

UK Engagement Survey 2014: Full report of the cognitive testing

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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 Higher Education Academy (HEA)-funded two-year pilot project exploring the viability of using items derived from the National Survey of Student Engagement (NSSE) in the UK, as well as piloting new UK-specific items. NSSE aims to evaluate student engagement with activities likely to enhance their learning outcomes (Kuh 2001) and was established in 2000 in North America and 484,919 students completed NSSE in 2014. Items from NSSE have been cognitively tested (Kuh 2001; Ouimet *et al.* 2001), but not extensively in a UK context. NSSE has been adopted in many different international contexts, including Canada, Australia, South Africa, China and Ireland (Coates and McCormick 2014).

This document reports on the cognitive testing of the 2014 pilot but draws extensively on the pilot project and cognitive testing from 2013. For the initial 2013 pilot HEA project, modifications were made to selected NSSE items to reflect the different national context, leading to the 14 items used in the first pilot of the UK Engagement Survey questionnaire. Cognitive testing was required to evaluate the robustness and validity of these items in the UK. A report provided an evaluation of student understanding and validity of the Student Engagement items derived from NSSE, across a range of institutional, subject and student characteristics. The results of the 2013 pilot are reported in Buckley (2013), which is available, with the full 2013 cognitive testing report as well as a set of case studies and other supporting resources, at:

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

Based on the review of the items, cognitive testing and user feedback, the questions from the 2013 pilot were modified for the 2014 pilot administration. An additional three scales drawn from NSSE were added (covering Reflective and Integrative Learning; Time Spent; and Skills Development). Two new scales were added on Engagement with Research and Formulating and Exploring Questions, leading to 50 items altogether that institutions could use in their own internal surveys (see Version 0 in Appendix 1). During the cognitive testing, an additional scale was piloted, on the theme of Students as Partners, leading to 54-56 items being tested during the cognitive review. During the testing, root questions, item wording, splitting and combining items, and adding new items were explored. The aim of this report is to inform development of the items, institutional understanding of results of the national pilot and to provide a broader context for students' understanding and interest in student engagement surveys. For the results of the 2014 pilot of the UK Engagement Survey, and information about the sources of the items and scales used, please visit

<https://www.heacademy.ac.uk/consultancy-services/surveys/ukes/ukes-final-reports>

I.1 Key findings

- Students were positive about the survey and thought it comprehensively covered very important elements of their overall student experience
- Overall, students were clear about what most the questions were asking
- There were, however, differences in students' understanding of questions and responses by both subject of study and institutional type
- Students thought the survey could be a good tool for universities to understand and learn about students' academic experiences
- Students appreciated the opportunity that this survey provided for them to think about their own learning experiences in a way they often had not before, particularly through the items addressing the amount of time spent on different activities
- Students found the items on engagement with research and formulating and exploring questions to be the most problematic in the survey

1.2 Introduction

This research project combined an analysis of the literature, related international efforts to modify student experience and engagement survey questions, and new primary data collection through individual interviews, to explore undergraduate students' 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 2014 pilot, to evaluate the validity and reliability of the piloted 50 items, thoroughly test the five new groups of items added for 2014 (consisting of 33 items) and make overall 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 does students' disciplinary background influence their response to the questions?
4. How do students from different year groups respond to the questions?
5. Do students from different institutional types and modes of study respond to the survey differently?
6. Do students interpret the questions as cohesive scales?
7. Do students think these are important questions?
8. Do students have suggestions for changes or additional 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 in fact slightly surpassed; 42 students from eleven different institutions were interviewed.

The majority of interviews were conducted at the interviewee's own institution. The researchers conducted interviews with distance students via Skype. Interviews were held in a room provided by the students' union of the institution visited, a room arranged by academic staff or in a room provided by the Educational 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 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/13/14-60) 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 42 students were interviewed from 11 institutions: Brunel University, King's College London (KCL), Sheffield Hallam University, University of Bath, University of Exeter, University of Glasgow, University of Lincoln, University of Liverpool, University of Sheffield, University of Winchester and the University of London (International Programmes). Three of these institutions took part in the survey pilot.

There was a mix of first, second, third, fourth and fifth year students interviewed. About a quarter were first year students, half of the students had just completed their second year of study and the rest were a mix of final year students (comprising third, fourth and fifth year students due to the nature of the Scottish higher education system and students on longer degree courses such as Medicine). The students were drawn from 28 subjects: Accounting and

Finance; Applied Nursing and Social Work; Biological Sciences/Biochemistry; Business; Business and IT; Business and Management; Business Management with Sports; Management; Childhood Studies; Choreography and Dance with History; English and French Law; English and Drama; English Literature; European Studies and Spanish; Forensic Science; History; Law; Liberal Arts; Mathematics; Medicine; Microbiology; Pharmacology; Politics and Sociology; Primary Education; Public Policy; Social Policy; Social Work; and Sociology and Law.

There was 60/40 female/male gender representation (similar to respondents to the 2014 pilot). Three-quarters of participants were domiciled in the UK, with equal numbers of European Union (EU) and international (non-European Union) students. One in eight students lived in Halls, another eighth lived in their own home and the rest lived in rental accommodation.

Half of the sample was in the 19-21 age range; another quarter was 22-24; and the rest ranged from 25-42. The sample included a number of mature students and five students studying via distance.

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 up to publication without needing to give any reason. Finally, all students were asked if the researcher could record the interviews.

Interviews lasted between 25 and 60 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 is built on the findings from the 2013 pilot of the UK Engagement Survey (Kandiko and Matos 2013). It included 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 (McCormick et al. 2013). 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 and China (see Coates and McCormick 2014). 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 original root questions, updated root questions and different item wording. Scripts and questionnaire versions were updated and tested iteratively as sets of interviews progressed (see Appendix for Versions 0-3).

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. Students were then asked to fill in and reflect on each item in one group of questions (see survey Versions 1-3 in the Appendix). Following the interview scripts, first students were asked to fill in

sections, followed by a discussion. 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 or wording; if they thought of different questions they should be asked in an engagement survey, and so on. Finally, students were asked general questions about the role of an engagement survey as a student voice mechanism and comparisons with satisfaction-based surveys.

Stage 2

Three versions of the survey were used (V1, V2 and V3) mainly to test wording and scales of questions. Three pilot scales (on engagement with research and formulating and exploring lines of enquiry, and a further scale on partnership proposed for UKES 2015) were tested with multiple wordings and question types.

After the first set of nine interviews, the original questionnaire (V1) was modified and a new version was created (V2). This was tested during a further set of 21 interviews. The questionnaire was then re-written and restructured based on the feedback of all interviews conducted up to that point (V3). This aimed mainly at focusing the wording of the questions, as well as testing additional questions for the pilot benchmarks for research and partnership. This process was conducted for one further round (of 11 interviews), resulting in the recommended questions, order of items and response categories (V4), included in the Appendix.

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

Stage 3

Two methods were used to measure reliability:

- 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 root questions 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 and 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, these five problems, drawn from the literature, 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 'knowledge base' in the subject of Drama)
2. Inclusion and exclusion problems – Exploring students' determination of whether certain concepts are to be considered within the scope of an item (such as whether 'your experience at this institution' included student union-led activities)
3. Temporal problems – This includes the time period to which the question applies (such as when averaging hours per week when amounts varied during term-time)
4. Logical problems – Exploring how students interpret phrases like 'and' and 'or' in survey questions (for instance in response to the question 'Analysing ideas or theories in depth by examining their parts', when a student felt she analysed theories as wholes but did not analyse their component parts)
5. Computational problems – Including difficult mental arithmetic or complicated syntax in questions (such as adding up hours per week or responding to questions such as 'Exploring open-ended lines of enquiry formulated or proposed by teaching staff (including problems, questions or scenarios))'

1.5 Terminology

The phrase 'students' union' is used throughout the report for clarity and consistency, although the relevant organisation has different names at different institutions (guild, representative council, etc.).

2. Findings

General findings about the survey are discussed first. Then each question and item is discussed individually in order, followed by findings related to each scale. This is followed by an analysis of the piloted Students as Partners scale.

Diversity of students' experiences and institutions' feedback: Reflections from 2013-14

As in the 2013 research, again we found a great diversity of students' experiences, engagement and perceptions of quality, as well as strong comments from students about policies and practices related to institutions' feedback to and from students, particularly regarding student survey data. Again, students were generally overall positive about the survey, with no major complaints about length (despite the survey being four times longer than in 2013) or content. Students were very positive about the fact that institutions were interested in exploring the various dimensions of student engagement with broad aspects of student life. However, many students noted that after filling out surveys or evaluation forms at their institutions, they never heard back from their institution regarding responses or actions. Students noted how they regularly "could not be bothered" to fill out surveys, especially if there was no incentive or if it was not clear what would happen in response.

Again as in 2013, students regularly commented on how their selected course was different from others at their institution, with most students feeling that their course experience was unique in particular ways. This came out strongly when students explained the types of thinking, forms of assessments (whether these facilitated collaborative learning or not) and gains from their course. Some questions inherently pertain more directly to different courses (e.g. "Connecting your learning to societal problems or issues"):

I do that very much so, just because my, you know, my degree is social policy, so I'm always, like, looking into different problems and trying to formulate ideas on how to solve it. I predominantly want to go into policy formation, so I'm always doing that. (Female, 22, Social Policy, UK student)

Never. (Female, 20, Mathematics, UK student)

I'm afraid in Maths it's very difficult to do this because we very rarely get physical problems. (Male, 20, Mathematics, UK student)

The gains item "Analysing numerical and statistical information" also had particular course-based responses:

I put very little, because in my course I really don't have to deal with maths, or any kind of statistic, no. (Female, 21, Childhood Studies, UK student)

I put very little because I have done very little of that. And can't think of any teaching I've had on it either. (Female, 22, Medicine, UK student)

I put very little because I just don't have to do it in my course at all. (Female, 29, Choreography and Dance, UK student)

I put some for that. I mean, we rarely do that, if I was doing physics it might be different. (Female, 20, History, UK student)

Students were perhaps less aware how diverse the student experience can be in other institutions, although differences of experiences at campus-based and urban institutions were commonly noted. Further detail of institutional differences noted is discussed below.

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. Several students noted how they spent a lot more time thinking about the questions in the context of the interview than they would when normally filling out a survey, usually aiming to get through it as quickly as possible.

Institutional-type difference

There are clear differences in both interpretation of survey questions as well as engagement with the survey itself when comparing responses from research-intensive university students and those from teaching-intensive institutions. It seemed that students in the former were much more at ease with the survey generally, but especially with the more complex questions which require a different level of engagement and reflection about one's experience of being a university student. This difference was also noted in terms of what students prefer to be asked about.

In certain instances there were issues about interpretation of some questions across institutional type. Ultimately one could say that in such instances, parts of this survey can be seen as perhaps representing idealised views of higher education (particularly in relation to pilot scales on Engagement with Research and Formulating and Exploring Questions). We therefore recommend that complex questions which do not reflect on a broad student experience, but rather an idealised view of it, should not be included in the core survey but could be included in optional question banks with appropriate advice and guidance.

Engagement surveys as student voice mechanism

Students generally thought engagement survey data could be useful as a mechanism for allowing the student voice to influence decision-making, but many noted that it depended on the institution taking action and who saw the data. Several students were sceptical that engagement survey data could be used for enhancements due to the variety of courses on offer and the particular nature of their course in relation to the institution. However, many students felt the survey covered important topics related to their academic experience, and covered areas they thought could be improved.

I think it is good because it's a good way of actually quantifying what people think, how many people have this opinion, and where people find things weak or strong within the course or within the institution. (Male, 23, Medicine, UK student)

Yes, it does. I mean, I've never thought too much about my experience in uni, until, like, I've given a survey and I read through all the questions and started thinking, yes, actually I quite enjoy it. (Female, 21, Childhood Studies, UK student)

I think that would be good because the way that these questions are, it's a little bit different than the ones you get at the end of the terms, like, oh, what could we do better? It's more in depth in the way that... and it's more realistic, so I think something like this would be good for the university. Whether they'd use it or not, I don't know (Male, 30, Social Work, UK student)

Engagement surveys compared to satisfaction surveys

Several students had completed the National Student Survey (NSS), or institutional surveys employing the same or similar questions. On the whole students felt the NSS was generic and too broad, but useful for pointing out aspects of their student experience the institution should improve. To this end, students felt the NSS was more aimed at institutions' priorities, and engagement surveys covered aspects more important to students' own learning experience. Students also noted how the engagement survey made them reflect on how they had spent their time, and about different types of learning activities. Most students felt that engagement and satisfaction surveys covered different aspects of their student experience, and although both could be useful depending on how the data was used, engagement surveys allowed them to reflect in-depth on their student experience and for institutions to have access to this data.

I think this one's better because it makes you like actually pin point, like you're given a set of like descriptive answers...questions and you like...it helps you pin point what your issue is. Whereas, in a satisfaction survey, I feel like it's just disengaged and it just gives you an opportunity to rant rather than see what's positive and negative at the same time. I feel like if you say satisfaction to a student, will automatically go to negative. If you say, like, survey about how you go on in university, just saying this was good, this was not, I think it's better because it's like a more balanced view. (Female, 22, European Studies)

I think you need both, you need both. But I think satisfaction gives you more a maybe honest answer. Engagement, you can be engaged but not satisfied. Or you can be the opposite, not engaged and still satisfied kind of thing like you need both, I think you can't just have engagement, it won't tell you enough. (Female, 22, Medicine, UK student)

Yes. I mean, I think... So the NSS one it's more about... I do feel it's more about... it's more for the university and for, like, the departments, you know, where they're going wrong and to improve it and make it better, and this is more effective for me, like, what you got out of Uni, what do you feel you've gained. So it does feel like a totally different... it feels like a totally different survey, like... Like, the NSS one's, like, testing the university and this one feels like more testing me, because it's about what have you done at university to make...to answer all these questions, kind of thing. (Female, 22, Microbiology, UK student)

Well, I thought the NSS was rubbish. (Male, 22, History, UK student)

Root questions

The root questions (the leading question preceding a set of items) were explored. Most root questions were clear to students and were interpreted consistently. A few directed students to reflect on certain activities and not on others in their responses, see example below:

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

During the current academic year, how much has your course emphasised the following mental activities?

The wording of 'coursework' seems to have a different connotation in the US context than in the UK due to different patterns of assessment. It recommended to change the root questions in Questions 2 (Higher Order Learning) and 3 (Engagement with Research and Formulating and Exploring Questions) to 'how much has your course emphasised'. When the word 'coursework' is used students predominantly referred to their assignments and exams (the latter which some first year students do not take until the end of their first year). When 'course' was used students included coursework, activities done during taught sessions as well as revision activities.

For Question 6 (Skills Development Scale), the root question presented an interesting case:

How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

For institutions with strong students' unions, some students interpreted this question to only include institutional-based (e.g. 'corporate-branded') activities but not those associated with the students' union (e.g. employability skills or citizenship development). When the root question was changed as below then students included both institutional and students' union activities:

How much has your overall student experience contributed to your knowledge, skills, and personal development in the following areas?

The latter option had a much broader connotation for students, and there was a noted difference in how students responded. This raises the issue about whether the survey is interested in solely institution-led activities or those done through the students' union as well. Suggestions for the latter are included in the recommended final version in the Appendix.

2.1 Questions

Questions are discussed in order from the original version of the questionnaire (see Appendix 2). Following statistical analysis and findings from the 2013 report, six of seven initial questions were only tested for clarity and consistency, as they had not presented any challenges to interpretation or understanding.

Question 1

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

Item 1a: 'Asked questions or contributed to course discussions in other ways' to be changed to "Asked questions or contributed to class discussions in other ways".

This item was clear to students, but as noted in the 2013 report there were differences in disciplinary practices about asking questions. Natural and biological sciences students tended to ask informal questions in laboratory settings, but not necessarily consider this part of the question. Humanities and social science students regularly spoke in class settings. With perhaps one exception, students stated that they did not ask questions in lectures, but rather in tutorials or seminars. Students felt that the lecture setting was not an appropriate space to ask questions.

Distance students, when prompted, did not refer online forums as a place they felt worked either as a setting for asking questions to their tutors. No campus-based students mentioned on-line forums in relation to asking questions. As students interpret the question as 'class' the change is suggested, to prevent confusion with asking questions about how the course is progressing (such as module order or assessment design).

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

Item 1b: 'Come to taught sessions prepared (e.g. completed assignments, readings, reports, etc.)' to revert to the original question: 'Come to taught sessions unprepared (e.g. not completed assignments, readings, reports, etc.)'.

Students overall clearly understood this question in a similar way to each other, as in having done the readings or, in certain cases, an assignment, ahead of their taught sessions. Our experience with this question in interviews for the 2013 project, however, makes us conclude that the original version of the question prompts the student to think about how they prepare (or fail to do so) for class more so than the question in this current form. Despite changing the question in response to statistical analysis from the previous year, we recommend reverting the item to the original wording.

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

Item 1c: '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.

Yes, we worked closely in groups this year but like we had a big group project at the end of the year so I got very close to my group members so we relied on each other heavily in terms of like not just for the group project but in terms of other things throughout the year just because we had to be close, so they helped a lot. (Female, 22, Medicine, UK student)

That one's often. Hold on. Yes, I'm always discussing with my friends. We tend to not pick the same questions, but a lot of the time, the assignment is actually the same kind of thing, and we, like, will discuss whether we've included a certain subheading within it or not, just in case we might have missed something. (Female, 19, Social Work, UK student)

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

Item 1d: '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. Students often felt very positive about helping other students.

I got called an IT helpdesk once. (Female, 20, Business and IT, UK student)

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

Item 1e: 'Discussed your academic performance and/or feedback with teaching staff' to remain unchanged.

Students seemed to find this question very clear. As noted in the 2012-2013 report, this is often a rare occurrence for students. If students marked 'Sometimes' that often referred to a single event occurring.

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

Item 1f: 'Talked about your career plans with teaching staff or advisors' to remain unchanged.

Students almost never talked about career plans with staff. In a few cases, students in their first or second year did not appear to see this as important. This question was more relevant for final year students. However, in certain institutions there is a strong emphasis on career skills and students are engaged from their first year in developing CV writing skills and other employability-oriented activities.

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

Item 1g: 'Discussed ideas from your course with teaching staff outside taught sessions, including by email/online' to remain unchanged.

Students rarely indicated discussion outside of class occurring, but when they did, it was mainly by email. Many students interviewed did not feel comfortable with the idea of initiating contact with a member of the faculty, nor felt a strong desire to do so.

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

Item 1h: 'Worked with teaching staff on activities other than coursework' to remain unchanged.

Some students questioned the use of 'coursework', and asked to what exactly the question referred. The majority however stated they had not worked with teaching staff in activities not directly related to their lectures and coursework. For those that had, there was a variety of activities other than coursework that the students thought of as the quotes below demonstrate:

Not really. Coursework was something I struggled with so I went to teaching staff to get information about that mostly. There was one time I'd spoken about like internships but I didn't think they were the best to help me. Like I went to the careers sessions all this year so I didn't really go to my teaching staff because I didn't think it was necessary. (Female, 22, Medicine, UK student)

Sometimes, predominantly because there's not many people who study social policy, so at the time, the teachers will come to one of us to try to engage in something else. So I'm doing a video later on in the week for...to put on the website for social policy at the uni, and I had to do an article for the blog because I attended a conference for them, so... (Female, 19, Social Policy, UK student)

Often, because I've done a couple of sort of extra projects on the side with some of my supervisors or things, or just like a little bit of extra work, and then sort of trying to bump up my CV and things. (Male, 23, Medicine, UK student)

Yes, I was a bit confused, because on activities, I'm not very sure, what sort of activities do you mean? Do you mean like lectures, seminars, like, group activities, or how do you mean by activities? (Female, 21, Childhood Studies, UK student)

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

Item 1i: 'Made significant changes to your work based on feedback' to remain unchanged.

This question was clearly and similarly understood by all the students we interviewed. To note, however, that in many instances students stated they do not receive any feedback on their work.

Maybe usually is to prepare for the next one; at the end of every assignment we get a little feedback. But sometimes throughout the year we can get feedback or sometimes before the [unclear] assignment you can get some feedback on your draft work or... so, yes, I try to use feedback. (Female, 39, Nursing and Social Work, EU student)

Again, I put sometimes because it varies a lot across the lecturers; some lecturers give you really good feedback and say exactly what needs to be changed, but if you're doing a question like that again, but then obviously it's just, you've got it wrong. I think with maths it's one of these where it's not like we do essays that need to be revised, you work on case studies and you can approach your lecturers to ask how to go about it but you don't hand in versions of it, it's just you hand in your final finished piece and you get marked. (Female, 20, Mathematics, UK student)

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

Item 1j: 'Asked another student to help you understand course material' to remain unchanged or to be deleted.

Students interpreted this item as asking for help in both functional terms (such as essay lengths and deadlines) and in academic terms (such as clarification of facts or procedures). It seems however that this is not a standard practice and some students even stated they would rather work things out individually. Some students had a defensive response to this question, stating that although they may help other students, they did not need to seek help from other students, seeing it as a sign of weakness or stupidity.

Never. I've never done that. I just... I really wouldn't because we discuss it in class anyway in seminars and I mean, it's kind of like, it would appear stupid if you go and ask someone like to explain an article that you can just like read twice if you don't understand the first time. (Female, 22, European Studies, EU Student)

I put sometimes. That is usually when it comes to exam time, you know, revising a topic, I have sometimes worked with other students, and if I've missed a lecture or something, then I've asked students for their notes, or that kind of thing, or just can you briefly explain what happened, like, in that war, or something like that, you know. But yes, sometimes, because usually I'm all right, so... (Female, 20, History, UK student)

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

Item 1k: 'Prepared for exams or assessments by discussing or working through course material with other students' to remain unchanged.

A few students raised issues with the question, worrying that the phrasing might lead to charges of collusion on assignments. However, most students were clear about preparing for assessments together but completing them on their own. Students did not feel the activities covered in this question included 'revision'. Students generally felt they might share notes or materials with other students, but generally revised for assessments and exams on their own. Considering this, interpretations varied among interviewees:

Oh, like group activities. Oh, definitely. We all hate working in groups, because like whilst... if there's a group of four, like two people will get on and they will like do all the work, and then like one person will slack and then the other person will like half do the work, so we like... students generally, just really don't like group activities, like group presentations, no. It just like never really works unless like you're besties with the other person. (Female, 22, European Studies, EU Student)

Yes, I put often, as well. I always do that, like, I make sure that I know, what our writing topic is for the next assignment. I just ask them, like, in seminars, or text them, maybe. Yes. (Female, 21, Childhood Studies, UK student)

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

Item II: 'Combined ideas from different modules when completing assignments' to remain unchanged.

Students seemed to have interpreted this question as asking whether some things they learned in a few modules could be used in others. There seems to have been no issue with this question as overall the understanding of it was quite similar across students.

Sometimes. Because the question says based on this academic year, my modules I do this year aren't connected, but some modules I did last year are connected to this year. So if it was in my whole experience, I would have put very often, but because it's only for this academic year, I just put sometimes, because some stuff can kind of relate, but not really. (Female, 20, History, UK student)

I put very often because I think it's just the nature of the course more, it tends to overlap quite a lot so that you can draw from different ideas and you actually get credit for doing that, so, for example, if I was doing an essay on international law, if I mentioned, like, the human rights aspect, which is covered in one of my other modules, you get more credit for that, so there seems to be an overlap and you actually get credit for sort of integrating that into your own work, so it's encouraged as well. (Male, 20, Law, UK student)

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

Item I m: 'Connecting your learning to societal problems or issue' to remain unchanged.

This question was generally understood by the students and with the meaning of linking their studies with real-life examples. What varied was whether they thought they were being asked if that had managed to resolve societal problems or simply contextualised their learning with the "outside" world. See above in 'Findings' regarding subject-specific responses to the item.

Yes, I think I've done it sometimes. Like, sometimes it's easier to understand something if you try to, you know, to compare it to a real problem or issue. So yes, I think I use that to try to understand it better, like, e.g., with politics or something. Like, it was easier if you would try to find a real example. (Female, 22, English Literature, UK student)

I mean, again I... some of these questions are more tailored towards maybe, like, a sociology degree I think, because, like, towards... my learning towards societal problems and issues not really, I like... you know, I know a lot about, like, medical problems that we have and, you know, the disease burden and stuff like that, but it's more from a scientific perspective. And I guess I have... I guess I have learnt some things and I do, like, have an awareness of some of the problems, but that's more because... that's not really through my course, it's more, sort of, like, wider reading afterwards. (Female, 22, Microbiology, UK student)

Well, sometimes. I think I should have put, like, never. Yes. I put sometimes because I was thinking about some other, like, local businesses and have you reflected upon them, and then social factors that they have to consider. So I put sometimes, but it was only the odd few times for this particular... (Female, 20, Business and IT, UK student)

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

Item I n: 'Examined the strengths and weaknesses of your own views on a topic or issue' to be changed to 'Identified the strengths and weaknesses of your own opinions', further rephrased or deleted.

Several students were unclear about what this item referred to in their experiences. Many struggled to think of examples for this item, or thought that examining strengths and weaknesses of your own views was always part of the thinking process. Several students thought it was an inherent part of the next item (see Item I o). From the quotes below it is clear that there was a rather diverse range of interpretations of what was meant by the question. Most problematically, some students did not understand the question at all. It is essential that a questionnaire is clear and we

believe this question as phrased does not broadly meet this criteria. However, as also noted below, when students can identify the strengths and weaknesses of their own views they relate it to developing reflective and critical thinking.

This is one actually that took me a couple of re-reads to understand what it was asking me because your own views on a topic doesn't really come in my subject. It's more about knowledge based... but I took that as how you approach the problem rather than like having your opinion on things just because of that's how my topic is structured. (Male, 20, Mathematics, UK student)

I put, often, just because I'm always quite open to other people's interpretation of a situation. It doesn't necessarily mean it's going to change my mind, but I'm very open to hearing other people's opinions. (Male, 30, Social Work, UK student)

I put sometimes, but I didn't really understand that question. Like, I kind of struggled to think of when I would have done that or really what it meant. (Female, 22, Medicine, UK student)

There isn't much aspect for interpreting your own views in something. Sometimes there is with, like, blood spatter and stuff, but a lot of time, it's generally this is what it is or it's in this boundary. So it's more sort of that's what it is. (Male, 21, Forensic Science, UK student)

I'm not really sure how to talk about that one. That was... I think I put Often, and that's probably because when I'm being taught something new I will look back, because our course does encourage us to sort of keep a log: what was your thinking here? What was your thinking here? What was your thinking here? How has your view changed? (Male, 20, Business and Management, UK student)

I said sometimes, but I don't think I've done that probably enough. Yes, I don't tend... I'm not very good at like reflecting. I think that's something that's quite difficult to do and we are encouraged to do it quite a lot, but... and I know you have to do it once you start working a lot as well. But, yes, it's quite difficult to do that I think (Female, 23, Medicine, UK student)

Because some of the modules are challenging, you know, so you see yourself in it, and then you know where you have to improve yourself (Female, 42, Social Work, UK student)

I put often, because so much of the teaching that I have is discussion-based and seminar-based where lecturers and then other students kind of actively challenge what you're thinking, and so you have to really think of what you're saying in terms of why it's strong or why it's weak in relation to kind of other things that they say, so... (Female, 20, English Literature, UK student)

I think I put sometimes. Yes, like, I'd say that I'm, like, critical of myself even, like, not good at a topic and I'm, like, I'm aware that I'd want to know if I can improve on it. (Female, 22, Microbiology, UK student)

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

Item 1o: 'Tried to better understand someone else's views by imagining how an issue looks from his or her perspective' to remain unchanged.

This question did not seem to raise issues with students, who generally interpreted in similar ways. Some noted overlap with the item above.

It's a little bit, I think, similar for me that, yes, I try to put myself in the friend's shoes and see... (Female, 39, Applied Nursing and Social Work, UK student)

Again, often. It ties into the previous question, I think. (Male, 20, English and Drama, UK student)

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

Item 1p: 'Learned something that changed the way you understand an issue or concept' to be changed to 'Changed the way you think about an issue or a concept as a result of what you learned' or deleted.

This item seemed too broad, and there was no consensus on how students interpreted 'something' as referred to in the question. Furthermore, and as one of the quotes below states, this question is more relevant to the humanities and the social sciences and may not feel applicable to STEM students. Overall, from the responses to the interviews, students do not seem to find this question particularly meaningful or useful. Given students' responses to this question, it is also unclear what institutions could do to improve on this metric.

Yes, so as I developed my political... or like understanding about more political things, that changed the way I saw stuff work, just like how the education is set up in England and stuff like that. (Female, 22, Medicine, UK student)

I mean, I think again I feel that these questions feel more, sort of, they're not, sort of, science degree based. Like, I think if I was studying some sort of... you know, if I was taking some sort of, like, politics class or a sociology class or, like, economics class, I can understand how these questions... how that you'd build on your knowledge in that way. But I wouldn't say my course really does. (Female, 22, Microbiology, UK student)

I put often, because sometimes you do get that you have this set of ideas, and not until, you know, you get a new fact or a different perspective, you don't actually know whether your understanding is correct. So I do do that sometimes, you know, especially when it comes to applying for training contracts for my profession. We do look at other ideas and try to incorporate it already idea that I've already got. So I do do that often, yes. (Male, 21, Law, UK student)

I put sometimes again. Yes, I don't think I do that very often either. I think it's quite hard to do it. I don't know. It's... I think it's just a continuing process of learning things and then you like realise it's sort of like building your knowledge but... yes, I should probably do that more often than sometimes then, but... (Female, 23, Medicine, UK student)

I learnt about... there's a module called Critical Debate and we learned about homosexual issues and we watched a film and it really changed my mind. And we had to write a critical reflection on it and I really, you know, I involved myself in as a mother. Like if my son was going to be a gay or something then I have to be open minded because that is their choice and it's inborn so if they want to do it you cannot force your values on them. You cannot force your values on them so that really changed the way I looked at a lot of things and it was helpful. (Female, 42, Social Work, UK student)

Not really to be honest. Not that I can think of. No. (Female, 29, Social Work, UK student)

I put sometimes. Yes. Something that changed the way you understand... It's a bit... learned something is a bit broad. I don't quite get, like, in terms of what, that's changed the way I understand an issue. It could be anything. So I feel like, I'm a bit confused, like, for number P. Sorry (Female, 21, Childhood Studies, UK student)

I put sometimes, because I mean, we mostly learn new concepts and when you've done something that you've already learned, like you can understand it better, but we don't always like learn something new, but yes, I guess like if you re-do something then you kind of like may understand it better sometimes because there's some concepts in political theory that you have to look over more than once.. (Female, 22, European Studies, EU student)

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

Item 1q: 'Connected ideas from your course to your prior experience and knowledge' to remain unchanged or deleted.

Students questioned if this item referred to prior-year university knowledge and that gained during A-level study or non-academic personal experiences they have had. In the case of the former, students felt it was always necessary to draw on previous knowledge at university. When students were prompted to select a question to remove, this was the item most often chosen, largely due to the broad nature of the question.

This one I think, I put often, because it's something that like in doing job applications it's kind of highlighted to me that all your knowledge is interconnected and the more you can show kind of threads of experience are a good thing, and I think that actually students have a lot more prior experience and knowledge than they sometimes think they do, and that they

sometimes bring to a course. They might think, oh I know nothing about African writers but actually they've done something somewhere that does link in with it now, African art in year nine or something that's somehow interconnected. So, I think... I think students do it, or I know I do it a lot more than I even realise, but it's really cool when I do realise it, it's very exciting. (Female, 20, English Literature, International)

I'm not sure whether it meant, like, life experience and knowledge, or just previous education, but like, I did a lot of things at college which connect to what I do now. A lot of my friends don't have that privilege, because they did completely different, like, curriculum or whatever, to me, but a lot of my stuff, from right back to secondary school, leads on into university for me, which is good. So I've kind of got a lot of previous knowledge that connects to this. (Female, 20, History, UK student)

Yes, I put often. And the reason being that, for example, I've lived in foster care, and I did the laws of succession, one of the topics that is family provisions. And that... answering questions in that area I was able to connect it with the background I had. And you know, the experiences I had, being able to understand, you know, the differences between, you know, foster child and adult and child and all these things that we did in the course, whilst having had that experience I'm able to connect that with my own personal experiences. (Male, 21, Law, UK student)

Question 2

The rewording from the 2013 pilot seemed to resolve most of the issues with the following scale. All of the items in Question 2 had less relevance for science students. It is recommended to change the root question to 'how much has your course emphasised'. When the word 'coursework' is used students only referred to their assignments and exams. When 'course' was used students included coursework, and activities during taught sessions as well as revision activities. Discussion of overlap between questions is discussed in the 'Scales' section below. As noted in 2013, there were marked disciplinary differences in how students interpreted and responded to these questions.

'During the current academic year, how much has your coursework emphasised the following mental activities?'
(Response categories: Very much / Quite a bit / Some / Very little)

Item 2a: 'Memorising course material' to remain unchanged.

This item was clearly understood and interpreted by all interviewees.

'During the current academic year, how much has your coursework emphasised the following mental activities?'
(Response categories: Very much / Quite a bit / Some / Very little)

Item 2b: 'Applying facts, theories, or methods to practical problems or new situations' to remain unchanged.

This item was clearly understood and interpreted. Some students commented that they applied theories but not necessarily to practical problems.

'During the current academic year, how much has your coursework emphasised the following mental activities?'
(Response categories: Very much / Quite a bit / Some / Very little)

Item 2c: 'Analysing ideas or theories in depth by examining their parts' to be changed to 'Analysing ideas and theories depth'

Several students mentioned that although they analysed theories in their course, they did not necessarily do this by breaking down the theory into parts. Generally this item was clearly understood and interpreted by all interviewees.

'During the current academic year, how much has your coursework emphasised the following mental activities?'
(Response categories: Very much / Quite a bit / Some / Very little)

Item 2d: 'Evaluating a point of view, decision, or information source' to remain unchanged.

This item was clearly understood and interpreted by all interviewees.

'During the current academic year, how much has your coursework emphasised the following mental activities?'
(Response categories: Very much / Quite a bit / Some / Very little)

Item 2e: 'Forming a new idea or understanding from various pieces of information' to remain unchanged.

This item was clearly understood and interpreted by all interviewees.

Question 3

It is recommended to change the root question from 'how much has your coursework' to 'how much has your course emphasised' as noted in Question 2, this provides a more encompassing question. When 'course' was used students also included activities with staff, as well as coursework, assessments and activities.

'During the current academic year, how much has your coursework emphasised the following activities?'
(Response categories: Very much / Quite a bit / Some / Very little)

Item 3a: 'Learning how knowledge is created in your subject' to possibly be combined with the item below.

Students were generally unclear about this question, preferring a question about 'how research is done', but then the question becomes very similar to 3b.

I was thinking about making my own research. Like, I'd soon not just stick to what my teachers had told me, but yes, if I need to write an essay or to... I wrote to my [unclear]. You obviously needed to investigate deeper, so yes, like, creating knowledge by my own, you know, by my own, like, researching to achieve more knowledge and to learn more things and to get more information. (Female, 22, English Literature, UK student)

When you say knowledge creation I think, okay, so I think in terms of coursework, like once I got a question, like going back into like research and past papers on it. I don't know if that's knowledge creation, it's more like... it's more like peoples' thoughts on a topic, like I don't know if that's... I think some topics there isn't much knowledge, there might be a lot of work but there's not much firm knowledge so I don't know how to answer that. (Female, 22, Medicine, UK student)

That was difficult; I'm not sure if I actually understand the question, to be honest. Learning how knowledge is created in your subject. I felt like who? Are you talking about the staff themselves in research, or...? It feels like a vague question to me. I put a question mark next to it; I just didn't understand. (Female, 22, Public Policy, UK student)

'During the current academic year, how much has your coursework emphasised the following activities?'
(Response categories: Very much / Quite a bit / Some / Very little)

Item 3b: 'Learning about methods of research and analysis in your subject' to remain unchanged.

Students found this question overall clear, even if many stated they had not done it at all or done it very little. If students felt they had done this, it was usually in a module focused on research methods.

Yes so I said maybe a little, coursework didn't teach me a lot about that, it was we had a real module on that, so I learnt a lot about that there and maybe from older students, I don't... teachers themselves, I don't think coursework taught us that, so it was very little. (Female, 22, Medicine, UK student)

I put very little for that, we don't really. I don't know, we're aware that, like, research and analysis happens because we obviously read a lot of academic papers, but, [inaudible] how that happens, I mean, I presume it's just people sat in libraries reading cases, but ... so, yes, I put very little for that. (Male, 20, Law, UK student)

'During the current academic year, how much has your coursework emphasised the following activities?'
(Response categories: Very much / Quite a bit / Some / Very little)

Item 3c: 'Learning about the results of current research' to be changed to 'Learning about the outcomes of current research'.

'Results' has specific disciplinary connotations, generally towards the sciences. Arts students were more comfortable responding to a question about the 'outcomes' of research, which was also applicable for science students.

Well, this kind of frustrates me, because I feel like we draw on past research too much and obviously policy is always changing, so I feel like more could be done in that area. Again, it's a very small department and things like this, but we are kind of encouraged by some lecturers to go out and research more and I know we should be doing that, but we're so sort of bogged down by course work we kind of just want to get through the work. So, yes, that annoys me that it's not current enough. (Female, 22, Public Policy, UK student)

Quite a bit, just because I use academic...I don't really use books. I always use journals because I remember from my first year, one of our lecturers said, when you're writing, they'd prefer you to use academic journals and it's so easy, the way that the library...to access it, and that's all current, generally, so with that I put, quite a bit. (Male, 30, Social Work, UK student)

'During the current academic year, how much has your coursework emphasised the following activities?'
(Response categories: Very much / Quite a bit / Some / Very little)

Item 3d: 'Exploring the knowledge base of your discipline actively, critically and creatively' to be significantly rephrased or deleted.

Students were generally very unclear about this item; several did not know what 'knowledge base' referred to, questioning if it was the knowledge they had learned or knowledge generally.

I said very much, because we have to criticise what articles say and we have to like say why we're criticising them, so it's critical and creative. (Female, 22, European Studies, EU student)

Exploring the knowledge base of your discipline actively, creatively... critically and creatively – I'm assuming it's going to be very much, but I'm not sure what it means by knowledge base, does it mean what I know, or what everyone knows? What other people know, or, you know, what I know, but...? (Female, 20, History, UK Student)

I'm not a very creative person, so I said some, in that I know that I'd be faced with tasks that have made me... forced me to be resourceful and creative in just a number of ways, like coursework, extracurriculars, so I know I have improved somewhat, but I will never be an imaginative person. (Female, 22, Public Policy, UK Student)

That's to do with theories, I would think, or the way that those theories are being used in social work practice now. So whether it be... I don't know. At my placement, I was using the psychodynamic approach quite a lot, I was using the humanistic approach quite a lot, and you're looking at... because though you have a specific knowledge base, it would vary depending on where your placement is. There was attachment I used a little bit in one of my cases, but if you're in children, it would be totally different when you're looking at attachment theories, so again, I think it's to do with theories, that's what I think. (Male, 30, Social Work, UK Student)

'During the current academic year, how much has your coursework emphasised the following activities?'
(Response categories: Very much / Quite a bit / Some / Very little)

Item 3e: 'Formulating your own open-ended lines of enquiry (including problems, questions or scenarios) to be significantly rephrased or deleted.

Some students found it difficult to understand what was meant by "open-ended lines of enquiry". Most students were unsure of exactly what this referred to in the item (and the two items below).

Open-ended lines. Your own opinion? I mean, so, well, open-ended, well, the first thing that comes to my mind is open-ended questions, so, your own view. If that make sense? (Female, 19, Social Work, UK Student)

*'During the current academic year, how much has your coursework emphasised the following activities?
(Response categories: Very much / Quite a bit / Some / Very little)*

Item 3f: 'Exploring open-ended lines of enquiry formulated by yourself (including problems, questions or scenarios)' recommend this item to be significantly rephrased or deleted.

As above, some students found it difficult to understand what was meant by "open-ended lines of enquiry". Students also noted overlap between this item and the one above.

It just made me think of, like, you're reading some papers and you thought yourself, like, what else could be done or what's the follow up research for this? That's what I'd interpret that in my field as an open ended line of enquiry. And as I say, like, I think if you're bright you could... I don't think... I said some times, because I don't really ever do that. I wish I could, but I think it, you know, it takes, sort of, like, an exceptional understanding of what you're learning about to be able to postulate like that. (Female, 22, Microbiology, UK student)

*'During the current academic year, how much has your coursework emphasised the following activities?
(Response categories: Very much / Quite a bit / Some / Very little)*

Item 3g: 'Exploring open-ended lines of enquiry formulated or proposed by teaching staff (including problems, questions or scenarios)" to be significantly rephrased or deleted.

Again, some students found it difficult to understand what was meant by "open-ended lines of enquiry". For example, students who mentioned choosing essay topics elsewhere in the interview did not include that as an example here.

It made me think about maybe at the end of a class if a lecturer said think about this problem over the next week and until I next see you, but we don't really do that. And it's not really open-ended. (Female, 22, Public Policy, UK student)

*'During the current academic year, how much has your coursework emphasised the following activities?
(Response categories: Very much / Quite a bit / Some / Very little)*

Item 3h: 'Your active participation in creating knowledge' to be significantly rephrased or deleted.

Students were mixed about responding to this question and referring to "doing research" generally or to their own research, such as writing essays. A select minority were clear about this question referring to their taking part in research say, alongside faculty. This was most often the case for final year students.

Very much, because at this stage in our course, although we did have like some sort of schedule, teaching time was all very... most of it was based on sort of informal teaching and you turning up and seeing things... and seeing stuff that is... all the onus, basically, was on you...when you go home or in your free time you needed to go read about things, you needed to... there wasn't so much sort of just being fed: here's notes, here's like... your notes were whatever you made, whatever you did when you went home, from your sort of reading. (Male, 23, Medicine, UK student)

Very little. I don't think we... there has been encouraged as such in terms of you know, taking part in things and working with academics in creating something that hasn't been... very little hasn't been encouragement. (Male, 21, Law, UK student)

Question 4

Question 4: 'During the current academic year, to what extent has your course challenged you to do your best work?' (Response categories: Very much / Quite a bit / Some / Very little) to remain unchanged.

This question was answered without problems by the majority of our interviewees. Several students noted how this was part of what a university experience should be about.

I think the course is challenging, I think to do well in it you do have to put in the work, you can't just blag it. But at the same time, I think if I look at the actual teaching experience, I'm not pushed by anybody at all. So in terms of assessment, I'd say I'm challenged, because it is hard, if you want to do well, but in terms of just coming to uni and getting on with it, I don't feel particularly challenged. If I'm in a seminar, if I don't want to say anything, I don't say anything, if I don't do the reading, it doesn't really matter, you know, so in that way, I don't feel challenged. And that's for this current academic year though, if I was thinking of first year, my answer might be slightly different. In first year, I had a tutor who put you on the spot, and it was embarrassing if you didn't know what you were going to say, so everyone made sure they came, you know, prepared, which was more challenging from a, like, teaching and learning experience. But then obviously, this year the assessment is a bit more difficult, the essays are longer, the exams are longer, that kind of stuff, so I put quite a bit, because it's a bit... you know, if that makes sense? (Female, 20, History, UK student)

Question 5

Students generally found it very interesting and helpful to fill in this question. Even if self-reported time spent might not provide the most accurate statistical data, it can provide an overall view of how students generally spend their time. Importantly, students stated they had rarely thought about how they spent their time in this way, and some even reflected on whether the way they were spending their time was the most appropriate or useful. In this formative sense, this is an important question, which we strongly recommend should remain, with minor changes in a couple of items as discussed below.

'About how many hours do you spend in a typical 7-day week during term-time doing the following?

(Response categories: 0 hours / 1-5 hours / 6-10 hours / 11-15 hours / 16-20 hours / 21-25 hours / 26-30 hours / More than 30 hours)

Item 5a: 'Preparing for taught sessions' to be replaced with two items: 'Time in taught sessions' and 'Time spent in independent study'

Many students interpreted this question as solely time spent doing reading for a lecture or seminar, and preparing materials for a session. When this question was asked in addition to 'time in independent study' students reported much higher levels of time in independent study than preparing for taught sessions. When asked if time spent preparing for taught sessions would be included in 'time in independent study' if only the latter was asked, most students responded in agreement. Time in taught sessions ranged from 1-5 hours per week to 21-25 hours. When tested there was overlap between 'Time spent preparing for class' and 'Time spent in independent study' when both were asked. Students thought they would include the former in the latter but not vice versa.

'About how many hours do you spend in a typical 7-day week during term-time doing the following?

(Response categories: 0 hours / 1-5 hours / 6-10 hours / 11-15 hours / 16-20 hours / 21-25 hours / 26-30 hours / More than 30 hours)

Item 5b: 'Participating in extra-curricular or co-curricular activities (students' union, societies, sports, etc.)' to remain unchanged.

Some students suggested splitting the question into 'extra-curricular activities' and 'co-curricular activities' as they felt academic-related societies provided quite a different benefit than participating in sporting clubs.

'About how many hours do you spend in a typical 7-day week during term-time doing the following?

(Response categories: 0 hours / 1-5 hours / 6-10 hours / 11-15 hours / 16-20 hours / 21-25 hours / 26-30 hours / More than 30 hours)

Item 5c: 'Working for pay on campus'

Item 5d: 'Working for pay off campus' recommend items to be combined into 'Working for pay'

Very little difference was noted between these items. The common difference noted was that on-campus work may involve less commuting. Many on-campus jobs involved working at the campus bar, which students noted would be little different to working in a bar in town.

'About how many hours do you spend in a typical 7-day week during term-time doing the following?'
(Response categories: 0 hours / 1-5 hours / 6-10 hours / 11-15 hours / 16-20 hours / 21-25 hours / 26-30 hours / More than 30 hours)

Item 5e: 'Doing volunteer work' to remain unchanged.

Few students did voluntary work. Some students that did noted it took up significant amounts of time, but at periodic points in the academic year. Some students who did volunteer work through the students' union or societies and felt there was overlap with item 5b.

'About how many hours do you spend in a typical 7-day week during term-time doing the following?'
(Response categories: 0 hours / 1-5 hours / 6-10 hours / 11-15 hours / 16-20 hours / 21-25 hours / 26-30 hours / More than 30 hours)

Item 5f: 'Providing care for dependents (children, parents, etc.)' to remain unchanged.

Most students did not have dependents, but those that had children (most often mature students) noted that it was a 24/7 responsibility.

'About how many hours do you spend in a typical 7-day week during term-time doing the following?'
(Response categories: 0 hours / 1-5 hours / 6-10 hours / 11-15 hours / 16-20 hours / 21-25 hours / 26-30 hours / More than 30 hours)

Item 5g: 'Commuting to campus (driving, walking, etc.)' to remain unchanged.

Several students remarked on being surprised at how much time they spent commuting when they calculated the amount. A few students noted how the time spent commuting to the institution was part of what made them choose to attend that institution.

An additional item 'Relaxing and socialising' is suggested to be added (from the NSSE scale used as the basis for these questions) as it adds comprehensiveness and also sparked many students to reflect on how they prioritise their time.

Question 6

There is a tension with the root question:

How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

For students at institutions with an active students' union and those involved in it, many students felt that the root question: 'experience at your institution' referred only to formal 'institutional' activities, ('corporate-branded') and not those associated with the students' union. When the root question was changed to 'overall student experience' then students included both institutional and students' union activities. The latter option had a much broader connotation for students, and there was a noted difference in how students responded. This raises the issue about whether the intention of the survey is to explore solely institution-led activities or those done through the students' union as well.

'How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?' (Response categories: Very much / Quite a bit / Some / Very little)

Item 6a: 'Writing clearly and effectively' to remain unchanged.

This item was clearly understood and interpreted by all interviewees.

'How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?' (Response categories: Very much / Quite a bit / Some / Very little)

Item 6b: 'Speaking clearly and effectively' to remain unchanged.

This item was clearly understood and interpreted by all interviewees.

'How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?' (Response categories: Very much / Quite a bit / Some / Very little)

Item 6c: 'Thinking critically and analytically' to remain unchanged.

This item was clearly understood and interpreted by all interviewees. Many students noted that this was whole point of going to university, and in several cases this had been pointed out by course leaders and at induction.

'How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?' (Response categories: Very much / Quite a bit / Some / Very little)

Item 6d: 'Analysing numerical and statistical information' to remain unchanged.

This item was clearly understood and interpreted by all interviewees. Even if some students stated they had had no knowledge in this area they were clear about what the question meant. See above in 'Findings' regarding the subject-specific responses to this item.

'How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?' (Response categories: Very much / Quite a bit / Some / Very little)

Item 6e: 'Acquiring job- or work-related knowledge and skills' to be changed to 'Acquiring employability skills'.

Students were comfortable with the shortening of this item, and 'employability skills' had resonance across students at a variety of institutional types and disciplines. Some students noted a tension between such activities which were done through the institution or through the students' union.

I said quite a bit, because we have opportunities in the university to like go and get help for job related skills and knowledge. I haven't really like taken advantage of them but I know that they are there and I also think that I've had help from my professors, so yes, quite a bit. (Female, 22, European Studies, EU Student)

I put quite a bit for that. All of our modules, skills-wise I think, develop...well, there's like transferable skills that can be used in, like, with the working environment, that's just being able to write, and speak, just the general stuff. Because I did Applied History, we do a specific part on careers, so we had to write out a CV and a cover letter, and discuss a careers plan, and those sorts of things. And also we had people coming in who had done a history degree and worked in different kinds of areas of employment, whether it be museums, or archives, or even just in management, and kind of discussing what we can do with our degree, which I think when you're doing a subject like history, people say what are you going to do with that, you know, so that was good. So yes, I put quite a bit for that. (Female, 20, History, UK student)

'How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?' (Response categories: Very much / Quite a bit / Some / Very little)

Item 6f: 'Becoming an independent learner' to remain unchanged.

Students clearly understood this item. Students felt this was a core activity in university study, and what differed it from A-level or prior educational experiences.

Yes. Like, I am... I think I'm already quite independent when I'm learning, so... but they did... you know, they did, like, push you and, like, say, you know, maybe, you know, outside of classroom hours when you should work on your own, focus on this, read a bit of this, or actually analyse and do a bit of research. So they did push you to, you know, work on your own as well because we always work in a team in most of our coursework. So, yes, they pushed you to work on your own. (Female, 20, Business and IT, UK student)

Yes, quite a bit. Like, as a uni student you have to be very independent. You can't always rely on, oh, the teacher's going to hand out some notes for me. You can't rely on that. You have to go to the library, do some reading, and print out your lecture notes. Yes. (Female, 21, Childhood Studies, UK student)

'How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?' (Response categories: Very much / Quite a bit / Some / Very little)

Item 6g: 'Being innovative and creative' to remain unchanged.

Some students were not sure about the meaning of the word innovative, but all could make some sense of the question with the term 'creative'. There were noted subject differences in responses, with many non-Arts students feeling that they would respond differently as an Arts student.

Some, because I guess it was more... there is some opportunity for you to do this in terms of how... we get some... five-weeks out of every year where you can choose what you want to do. A lot of the rest of it is really just sort of covering core topics that you need to have done. And, I guess, in terms of what you do outside, you could have the opportunity to do sort of more and sort of gauge where you're going and, you know, whatever, is maybe not something I've done so much of. (Male, 23, Medicine, UK student)

'How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?' (Response categories: Very much / Quite a bit / Some / Very little)

Item 6h: 'Working effectively with others' to remain unchanged.

Some students suggested there could be an additional question about 'Socialising' effectively, as they saw this as an important skill to gain but somewhat different to 'Working' with others. This may not be significantly different enough to warrant an additional question, but could be tested in future scales.

'How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?' (Response categories: Very much / Quite a bit / Some / Very little)

Item 6i: 'Developing or clarifying personal values or ethics' to remain unchanged.

Students were generally supportive of this item, although several noted that the institution should not go too far in pushing students in a particular direction. Students were more comfortable with this (and 6l) being secondary outcomes of a university experience, but not primary ones. Students were clear that they were happy with opportunities for this to happen at university, but not with the institution 'asking' them about their values or ethics or mandating any particular position.

This is the most difficult one for me to answer. I said quite a bit. I feel like my personal values or ethics haven't changed, but I'm more confident in them, in a way. Because I feel like I've met a lot of similar-minded people, but at the same time I know a lot of people who have completely different values and ethics and we still get along fine, so it doesn't really rule my life, but I'm definitely like, okay, well, it's not going with the crowd, I just sort of am happier in my views and stuff. (Female, 22, Public Policy, UK student)

'How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?' (Response categories: Very much / Quite a bit / Some / Very little)

Item 6j: 'Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)' to remain unchanged.

This question well similarly understood by all students.

'How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?' (Response categories: Very much / Quite a bit / Some / Very little)

Item 6k: 'Solving complex real-world problems' to be changed to 'Exploring complex real-world problems'.

'Solving' problems was beyond the scope of what occurs in many subjects, and students were more comfortable with 'exploring' problems. Some students referred to activities that occurred during their university experience (such as writing a CV and applying for jobs) as being 'real-world' problems.

Some. I could do with more on this and the complexities, because at the end of the day everything can be pretty complex and, obviously, we have to find a... how to deal with them but, yes, I think this is something that I could do a bit. (Female, 39, Nursing and Social Work, EU student)

Oh, I put very little. I feel like... sometimes I feel very useless because I've got... I can't really do many things for people. I can't really solve the problem. I can see the problem, but I can't solve it. (Female, 21, Childhood Studies, UK student)

'How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?' (Response categories: Very much / Quite a bit / Some / Very little)

Item 6l: 'Being an informed and active citizen' to remain unchanged.

Students were almost split in referring to being a 'citizen' of their institutional community (often referring to student union voting and related democratic activities) and a 'citizen' in terms of wider society (referring to reading newspapers, following the news and voting in regional and national political elections). However, as local society and wider society are both components of citizenship, this question seems fine, although this finding is important to note in interpretation of data.

I put quite a bit, because they encourage us to join different forums, for example, or keep an eye on what's going on many things, the law or subscribe to certain things that can help us be up to date, so I think they develop this and encourage this quite a bit. (Female, 39, Nursing and Social Work, EU student)

I put some for that. In fact, I'd probably change that to very little, to be honest. Yes, I mean, they try to get us involved in, say like the student union, or even just voting in general about those sorts of things, and they try to keep us informed. They have loads of things always going on, like festivals celebrating different things, or that are informative, but I don't think it's actually affected me personally. I'm not going to lie, when all the student union stuff is going on, you can tell they're trying to inform you, but no-one really listens, or... so yes, very little. That's quite bad, isn't it? Yes, you can tell they try, but I don't think it's very effective, as a student, and everyone I know as well, it's the way they go about it, I don't think it does actually make you a more informed and active citizen, but I think they're trying to make you that, if that makes sense – but it's not working. (Female, 20, History, UK student)

2.2 Scales

Academic integration¹

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

- Ia. Asked questions or contributed to course discussions in other ways
- Ie. Discussed your academic performance and/or feedback with teaching staff

¹ Note that the item on making changes in response to feedback is discussed below with the Course Challenge scale, as that is where it was originally placed.

- If. Talked about your career plans with teaching staff or advisors
- Ig. Discussed ideas from your course with teaching staff outside taught sessions, including by email/online
- Ih. Worked with teaching staff on activities other than coursework

These items were clear to students, and although many did not do the last three very often, there was often little desire to do so, particularly if it was to be initiated by students.

Collaborative learning

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

(Response categories: Very often / Often / Sometimes / Never)

- Ic. Worked with other students on course projects or assignments
- Id. Explained course material to one or more students
- Ij. Asked another student to help you understand course material
- Ik. Prepared for exams or assessments by discussing or working through course material with other students

Some students noted overlap between items Ij and Ik, noting that asking for help was often part of working with other students. Other students noted overlap between items Ic and Ik. It may be that Ik is not sufficiently different from Ic and Ij.

If all items are to remain, we recommend that the questions in this scale are asked together and in the following order: Id, Ij, Ic, Ik:

- Id. Explained course material to one or more students
- Ij. Asked another student to help you understand course material (or drop this item)
- Ic. Worked with other students on course projects or assignments
- Ik. Prepared for exams or assessments by discussing or working through course material with other students

However, these questions felt at times repetitive and so it could be advisable to drop two of the items: Ij is the most likely candidate for deletion and possibly Id. It was clear from the interviews that it is not a common practice to work in groups or to interact with fellow coursemates by asking for help understanding course material, and that was felt both across subjects and across institution types.

Reflective and integrative learning

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

- II. Combined ideas from different modules when completing assignments
- Im. Connecting your learning to societal problems or issues
- In. Examined the strengths and weaknesses of your own views on a topic or issue
- Io. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective
- Ip. Learned something that changed the way you understand an issue or concept
- Iq. Connected ideas from your course to your prior experience and knowledge

Many students noted overlap between In and Io, feeling that there was inherent overlap in the two activities. In conjunction with the confusion students expressed about In (described above), it is recommended that this item be deleted.

Students also noted overlap between Im and Iq, often referring to the same example when explaining their response to each question.

Higher-order learning

During the current academic year, how much has your coursework emphasized the following activities? (Response categories: Very much / Quite a bit / Some / Very little)

- 2a. Memorising course material
- 2b. Applying facts, theories, or methods to practical problems or new situations
- 2c. Analysing ideas or theories in depth by examining their parts
- 2d. Evaluating or judging a point of view, decision, or information source
- 2e. Forming a new understanding from various pieces of information

As noted in 2013, there were marked disciplinary differences in how students interpreted and responded to the questions.

Students noted the most overlap in items in this scale. Students felt 2b and 2c had significant overlap, and often thought of the same example for both. Students noted the most overlap between items 2c and 2d. Students also noted overlap between 2d and 2e. However, in general students felt that each question referred to different activities. It is recommended that the scale remain unchanged.

Engagement with Research and Formulating and Exploring Questions

A majority of students felt more comfortable answering the Engagement with Research items (exploring the extent to which existing research findings and methods have been incorporated into curricula) than Formulating and Exploring Questions (focusing on students' own research activities). The few students who preferred the latter scale tended to be social sciences/humanities students from research-intensive universities. Refer to the individual items above for recommendations on specific changes.

The most problematic element with the Formulating and Exploring Questions scale was the “open-ended lines of enquiry” part of the question, which many students failed to comprehend and many had to read several times. Students were prompted to reflect on the two scales:

The first four questions are rather about research; the second four are about... it's a bit broader, because the first four questions for me are about the research and I have immediately the knowledge... that last four are a bit more generally about creating work, which is research, but it's a bit more broader and so it's a bit different for me, the first one and the second one. (Female, 39, Nursing and Social Work, EU student)

The first four are a lot easier to understand what it's actually asking you. The second four I just kind of took a guess at what it was asking me and hoped that was going along the right lines, so I can imagine a lot of people just going, well, I'll put this answer and hope I'm on the right page with whoever wrote this. (Female, 20, Mathematics, UK student)

Probably the first four. I wouldn't say as an undergrad you really do, like, conduct your own research in that way, it's all about following other people and, like, learning from other people. Like, I think, sort of, your knowledge isn't big enough really. Like, unless you're, like, absolutely fantastic, like, a lot of people, as an undergrad you're not really, like, challenging or coming up with your own research or ideas, you're just learning other people's. So I don't think you'd find it that much that people were... are acting, like, so independently. (Female, 22, Microbiology, UK student)

Actually a bit of both, if I can say that, because I do... I learn about the results of current research but I also create questions by myself and try and look at it a different way (Female, 20, Business and IT, UK student)

The second one, definitely, we get encouraged to be a lot, I don't know, quite open-minded and critical and try to think of existing frameworks or theories in different aspects, whereas we don't really get taught about specifics of, like, conventional research, so I'd say definitely the second set of questions are more applicable. (Male, 20, Law, UK student)

Open-ended lines. Your own opinion? I mean, so, well, open-ended, well, the first thing that comes to my mind is open-ended questions, so, your own view. If that make sense? (Female, 19, Social Work, UK student)

Engagement with Research

For both Engagement with Research and Formulating and Exploring Questions scales, students were split about referring to engagement with their own research (such as writing essays or a dissertation) or with research generally (such as that conducted by their lecturers).

During the current academic year, how much has your coursework emphasised the following activities? (Response categories: Very much / Quite a bit / Some / Very little)

- 3a. Learning how knowledge is created in your subject
- 3b. Learning about methods of research and analysis in your subject
- 3c. Learning about the results of current research
- 3d. Exploring the knowledge base of your discipline actively, critically and creatively

This scale is recommended to be changed to:

- 3a. Learning how knowledge is created in your subject
- 3b. Learning about methods of research and analysis in your subject
- 3c. Learning about the outcomes of current research

Formulating and Exploring Questions

During the current academic year, how much has your coursework emphasised the following activities? (Response categories: *Very much / Quite a bit / Some / Very little*)

- 3e. Formulating your own open-ended lines of enquiry (including problems, questions or scenarios)
- 3f. Exploring open-ended lines of inquiry formulated by yourself (including problems, questions or scenarios)
- 3g. Exploring open-ended lines of enquiry formulated or proposed by teaching staff (including problems, questions or scenarios)
- 3h. Your active participation in creating knowledge

This scale is recommended to be significantly reworded, particularly the phrase ‘open-ended lines of enquiry’ or deleted, as few students understood the items.

Course challenge

- ii. During the current academic year, about how often have you made significant changes to your work based on feedback? (Response options: *Very often / Often / Sometimes / Never*)
- 4. During the current academic year, to what extent has your course challenged you to do your best work? (Response options: *Very much / Quite a bit / Some / Very little*)
- Ib. During the current academic year, about how often have you come to taught sessions prepared (completed assignments, readings, reports, etc.) (Response options: *Very often / Often / Sometimes / Never*)

This scale was clearly understood, although the variety of items may lead it to lack coherence as a scale.

Time spent

About how many hours do you spend in a typical 7-day week during term-time doing the following? (Response categories: *0 / 1-5 / 6-10 / 11-15 / 16-20 / 21-25 / 26-30 / more than 30*)

- 5a. Preparing for taught sessions
- 5b. Participating in extra-curricular or co-curricular activities (students’ union, societies, sports, etc.)
- 5c. Working for pay on campus
- 5d. Working for pay off campus
- 5e. Doing volunteer work
- 5f. Providing care for dependents (children, parents, etc.)
- 5g. Commuting to campus (driving, walking, etc.)

Students noted challenges with the accuracy of their responses, although they said it was generally a close approximation. Students commented that of all the questions in the survey, those in the Time Spent scale made them reflect the most on their experience, and how they prioritised their time. Many students commented that filling out this scale made them think they should spend more time on academic work.

As noted above, items 5c and 5d can be combined into one item ‘Working for pay’.

There was overlap noted between 5d and 5g, with many students who did volunteering doing it through a student society or the students’ union.

There was also overlap between ‘Time spent preparing for class’ and ‘Time spent in independent study’ when both were asked. Students thought they would include the former in the latter but not vice versa. Recommended changes are:

- 5a. Time spent in taught sessions
- 5b. Time spent in independent study
- 5c. Participating in extra-curricular or co-curricular activities (students’ union, societies, sports, etc.)
- 5d. Working for pay
- 5e. Doing volunteer work
- 5f. Providing care for dependents (children, parents, etc.)
- 5g. Commuting to campus (driving, walking, etc.)
- 5h. Relaxing and socialising

Skills development

How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas? (Response options: Very much / Quite a bit / Some / Very little)

- 6a. Writing clearly and effectively
- 6b. Speaking clearly and effectively
- 6c. Thinking critically and analytically
- 6d. Analysing numerical and statistical information
- 6e. Acquiring job- or work-related knowledge and skills
- 6f. Becoming an independent learner
- 6g. Being innovative and creative
- 6h. Working effectively with others
- 6i. Developing or clarifying personal values or ethics
- 6j. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)
- 6k. Exploring complex real-world problems
- 6l. Being an informed and active citizen

This scale worked well. A few students noted that items 6a-f were core activities of university study, and that 6g-l were also important, but less so than the former set. The only recommendations are to change 6e to ‘Acquiring employability skills’ and 6k to ‘Exploring complex real world problems’.

Students as Partners

A number of questions were tested relating to this topic, for possible inclusion in the 2015 administration of UKES. The development of the scale was proposed by the HEA due to the increasing emphasis on staff working in partnership with students in UK Higher Education. The intention of the scale is to capture activities associated with a ‘partnership ethos’, and the purpose of the interviewing was to test which of these could be distilled into practices. Given that a large proportion of students do not ever speak to an academic member of staff outside of class, the need for the questions to be relevant to a wide range of students meant not focusing on activities (such as curriculum co-design) that are relevant for only very small numbers of students - although such activities may be transformational for students involved. Expert views were solicited, as well as liaising with the HEA Students as Partners team in developing the initial item wordings.

The first set of items piloted included:

During the current academic year, how much has your institution emphasised the following activities? (Response categories: Very much / Quite a bit / Some / Very little)

- Item 7a:** ‘You providing feedback about how you think the course is going’
- Item 7b:** ‘You making active decisions about how and what you study’
- Item 7c:** ‘You actively contributing to shaping an academic community’
- Item 7d:** ‘You taking responsibility for your learning’

Students were satisfied with 7a and 7d. For 7a, some institutions had very clear policies and procedures for collecting student feedback on modules and end-of-year surveys. Students were much more likely to refer to filling out module evaluation forms than institution-wide surveys. Other institutions seemed to have sporadic opportunities for students to

feedback. Students said they were much more likely to feedback when it was something done in a class setting compared to on-line opportunities.

For 7d, students almost universally referred to this as the ‘opposite of spoon-feeding’. Students felt confident this was an essential part of higher education, and often what differentiated it from A-level schooling or college. Generally students were positive about this question, feeling that taking responsibility for their learning was part of succeeding in higher education. A few students noted a negative connotation, feeling that the reason a student needed to take responsibility was because institutions did not provide enough support to students.

Yes. They do a lot too because they want you to be responsible for the grades you get or the marks you get, because if you don't put the input, there's going to be no output. So, you know, they want you to go out, do teamwork, be... you know, be [unclear], be prepared, because it's all going to help you in, you know, when you leave uni and you go into that work environment. If you haven't done any of these things before, how are you going to apply that into a business or a corporation? (Female, 20, Business and IT, UK student)

I put very much for that. I think a lot of our work, I think the bulk of our work is outside the sort of taught sessions and you have to prepare for it, and I think it depends on which member of staff you have, but I know that if I don't do learning I can sit in a seminar and get away with it, other people who've been in my class seem to sit the entire year and never contributed and I know that I did the reading, I can turn up and still get away with it, so I think you have to have that personal drive to want to do it. (Male, 20, Law, UK student)

Most students felt that 7b could be split into two questions, as students felt ‘how’ they study referred to tactics used during independent study, choice in assessments (such as essays or projects), and individual or group study. ‘What’ you study was more focused on content of assessments (such as module choice and the ability to select topics for essays).

However, 7c was generally confusing to students, and most asked to what the question was referring. Other items probed in the first iteration related to students being active in changing their course; having a sense of belonging; being part of a community; actively contributing to developing a course community; being part of a community of staff and students; and being part of a learning network.

The root question was also tested, with ‘to what extent have you’ as an alternative root question to ‘how much has your institution emphasised’. The root question was also tested with ‘your experience at this institution’. Students preferred ‘how much has your institution emphasised’ to both alternatives.

The second iteration of this scale included the following items:

During the current academic year, how much has your institution emphasised the following activities? (Response categories: Very much / Quite a bit / Some / Very little)

Item 7a: ‘You providing feedback about how you think the course is going’

Item 7b: ‘You making active decisions about how and what you study’

Item 7c: ‘You actively contributing to shaping a community of staff and students’

Item 7d: ‘You taking responsibility for your learning’

Item 7e: ‘Developing a sense of belonging’

Students noted that 7b was inherently difficult on vocational courses, where there was often very little flexibility on module selection and assessments (but noted that this was often due to external requirements rather than the institution). Students with placements as part of their course also noted that there was very little flexibility. Item 7c was sufficiently clear to students with the clarification of adding ‘...a community of staff and students’.

Student reaction to Item 7e [Item 7g in third iteration] was mixed, if not mainly negative. We have found that many students were uncomfortable with the use of the expression “sense of belonging” finding it perhaps too personal. Some students in the humanities/social sciences were fine addressing this question but we found those in the sciences were clearly not. This was interesting to note, particularly as having ‘a sense of belonging’ is increasing mentioned in the academic literature as a key part of students’ successful university experience (Read et al. 2003; Meeuwisse et al. 2010; Strayhorn, 2012; Thomas 2012).

Like, just a sense of belonging, like, it's just like a... is weird phrasing. I mean, I guess that's what part of... about what university's about, it's, like, you just want to feel at home there, you want to feel that it's a part of you, but I wouldn't say it's something... I'd say I wouldn't put it on a... on feedback form like that. (Female, 22, Microbiology, UK student)

I wrote very much. I do feel like I belong here, to be honest. I don't really want to leave, but... I was even thinking about doing extra, like Master's and stuff. Yes, I think... I don't think that's the institution; I think it's the people, though. I think the people, you know, if you don't get along with people, then you won't really feel like you belong, but... The institution don't really do anything: I think the only thing that they did to kind of develop a sense of belonging was in Freshers' Week, first year, where there was a couple of things on and that was it. (Female, 22, Social Policy, UK student)

Again, I was thinking entirely from the university point of view. I've done it. I don't think it's the university that's done it for me. I think it's my choices how I've chosen to respond to being at university that's made me feel really part of the [university], but I don't think the university's emphasised that. I don't think it's the university that's made me do it. It may be a factor, but I don't think the university does very much to make people feel part of a community here. I think being part of the Students' Union makes you feel part of a... makes you feel belong... or makes you feel you belong here. (male, 21, History, UK student)

Students remarked they thought the topics covered in Question 7 were important parts of the university experience, and that it is essential for institutions to seek students' feedback and engage with them to enhance the institution and the student experience.

The last iteration of testing included the following items:

During the current academic year, how much has your institution emphasised the following activities? (Response categories: Very much / Quite a bit / Some / Very little)

Item 7a: 'You providing feedback about how you think the course is going'

Item 7b: 'You making active decisions about how you study'

Item 7c: 'You making active decisions about what you study'

Item 7d: 'You being part of a community'

Item 7e: 'You actively contributing to shaping a community of staff and students'

Item 7f: 'You taking responsibility for your learning'

Item 7g: 'Developing a sense of belonging'

It seems that the last iteration was the one which overall worked best with the students we interviewed and so would recommend this version to remain but exclude item 7d, as it seemed repetitive given the other questions and to exclude item 7g due to a sense of belonging possibly being more of a meta-construct and less applicable as a direct question. Particularly important was the separation into two questions of "making active decisions about how you study" and "about what you study".

We would however recommend the following order:

Item 7f: 'You taking responsibility for your learning'

Item 7c: 'You making active decisions about what you study'

Item 7b: 'You making active decisions about how you study'

Item 7a: 'You providing feedback about how you think the course is going'

Item 7e: 'You actively contributing to shaping a community of staff and students'

3. 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 often 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 provides. Therefore it could be advisable to perhaps have a clear and succinct preamble explaining what information is gathered (if using the Bristol Online 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 explicitly state to respondents 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 coursemates 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.

Items and scales

Changes are recommended to the root questions for scales: Higher Order Learning; Engagement with Research; Formulating and Exploring Questions; and Skills Development. The items in the Academic Integration, Collaborative Learning, Higher Order Learning and Course Challenge scales seemed to work well and students understood the items. Students noted some overlap on the Reflective and Integrative Learning scale and it presented some differences in interpretation across disciplines.

The Time Spent scale needed some modifications, but students noted it made them reflect on how they prioritised their time. The Time Spent responses can provide very useful data, but their precision should be taken with caution, although students felt their responses represented fair accuracy.

The Engagement with Research and Formulating and Exploring Questions pilot scales presented the most difficulty and are recommended to be significantly reworded or potentially deleted. The piloted Students as Partners scale was clearly understood and was seen to represent an important aspect of the student experience. A few questions were noted that could be dropped, after analysis of the quantitative data and decisions about the length of the survey.

Response categories

In general students were satisfied with the response categories. The Time Spent scale raised the most difficulty for students to answer. Although the categories were clear students struggled to compute an average and several changed their response after talking through their response. Students were satisfied with the hours per week categories for the scale.

Students felt that there was a rather large jump between the 'sometimes' and 'never' scale points in the original four-category scale. As noted in the 2013 report, students were in favour of adding a 'rarely' option. 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. This highlights the need for caution when comparing responses between questions and taking care making comparisons across disciplines. This also raises the importance of further exploration and analysis across student and subject groupings.

Some students mentioned that there should be a ‘not at all’ category on the ‘Very much/Quite a bit/Some/Very little’ scale, since some of them stated they had answered ‘very little’ when in fact it should have been ‘not at all’. There were also some confusion as to what difference between ‘some’ and ‘very little’ may be.

4. Final recommended versions of questions

Academic integration

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

- Ia. Asked questions or contributed to course discussions in other ways
- Ie. Discussed your academic performance and/or feedback with teaching staff
- If. Talked about your career plans with teaching staff or advisors
- Ig. Discussed ideas from your course with teaching staff outside taught sessions, including by email/online
- Ih. Worked with teaching staff on activities other than coursework

Collaborative learning

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

- Id. Explained course material to one or more students
- Ij. Asked another student to help you understand course material
- Ic. Worked with other students on course projects or assignments
- Ik. Prepared for exams or assessments by discussing or working through course material with other students

Reflective and integrative learning

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

- II. Combined ideas from different modules when completing assignments
- Im. Connecting your learning to societal problems or issues
- Io. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective
- Ip. Learned something that changed the way you understand an issue or concept
- Iq. Connected ideas from your course to your prior experience and knowledge

Higher-order learning

During the current academic year, how much has your course emphasized the following activities? (Response options: Very much / Quite a bit / Some / Very little)

- 2a. Memorising course material
- 2b. Applying facts, theories, or methods to practical problems or new situations
- 2c. Analysing ideas or theories in depth by examining their parts
- 2d. Evaluating or judging a point of view, decision, or information source
- 2e. Forming a new understanding from various pieces of information

Engagement with Research

During the current academic year, how much has your course emphasised the following activities? (Response categories: Very much / Quite a bit / Some / Very little)

- 3a. Learning how knowledge is created in your subject
- 3b. Learning about methods of research and analysis in your subject
- 3c. Learning about the outcomes of current research

Course challenge

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

- Ib. Come to taught sessions unprepared (e.g. not completed assignments, readings, reports, etc.)
 - Ii. Made significant changes to your work based on feedback
4. During the current academic year, to what extent has your course challenged you to do your best work? (Response options: *Very much / Quite a bit / Some / Very little*)

Time spent

About how many hours do you spend in a typical 7-day week during term-time doing the following? (Response categories: *0 hours / 1-5 hours / 6-10 hours / 11-15 hours / 16-20 hours / 21-25 hours / 26-30 hours / more than 30 hours*)

- 5a. Time spent in taught sessions
- 5b. Time spent in independent study
- 5c. Participating in extra-curricular or co-curricular activities (students' union, societies, sports, etc.)
- 5d. Working for pay
- 5e. Doing volunteer work
- 5f. Providing care for dependents (children, parents, etc.)
- 5g. Commuting to campus (driving, walking, etc.)
- 5h. Relaxing and socialising

Skills development

How much has your overall student experience contributed to your knowledge, skills, and personal development in the following areas? (Response options: *Very much / Quite a bit / Some / Very little*)

- 6a. Writing clearly and effectively
- 6b. Speaking clearly and effectively
- 6c. Thinking critically and analytically
- 6d. Analysing numerical and statistical information
- 6e. Acquiring employability skills
- 6f. Becoming an independent learner
- 6g. Being innovative and creative
- 6h. Working effectively with others
- 6i. Developing or clarifying personal values or ethics
- 6j. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)
- 6k. Exploring complex real-world problems
- 6l. Being an informed and active citizen

Students as Partners

During the current academic year, how much has your institution emphasised the following activities? (Response categories: *Very much / Quite a bit / Some / Very little*)

- 7f: 'You taking responsibility for your learning'
- 7c: 'You making active decisions about what you study'
- 7b: 'You making active decisions about how you study'
- 7a: 'You providing feedback about how you think the course is going'
- 7e: 'You actively contributing to shaping a community of staff and students'

5. A Design for Further Cognitive Testing

Although usually used in the process of survey design and development, 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.

5.1 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., and 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).

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Appendix I: Cognitive Interview Script (Amended Example)

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 staffmean 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?
 - i. 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 b, analysing in depth an idea, experience or line of reasoning. Think aloud.
 - i. PROBE: What does analysing mean to you?
 - i. PROBE: Would you mind providing some concrete examples?
 - b. For item c, 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 d, 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 e, 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 4, 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. How has filling in this survey changed your conception of your student experience?
- h. How do you feel about an engagement survey as a 'student voice' mechanism?
Does this let students 'have their say' in the same way as a satisfaction survey? (Compare to NSS for final year students)
- i. 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 0 (Original questionnaire)

Suggested questionnaire format

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

	Very often	Often	Sometimes	Never
a. Asked questions or contributed to course discussions in other ways				
b. Come to taught sessions prepared (e.g. 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. Worked with teaching staff on activities other than coursework				
i. Made significant changes to your work based on feedback				
j. Asked another student to help you understand course material				
k. Prepared for exams or assessments by discussing or working through course material with other students				
l. Combined ideas from different modules when completing assignments				
m. Connecting your learning to societal problems or issue				
n. Examined the strengths and weaknesses of your own views on a topic or issue				
o. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective				
p. Learned something that changed the way you understand an issue or concept				
q. Connected ideas from your course to your prior experience and knowledge				

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

	Very much	Quite a bit	Some	Very little
a. Memorising course material				
b. Applying facts, theories, or methods to practical problems or new situations				
c. Analysing ideas or theories in depth by examining their parts				
d. Evaluating or judging a point of view, decision, or information source				
e. Forming a new understanding from various pieces of information				

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

	Very much	Quite a bit	Some	Very little
a. Learning how knowledge is created in your subject				
b. Learning about methods of research and analysis in your subject				
c. Learning about the results of current research				
d. Exploring the knowledge base of your discipline actively, critically and creatively				
e. Formulating your own open-ended lines of enquiry (including problems, questions or scenarios)				
f. Exploring open-ended lines of enquiry formulated by yourself (including problems, questions or scenarios)				
g. Exploring open-ended lines of enquiry formulated or proposed by teaching staff (including problems, questions or scenarios)				
h. Your active participation in creating knowledge				
	Very much	Quite a bit	Some	Very little
4. During the current academic year, to what extent has your course challenged you to do your best work?				

5. About how many hours do you spend in a typical 7-day week during term-time doing the following?

	0 hours	1-5 hours	6-10 hours	11-15 hours	16-20 hours	21-25 hours	26-30 hours	More than 30 hours
a. Preparing for taught sessions								
b. Participating in extra-curricular or co-curricular activities (students' union, societies, sports, etc.)								
c. Working for pay on campus								
d. Working for pay off campus								
e. Doing volunteer work								
f. Providing care for dependents (children, parents, etc.)								
g. Commuting to campus (driving, walking, etc.)								

6. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

	Very much	Quite a bit	Some	Very little
a. Writing clearly and effectively				
b. Speaking clearly and effectively				
c. Thinking critically and analytically				
d. Analysing numerical and statistical information				
e. Acquiring job- or work-related knowledge and skills				
f. Becoming an independent learner				
g. Being innovative and creative				
h. Working effectively with others				
i. Developing or clarifying personal values or ethics				
j. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)				
k. Solving complex real-world problems				
l. Being an informed and active citizen				

Appendix 3: Student engagement survey questionnaire |

Engagement questionnaire

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

	Very often	Often	Sometimes	Never
a. Asked questions or contributed to course discussions in other ways				
b. Come to taught sessions prepared (e.g. 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. Worked with teaching staff on activities other than coursework				
i. Made significant changes to your work based on feedback				
j. Asked another student to help you understand course material				
k. Prepared for exams or assessments by discussing or working through course material with other students				
l. Combined ideas from different modules when completing assignments				
m. Connecting your learning to societal problems or issue				
n. Examined the strengths and weaknesses of your own views on a topic or issue				
o. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective				
p. Learned something that changed the way you understand an issue or concept				
q. Connected ideas from your course to your prior experience and knowledge				

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

	Very much	Quite a bit	Some	Very little
a. Memorising course material				
b. Applying facts, theories, or methods to practical problems or new situations				
c. Analysing ideas or theories in depth by examining their parts				
d. Evaluating or judging a point of view, decision, or information source				
e. Forming a new understanding from various pieces of information				

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

	Very much	Quite a bit	Some	Very little
a. Learning how knowledge is created in your subject				
b. Learning about methods of research and analysis in your subject				
c. Learning about the results of current research				
d. Exploring the knowledge base of your discipline actively, critically and creatively				
e. Formulating your own open-ended lines of enquiry (including problems, questions or scenarios)				
f. Exploring open-ended lines of enquiry formulated by yourself (including problems, questions or scenarios)				
g. Exploring open-ended lines of enquiry formulated or proposed by teaching staff (including problems, questions or scenarios)				
h. Your active participation in creating knowledge				
	Very much	Quite a bit	Some	Very little
4. During the current academic year, to what extent has your course challenged you to do your best work?				

5. About how many hours do you spend in a typical 7-day week during term-time doing the following?

	0 hours	1-5 hours	6-10 hours	11-15 hours	16-20 hours	21-25 hours	26-30 hours	More than 30 hours
a. Preparing for taught sessions								
b. Participating in extra-curricular or co-curricular activities (students' union, societies, sports, etc.)								
c. Working for pay on campus								
d. Working for pay off campus								
e. Doing volunteer work								
f. Providing care for dependents (children, parents, etc.)								
g. Commuting to campus (driving, walking, etc.)								

6. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

	Very much	Quite a bit	Some	Very little
a. Writing clearly and effectively				
b. Speaking clearly and effectively				
c. Thinking critically and analytically				
d. Analysing numerical and statistical information				
e. Acquiring job- or work-related knowledge and skills				
f. Becoming an independent learner				
g. Being innovative and creative				
h. Working effectively with others				
i. Developing or clarifying personal values or ethics				
j. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)				
k. Solving complex real-world problems				
l. Being an informed and active citizen				

7. During the current academic year, how much has your institution emphasised the following activities?

	Very much	Quite a bit	Some	Very little
a. You providing feedback about how you think the course is going				
b. You making active decisions about how and what you study				
c. You actively contributing to shaping an academic community				
d. You taking responsibility for your learning				

Demographics	
Institution	
Subject/discipline	
Year of study	
Full-time/Part-time status	

Domicile (UK, EU, non-EU)	
Study on campus or on-line	
Accommodation (eg halls, rented flat, at home, own home)	
Gender	
Age	

Appendix 4: Student engagement survey questionnaire 2

Engagement questionnaire

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

	Very often	Often	Sometimes	Never
a. Asked questions or contributed to course discussions in other ways				
b. Came to taught sessions prepared (e.g. 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. Worked with teaching staff on activities other than coursework				
i. Made significant changes to your work based on feedback				
j. Asked another student to help you understand course material				
k. Prepared for exams or assessments by discussing or working through course material with other students				
l. Combined ideas from different modules when completing assignments				
m. Connecting your learning to societal problems or issue				
n. Examined the strengths and weaknesses of your own views on a topic or issue				
o. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective				
p. Learned something that changed the way you understand an issue or concept				
q. Connected ideas from your course to your prior experience and knowledge				

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

	Very much	Quite a bit	Some	Very little
a. Memorising course material				
b. Applying facts, theories, or methods to practical problems or new situations				
c. Analysing ideas or theories in depth by examining their parts				
d. Evaluating or judging a point of view, decision, or information source				
e. Forming a new understanding from various pieces of information				

3. During the current academic year, how much has your course emphasized the following activities?

	Very much	Quite a bit	Some	Very little
a. Learning how knowledge is created in your subject				
b. Learning about methods of research and analysis in your subject				
c. Learning about the results of current research				
d. Exploring the knowledge base of your discipline actively, critically and creatively				
e. Formulating your own open-ended lines of enquiry (including problems, questions or scenarios)				
f. Exploring open-ended lines of enquiry formulated by yourself (including problems, questions or scenarios)				
g. Exploring open-ended lines of enquiry formulated or proposed by teaching staff (including problems, questions or scenarios)				
h. Your active participation in creating knowledge				
	Very much	Quite a bit	Some	Very little
4. During the current academic year, to what extent has your course challenged you to do your best work?				

5. About how many hours do you spend in a typical 7-day week during term-time doing the following?

	0 hours	1-5 hours	6-10 hours	11-15 hours	16-20 hours	21-25 hours	26-30 hours	More than 30 hours
a. Preparing for taught sessions								
b. Time in taught sessions								
c. Time spent in independent study								
d. Participating in extra-curricular or co-curricular activities (students' union, societies, sports, etc.)								
e. Working for pay on campus								
f. Working for pay off campus								
g. Doing volunteer work								
h. Providing care for dependents (children, parents, etc.)								
i. Commuting to campus (driving, walking, etc.)								
j. Relaxing and socialising								

6. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

	Very much	Quite a bit	Some	Very little
a. Writing clearly and effectively				
b. Speaking clearly and effectively				
c. Thinking critically and analytically				
d. Analysing numerical and statistical information				
e. Acquiring employability skills				
f. Becoming an independent learner				
g. Being innovative and creative				
h. Working effectively with others				
i. Developing or clarifying personal values or ethics				
j. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)				
k. Solving complex real-world problems				
l. Being an informed and active citizen				

7. During the current academic year, how much has your institution emphasised the following activities?

	Very much	Quite a bit	Some	Very little
a. You providing feedback about how you think the course is going				
b. You making active decisions about how and what you study				
c. You actively contributing to shaping a community of staff and students				
d. You taking responsibility for your learning				
e. Developing a sense of belonging				

Demographics	
Institution	
Subject/discipline	
Year of study	
Full-time/Part-time status	
Domicile (UK, EU, non-EU)	

Study on campus or on-line	
Accommodation (eg halls, rented flat, at home, own home)	
Gender	
Age	

Appendix 5: Student engagement survey questionnaire 3

Engagement questionnaire

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

	Very often	Often	Sometimes	Never
a. Asked questions or contributed to course discussions in other ways				
b. Come to taught sessions prepared (e.g. 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. Worked with teaching staff on activities other than coursework				
i. Made significant changes to your work based on feedback				
j. Asked another student to help you understand course material				
k. Prepared for exams or assessments by discussing or working through course material with other students				
l. Revised with other students				
m. Combined ideas from different modules when completing assignments				
n. Connecting your learning to societal problems or issue				
o. Examined the strengths and weaknesses of your own views on a topic or issue				
p. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective				
q. Learned something that changed the way you understand an issue or concept				
r. Connected ideas from your course to your prior experience and knowledge				

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

	Very much	Quite a bit	Some	Very little
a. Memorising course material				
b. Applying facts, theories, or methods to practical problems or new situations				
c. Analysing ideas or theories in depth by examining their parts				
d. Evaluating or judging a point of view, decision, or information source				
e. Forming a new understanding from various pieces of information				

3. During the current academic year, how much has your course emphasized the following activities?

	Very much	Quite a bit	Some	Very little
a. Learning how knowledge is created in your subject				
b. Learning about methods of research and analysis in your subject				
c. Learning about the outcomes of current research				
d. Exploring the knowledge base of your discipline actively, critically and creatively				
e. Formulating your own open-ended lines of enquiry (including problems, questions or scenarios)				
f. Exploring open-ended lines of enquiry formulated by yourself (including problems, questions or scenarios)				
g. Exploring open-ended lines of enquiry formulated or proposed by teaching staff (including problems, questions or scenarios)				
h. Your active participation in creating knowledge				
	Very much	Quite a bit	Some	Very little
4. During the current academic year, to what extent has your course challenged you to do your best work?				

5. About how many hours do you spend in a typical 7-day week during term-time doing the following?

	0 hours	1-5 hours	6-10 hours	11-15 hours	16-20 hours	21-25 hours	26-30 hours	More than 30 hours
a. Time in taught sessions								
b. Time spent in independent study								
c. Participating in extra-curricular or co-curricular activities (students' union, societies, sports, etc.)								
d. Working for pay								
e. Doing volunteer work								
f. Providing care for dependents (children, parents, etc.)								
g. Commuting to campus (driving, walking, etc.)								
h. Relaxing and socialising								

6. How much has your overall student experience contributed to your knowledge, skills, and personal development in the following areas?

	Very much	Quite a bit	Some	Very little
a. Writing clearly and effectively				
b. Speaking clearly and effectively				
c. Thinking critically and analytically				
d. Analysing numerical and statistical information				
e. Acquiring employability skills				
f. Becoming an independent learner				
g. Being innovative and creative				
h. Working effectively with others				
i. Developing or clarifying personal values or ethics				
j. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)				
k. Exploring complex real-world problems				
l. Being an informed and active citizen				

7. During the current academic year, how much has your institution emphasised the following activities?

	Very much	Quite a bit	Some	Very little
a. You providing feedback about how you think the course is going				
b. You making active decisions about how you study				
c. You making active decisions about what you study				
d. You being part of a community				
c. You actively contributing to shaping a community of staff and students				
d. You taking responsibility for your learning				
e. Developing a sense of belonging				

Demographics	
Institution	
Subject/discipline	
Year of study	
Full-time/Part-time status	

Domicile (UK, EU, non-EU)	
Study on campus or on-line	
Accommodation (eg halls, rented flat, at home, own home)	
Gender	
Age	

Appendix 6: Student engagement survey questionnaire (Recommended final version)

Engagement questionnaire

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

	Very often	Often	Sometimes	Never
a. Asked questions or contributed to class discussions in other ways				
b. Came to taught sessions unprepared (e.g. not completed assignments, readings, reports, etc.)				
c. Explained course material to one or more students				
d. Worked with other students on course projects or assignments				
e. Prepared for exams or assessments by discussing or working through course material with other students				
f. Discussed ideas from your course with teaching staff outside taught sessions, including by email/online				
g. Worked with teaching staff on activities other than coursework				
h. Discussed your academic performance and/or feedback with teaching staff				
i. Made significant changes to your work based on feedback				
j. Combined ideas from different modules when completing assignments				
k. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective				
l. Learned something that changed the way you understand an issue or concept				
m. Connected ideas from your course to your prior experience and knowledge				
n. Connecting your learning to societal problems or issue				
o. Talked about your career plans with teaching staff or advisors				

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

	Very much	Quite a bit	Some	Very little
a. Memorising course material				
b. Applying facts, theories, or methods to practical problems or new situations				
c. Analysing ideas or theories in depth by examining their parts				
d. Evaluating or judging a point of view, decision, or information source				
e. Forming a new understanding from various pieces of information				

3. During the current academic year, how much has your course emphasized the following activities?

	Very much	Quite a bit	Some	Very little
a. Learning how knowledge is created in your subject				
b. Learning about methods of research and analysis in your subject				
c. Learning about the outcomes of current research				
	Very much	Quite a bit	Some	Very little
4. During the current academic year, to what extent has your course challenged you to do your best work?				

5. About how many hours do you spend in a typical 7-day week during term-time doing the following?

	0 hours	1-5 hours	6-10 hours	11-15 hours	16-20 hours	21-25 hours	26-30 hours	More than 30 hours
a. Time in taught sessions								
b. Time spent in independent study								
c. Participating in extra-curricular or co-curricular activities (students' union, societies, sports, etc.)								
d. Working for pay								
e. Doing volunteer work								
f. Providing care for dependents (children, parents, etc.)								
g. Commuting to campus (driving, walking, etc.)								
h. Relaxing and socialising								

6. How much has your overall student experience contributed to your knowledge, skills, and personal development in the following areas?

	Very much	Quite a bit	Some	Very little
a. Writing clearly and effectively				
b. Speaking clearly and effectively				
c. Thinking critically and analytically				
d. Analysing numerical and statistical information				
e. Acquiring employability skills				
f. Becoming an independent learner				
g. Being innovative and creative				
h. Working effectively with others				
i. Developing or clarifying personal values or ethics				
j. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)				
k. Exploring complex real-world problems				
l. Being an informed and active citizen				

7. During the current academic year, how much has your institution emphasised the following activities?

	Very much	Quite a bit	Some	Very little
a. You taking responsibility for your learning				
b. You making active decisions about what you study				
c. You making active decisions about how you study				
d. You providing feedback about how you think the course is going				
e. You actively contributing to shaping a community of staff and students				

Demographics	
Institution	
Subject/discipline	
Year of study	
Full-time/Part-time status	
Domicile (UK, EU, non-EU)	

Study on campus or on-line	
Accommodation (eg halls, rented flat, at home, own home)	
Gender	
Age	

Appendix 7: Student engagement survey items and scales

UK engagement survey pilot 2014

Items and scales²

Higher-order learning

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

(Response options: *Very much / Quite a bit / Some / Very little*)

1. Memorising course material
2. Applying facts, theories, or methods to practical problems or new situations
3. Analysing ideas or theories in depth by examining their parts
4. Evaluating or judging a point of view, decision, or information source
5. Forming a new understanding from various pieces of information

Course challenge

1. During the current academic year, about how often have you made significant changes to your work based on feedback? *
- (Response options: *Very often / Often / Sometimes / Never*)
2. During the current academic year, to what extent has your course challenged you to do your best work?
- (Response options: *Very much / Quite a bit / Some / Very little*)
3. During the current academic year, about how often have you come to taught sessions prepared (completed assignments, readings, reports, etc.)
- (Response options: *Very often / Often / Sometimes / Never*)

Collaborative learning

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

(Response categories: *Very often / Often / Sometimes / Never*)

1. Worked with other students on course projects or assignments
2. Explained course material to one or more students
3. Asked another student to help you understand course material
4. Prepared for exams or assessments by discussing or working through course material with other students

Academic integration

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

(Response categories: *Very often / Often / Sometimes / Never*)

1. Asked questions or contributed to course discussions in other ways
2. Discussed your academic performance and/or feedback with teaching staff
3. Talked about your career plans with teaching staff or advisors
4. Discussed ideas from your course with teaching staff outside taught sessions, including by email/online
5. Worked with teaching staff on activities other than coursework

Reflective and integrative learning

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

(Response categories: *Very often / Often / Sometimes / Never*)

1. Combined ideas from different modules when completing assignments

² The items are grouped according to the original 2014 scales. The grouping therefore differs slightly from that in the appendix of the main report of the 2014 survey, where the grouping has been revised in light of statistical analysis.

2. Connecting your learning to societal problems or issues
3. Examined the strengths and weaknesses of your own views on a topic or issue
4. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective
5. Learned something that changed the way you understand an issue or concept
6. Connected ideas from your course to your prior experience and knowledge

Time spent

About how many hours do you spend in a typical 7-day week during term-time doing the following?
(Response categories: 0 / 1-5 / 6-10 / 11-15 / 16-20 / 21-25 / 26-30 / more than 30)

1. Preparing for taught sessions
2. Participating in extra-curricular or co-curricular activities (students' union, societies, sports, etc.)
3. Working for pay on campus
4. Working for pay off campus
5. Doing volunteer work
6. Providing care for dependents (children, parents, etc.)
7. Commuting to campus (driving, walking, etc.)

Skills development

How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

(Response options: Very much / Quite a bit / Some / Very little)

1. Writing clearly and effectively
2. Speaking clearly and effectively
3. Thinking critically and analytically
4. Analysing numerical and statistical information
5. Acquiring job- or work-related knowledge and skills
6. Working effectively with others
7. Becoming an independent learner*
8. Developing or clarifying personal values or ethics
9. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)
10. Solving complex real-world problems
11. Being an informed and active citizen

Engagement with research

During the current academic year, how much has your coursework emphasised the following activities?
(Response categories: Very much / Quite a bit / Some / Very little)

1. Learning how knowledge is created in your subject*
2. Learning about methods of research and analysis in your subject*
3. Learning about the results of current research*
4. Exploring the knowledge base of your discipline actively, critically and creatively*

Formulating and Exploring Questions

During the current academic year, how much has your coursework emphasised the following activities?
(Response categories: Very much / Quite a bit / Some / Very little)

1. Formulating your own open-ended lines of enquiry (including problems, questions or scenarios)*
2. Exploring open-ended lines of inquiry formulated by yourself (including problems, questions or scenarios)*
3. Exploring open-ended lines of enquiry formulated or proposed by teaching staff (including problems, questions or scenarios)*
4. Your active participation in creating knowledge *

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