. Analysing ideas or theories in depth
2. Evaluating a point of view, decision, or information source
3. Forming a new idea or understanding from various pieces of information
4. Applying knowledge to new situations

Course Challenge

5. Do you feel you have been pushed to work harder than you thought you could?
(Response options: Very much / Quite a bit / Some / Very little / Not at all)

6. Has your course challenged you to do your best work?

(Response options: Very much / Quite a bit / Some / Very little / Not at all)

7. During the current academic year, about how often have you come to taught sessions unprepared (eg not completed assignments, readings, reports, etc)

(Response options: Very often / Often / Sometimes / Rarely / Never)

Collaborative Learning

During the current academic year, about how often have you done each of the following?
(Response options: Very often / Often / Sometimes / Rarely / Never)

8. Worked with other students on course projects or assignments
9. Explained course material to other students
10. Discussed ideas from your course with others outside of taught sessions (eg students, family members, etc), including by email

Academic Integration

During the current academic year, about how often have you done each of the following?
(Response options: Very often / Often / Sometimes / Rarely / Never)

11. Asked questions in class
12. Discussed your academic performance and/or feedback with teaching staff
13. Discussed ideas from your course with teaching staff outside taught sessions, including by email
10. Discussed ideas from your course with others outside of taught sessions (eg students, family members, etc), including by email
14. Talked about your career plans with teaching staff or advisors

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Appendix I: Cognitive Interview Script

Materials:

Recorder
Note taker (with script, pad, and pen or laptop)
Copies of survey
Need copies of survey in envelopes for general review by students.
Need copies of survey for students to complete.
Ethics information sheets and consent forms

Preparation

Mark survey envelope with:

- i. Institution _____
- ii. Mission Group _____
- iii. Gender _____
- iv. Subject/Discipline _____
- v. Year _____
- vi. Full-time/part-time status _____
- vii. Date _____
- viii. Recorder file _____

Introduce yourself, and the note taker, mention the recording, etc.

Turn on tape recorder.

Hand the envelope with survey and the ethics information sheet and consent form to the respondent.

Interviewer Introduction

“First, thank you for taking time to help us further explore this pilot student engagement survey. To provide you with more background on the survey, students are asked to participate in the survey so that faculty, administration, senior managers, students unions and students can get a better understanding of the undergraduate experience at their institutions. We have followed all of the ethics protocols at King’s College London to carry out these interviews and focus groups. As part of the ethics procedure, we will need you to sign a consent form.

There is plenty of time for the interview and we would like you to be as honest and thoughtful as possible in your responses and comments. Occasionally, during the interview, we will ask you to speak aloud about what you are thinking as you respond to questions. For example:

Interviewer: ‘Please tell me what you are thinking about when I ask you what kind of movies you like?’

Student: ‘I usually like movies that are comedies because it’s fun to watch them with my friends and laugh.’

Do you have any questions before we begin?

Interview Script

“Please open this envelope and briefly look at each page of the survey. Later I am going to ask you about individual questions. But now, I’d like you to describe your initial impression of the survey as you removed it from the envelope, and looked at each page. I am going to ask that you pay special attention to certain questions or elements of the survey. However, we are interested in any comments you have regarding the layout, the instructions for answering questions, the response options, and the overall ‘flow’ of the survey.

- I. We will begin by asking you to complete certain survey items in question I. Are you ready to begin?
Please stop when you complete question Ia through Id.
 - a. For item a, what does asked questions in or contributed to class discussions mean to you?
 - i. PROBE: For item a, what does your response (read response) mean?
 - b. What does come to class without completing readings or assignments mean to you?
 - i. PROBE: For item b, what does your response (read response) mean?
 - c. What does worked with other students on course projects or assignments mean to you?

- i. PROBE: For item c, was this required?
 - d. What does explained course material to one or more students?
 - i. PROBE: For item d, what does your response (read response) mean?
 - ii. PROBE: For item d, was this during class, or another time?
- II. We will begin by asking you to complete certain survey items in question 1. Are you ready to begin?
Please stop when you complete question 1e through 1h.
- e. For item e, what does discussed your academic performance and/or feedback with teaching staff mean to you?
 - i. PROBE: What staff came to mind as you answered item e?
 - ii. PROBE: For item e, what does your response (read response) mean?
 - f. What does talked about your career plans with teaching staff or advisors mean to you?
 - i. PROBE: For item f, what does your response (read response) mean? How often would you expect to do this?
 - g. What does discussed ideas from your course with teaching staff outside taught sessions, including by email/online mean to you?
 - i. PROBE: For item g, what does your response (read response) mean?
 - h. What does discussed ideas from your course with others outside of taught sessions (students, family members, co-workers, etc.), including by email/online mean to you?
 - i. PROBE: For item h, who comes to mind?
 - ii. PROBE: For item h, what does your response (read response) mean?
- III. For item i, please tell me what you are thinking about as you determine your responses. This is a “Think Aloud” question like the exercise we practiced earlier.
- i. PROBE: For item i, who comes to mind?
 - ii. PROBE:
- IV. For question 2, please tell me what you are thinking about as you determine your responses. This is a “Think Aloud” question like the exercise we practiced earlier.
- a. For item a, analysing in depth an idea, experience or line of reasoning. Think aloud.
 - i. PROBE: What does analysing mean to you?
 - ii. PROBE: Would you mind providing some concrete examples?
 - b. For item b, forming a new idea or understanding from various pieces of information. Think aloud.
 - i. PROBE: What did you consider as ‘various pieces of information’?
 - c. For item c, evaluating a point of view, decision, or information source.
 - ii. PROBE: What does evaluating mean to you?
 - i. PROBE: What does your response (read response) mean?
 - d. For item d, applying facts, theories, or methods to practical problems or new situations. Think aloud.
 - i. PROBE: Would you mind providing some concrete examples?
 - e. In question 2, are there any unfamiliar terms?
 - f. In question 2, are there other mental activities that your coursework has emphasized
- V. For question 3, please tell me what you are thinking about as you determine your response. This is a ‘Think Aloud’ question.
- i. PROBE: What does your response (read response) mean?
 - ii. PROBE: What comes to mind when you think of your best work?
- VI. You may now complete the remaining questions and stop. This concludes the formal process of completing the survey, but we’d like to conclude by asking a few general questions.
- a. Please tell me any thoughts about the look of the survey.
 - i. PROBE: Why do you feel that way?
 - b. Please tell me any thoughts about the organization of the survey.

- i. PROBE: Why do you feel that way?
- c. Are there additional questions you believe should be asked?
- d. Are there questions you believe should be deleted?
- e. Are there questions you believe should be modified?
- f. Are there words used in the questions that you think could be changed to make it more understandable to students?
- g. Do you have any questions for (me/us)?”

Interview Conclusion

“Thank you for participating in this discussion. Your responses will help universities get a better understanding of the undergraduate experience.”

Give students gift cards and/or provide any additional information on incentives or follow-up sessions. Sign acknowledgement forms.

Appendix 2: Student engagement survey questionnaire A

1. In your experience at your institution during the current academic year, about how often have you done each of the following?

	Very often	Often	Some-times	Never
a. Asked questions or contributed to course discussions in other ways				
b. Come to taught sessions unprepared (e.g. not completed assignments, readings, reports, etc.)				
c. Worked with other students on course projects or assignments				
d. Explained course material to one or more students				
e. Discussed your academic performance and/or feedback with teaching staff				
f. Talked about your career plans with teaching staff or advisors				
g. Discussed ideas from your course with teaching staff outside taught sessions, including by email/online				
h. Discussed ideas from your course with others outside of taught sessions (students, family members, co-workers, etc.), including by email/online				
i. Worked harder than you thought you could to meet a tutor's/lecturer's standards or expectations				

2. During the current academic year, how much has your coursework emphasized the following mental activities?

	Very much	Quite a bit	Some	Very little
a. Analysing in depth an idea, experience or line of reasoning				
b. Forming a new idea or understanding from various pieces of information				
c. Evaluating a point of view, decision, or information source				
d. Applying facts, theories, or methods to practical problems or new situations				

	Very much	Quite a bit	Some	Very little
3. During the current academic year, to what extent has your course challenged you to do your best work?				

Demographics	
4. Institution	
5. Gender	
6. Subject/discipline	
7. Year	
8. Full-time/Part-time status	

Appendix 3: Student engagement survey questionnaire A1

1. In your experience at your institution during the current academic year, about how often have you done each of the following?

	Very often	Often	Sometimes	Rarely	Never
a. Asked questions or contributed to course discussions in other ways					
b. Come to taught sessions unprepared (e.g. not completed assignments, readings, reports, etc.)					
c. Worked with other students on course projects or assignments					
d. Explained course material to one or more students					
e. Discussed your academic performance and/or feedback with teaching staff					
f. Talked about your career plans with teaching staff or advisors					
g. Discussed ideas from your course with teaching staff outside taught sessions, including by email/online					
h. Discussed ideas from your course with others outside of taught sessions (students, family members, co-workers, etc.), including by email/online					
i. Worked harder than you thought you could to meet a tutor's/lecturer's standards or expectations					

2. During the current academic year, how much has your coursework emphasized the following mental activities?

	Very much	Quite a bit	Some	Very little
a. Analysing in depth an idea, experience or line of reasoning				
b. Forming a new idea or understanding from various pieces of information				
c. Evaluating a point of view, decision, or information source				
d. Applying facts, theories, or methods to practical problems or new situations				

	Very much	Quite a bit	Some	Very little
3. During the current academic year, to what extent has your course <u>challenged you</u> to do your best work?				

Demographics	
4. Institution	
5. Gender	
6. Subject/discipline	
7. Year	
8. Full-time/Part-time status	

Appendix 4: Student engagement survey questionnaire A2

1. During the current academic year, about how often have you done each of the following?

	Very often	Often	Sometimes	Rarely	Never
a. Asked questions or contributed to course discussions in other ways					
b. Come to taught sessions unprepared (e.g. not completed assignments, readings, reports, etc.)					
c. Worked with other students on course projects or assignments					
d. Explained course material to one or more students					
e. Discussed your academic performance and/or feedback with teaching staff					
f. Talked about your career plans with teaching staff or advisors					
g. Discussed ideas from your course with teaching staff outside taught sessions, including by email					
h. Discussed ideas from your course with others outside of taught sessions (students, family members, etc.), including by email					

2. During the current academic year, how often has your coursework emphasized the following?

	Very often	Often	Sometimes	Rarely	Never
a. Analyse ideas or theories in depth					
b. Evaluate a point of view, decision, or information source					
c. Form a new idea or understanding from various pieces of information					
d. Apply knowledge to new situations					

	Very much	Quite a bit	Some	Very little	Not at all
3. Do you feel you have been pushed to work harder than you thought you could					
4. Has your course challenged you to do your best work?					

Demographics	
Institution	
Gender	
Subject/discipline	
Year	
Full-time/Part-time status	

Appendix 5: Student engagement survey questionnaire A3

1. During the current academic year, about how often have you done each of the following?

	Very often	Often	Some-times	Rarely	Never
a. Asked questions in class					
b. Come to taught sessions unprepared (e.g. not completed assignments, readings, reports, etc.)					
c. Worked with other students on course projects or assignments					
d. Explained course material to other students					
e. Discussed your academic performance and/or feedback with teaching staff					
f. Talked about your career plans with teaching staff or advisors					
g. Discussed ideas from your course with teaching staff outside taught sessions, including by email					
h. Discussed ideas from your course with others outside of taught sessions (e.g. students, family members, etc.), including by email					

2. During the current academic year, how often has your coursework emphasised the following?

	Very often	Often	Some-times	Rarely	Never
a. Analyzing ideas or theories in depth					
b. Evaluating a point of view, decision, or information source					
c. Forming a new idea or understanding from various pieces of information					
d. Applying knowledge to new situations					

	Very much	Quite a bit	Some	Very little	Not at all
3. Do you feel you have been pushed to work harder than you thought you could?					
4. Has your course challenged you to do your best work?					

Demographics	
Institution	
Gender	
Subject/discipline	
Year	
Full-time/Part-time status	

Appendix 6: Student engagement survey questionnaire B

1. In your experience at your institution during the current academic year, about how often have you done each of the following?

	Very often	↔	Never
a. Asked questions or contributed to course discussions in other ways			
b. Come to taught sessions unprepared (e.g. not completed assignments, readings, reports, etc.)			
c. Worked with other students on course projects or assignments			
d. Explained course material to one or more students			
e. Discussed your academic performance and/or feedback with teaching staff			
f. Talked about your career plans with teaching staff or advisors			
g. Discussed ideas from your course with teaching staff outside taught sessions, including by email/online			
h. Discussed ideas from your course with others outside of taught sessions (students, family members, co-workers, etc.), including by email/online			
i. Worked harder than you thought you could to meet a tutor's/lecturer's standards or expectations			

2. During the current academic year, how much has your coursework emphasized the following mental activities?

	Very much little	↔	Very
a. Analysing in depth an idea, experience or line of reasoning			
b. Forming a new idea or understanding from various pieces of information			
c. Evaluating a point of view, decision, or information source			
d. Applying facts, theories, or methods to practical problems or new situations			

	Very much little	↔	Very
3. During the current academic year, to what extent has your course challenged you to do your best work?			

Demographics	
4. Institution	
5. Gender	
6. Subject/discipline	
7. Year	
8. Full-time/Part-time status	

Appendix 7: Student engagement survey questionnaire B1

1. In your experience at your institution during the current academic year, about how often have you done each of the following?

	Very often	↔	Never
a. Asked questions or contributed to course discussions in other ways			
b. Come to taught sessions unprepared (e.g. not completed assignments, readings, reports, etc.)			
c. Worked with other students on course projects or assignments			
d. Explained course material to one or more students			
e. Discussed your academic performance and/or feedback with teaching staff			
f. Talked about your career plans with teaching staff or advisors			
g. Discussed ideas from your course with teaching staff outside taught sessions, including by email/online			
h. Discussed ideas from your course with others outside of taught sessions (students, family members, co-workers, etc.), including by email/online			
i. Worked harder than you thought you could to meet a tutor's/lecturer's standards or expectations			

2. During the current academic year, how much has your coursework emphasized the following mental activities?

	Very much little	↔	Very
a. Analysing in depth an idea, experience or line of reasoning			
b. Forming a new idea or understanding from various pieces of information			
c. Evaluating a point of view, decision, or information source			
d. Applying facts, theories, or methods to practical problems or new situations			

	Very much little	↔	Very
3. During the current academic year, to what extent has your course challenged you to do your best work?			

Demographics	
4. Institution	
5. Gender	
6. Subject/discipline	
7. Year	
8. Full-time/Part-time status	

Appendix 8: Student engagement survey questionnaire C

1. In your experience at your institution during the current academic year, about how often have you done each of the following?

	Never	1-3 times	4-5 times	6-10 times	10 or more
a. Asked questions or contributed to course discussions in other ways					
b. Come to taught sessions unprepared (e.g. not completed assignments, readings, reports, etc.)					
c. Worked with other students on course projects or assignments					
d. Explained course material to one or more students					
e. Discussed your academic performance and/or feedback with teaching staff					
f. Talked about your career plans with teaching staff or advisors					
g. Discussed ideas from your course with teaching staff outside taught sessions, including by email/online					
h. Discussed ideas from your course with others outside of taught sessions (students, family members, co-workers, etc.), including by email/online					
i. Worked harder than you thought you could to meet a tutor's/lecturer's standards or expectations					

2. During the current academic year, how much has your coursework emphasized the following mental activities?

	Very much	Quite a bit	Some	Little	Very little
a. Analysing in depth an idea, experience or line of reasoning					
b. Forming a new idea or understanding from various pieces of information					
c. Evaluating a point of view, decision, or information source					
d. Applying facts, theories, or methods to practical problems or new situations					

	Very much	Quite a bit	Some	Little	Very little
3. During the current academic year, to what extent has your course challenged you to do your best work?					

Demographics	
4. Institution	
5. Gender	
6. Subject/discipline	
7. Year	
8. Full-time/Part-time status	

Appendix 9: Student engagement survey questionnaire D

1. In your experience at your institution during the current academic year, about how often have you done each of the following?

	Very often	Often		Some-times	Never
a. Asked questions or contributed to course discussions in other ways					
b. Come to taught sessions unprepared (e.g. not completed assignments, readings, reports, etc.)					
c. Worked with other students on course projects or assignments					
d. Explained course material to one or more students					
e. Discussed your academic performance and/or feedback with teaching staff					
f. Talked about your career plans with teaching staff or advisors					
g. Discussed ideas from your course with teaching staff outside taught sessions, including by email/online					
h. Discussed ideas from your course with others outside of taught sessions (students, family members, co-workers, etc.), including by email/online					
i. Worked harder than you thought you could to meet a tutor's/lecturer's standards or expectations					

2. During the current academic year, how much has your coursework emphasized the following mental activities?

	Very much	Quite a bit		Some	Very little
a. Analysing in depth an idea, experience or line of reasoning					
b. Forming a new idea or understanding from various pieces of information					
c. Evaluating a point of view, decision, or information source					
d. Applying facts, theories, or methods to practical problems or new situations					

	Very much	Quite a bit		Some	Very little
3. During the current academic year, to what extent has your course <u>challenged you</u> to do your best work?					

Demographics	
4. Institution	
5. Gender	
6. Subject/discipline	
7. Year	
8. Full-time/Part-time status	

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