



A report to:

**The Higher Education Academy**

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# **Cognitive review of survey items at postgraduate level**

**Final report**

**CooperGibson Research**

Professional research and consultancy services  
Education, skills, social science and market research

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## 1. Executive summary

The national Postgraduate Taught Experience Survey (PTES) allows institutions to collect feedback on the experiences of their taught postgraduate students. The Higher Education Academy (HEA) co-ordinates PTES (and the Postgraduate Research Experience Survey) and supports institutions and disciplines to interpret and use National Student Survey (NSS) data to make real improvements in learning and teaching by informing enhancements to the student learning experience.

In 2012, a wide-scale review was commissioned of PTES to evaluate the survey's fitness for purpose, including some pilot cognitive testing of items. This review evidenced the need for changes to various questions in the survey and a wider programme of cognitive testing.

Following this work, in May 2013, the HEA embarked on a significant redesign of PTES questionnaire and commissioned CooperGibson Research to undertake a detailed cognitive review of PTES. The broad objective of this review was to explore how students understand and interpret PTES questions in order to inform the design of the national survey. It aimed to conduct a series of cognitive interviews with postgraduate students to review the questions in PTES and explore proposed alternatives.

### 1.1 Approach

Cognitive interviewing focuses on survey questions and the cognitive processes that respondents use to answer survey questions, providing students' understanding and interpretations of individual questions. It was an iterative process based on four stages of fieldwork. After each stage of data collection, findings were fed back to the HEA and revisions to questions took place with changes and additions introduced in the next round.

The approach was innovative in that it involved both in-depth individual telephone and face-to-face cognitive interviews with postgraduate students and focus groups with postgraduate students using cognitive interviewing techniques. In total, 11 universities were involved in the cognitive interview process across England, Scotland and Wales and 77 postgraduate students. The postgraduate students represented a wide range of subject areas, different ages, home and international students and full-time, part-time and distance learning modes.

### 1.2 Key findings

The cognitive review process has been a useful tool for supporting the design of survey question items for PTES, a project which also involved wide consultation and quantitative testing of data from previous iterations of PTES. The individual and group discussions highlighted key areas of wording and phrasing issues that had not been identified previously. The students were able to explain their thinking when answering questions, highlight where questions were unclear or ambiguous and had potential for multiple interpretations. They were also able to make useful suggestions about how to revise the wording of questions, fill any significant gaps and structure the questionnaire. While there was detailed feedback against each of the survey items, there were also a number of key messages which are summarised below.

#### Overarching messages

- overall, students felt the questions tested were relatively clear and most could provide an answer to most questions, although there were differing interpretations for some questions and difficulties with specific terminology;
- there was a clear preference for the use of 'course' rather than 'programme';
- some questions were deemed to be less relevant to distance learning or part-time students because they were interpreted to relate to experiences on campus or in

face-to-face sessions (eg 'I have been encouraged to ask questions or make contributions in taught sessions');

- students felt some questions did not fit well in certain sections (although it was noted that they reviewed extracts of the questionnaire rather than the full survey).

### Messages relating to retained question items

- the final versions of questions showed more consistent interpretation during cognitive testing; on the whole students were comfortable with the wording of items and with the ease of providing a response;
- students requested that space was provided on the questionnaire to clarify certain responses;
- suggestions were made by students to include questions around providing feedback, academic and pastoral support offered, careers advice, workload and access to resources.

### Messages relating to discarded question items

- the removal of a number of problematic questions has improved the relevance of the survey for the majority of students across a wide student cohort;
- some terminology was particularly problematic for international students. Commonly used words/phrases were not recognised, eg 'motivated', 'reflect', 'professional development', 'work-based learning'. Simple language appeared to be paramount to aid their understanding;
- there was a preference for some words over others, however this appeared to be dependent on context. For example, in one case 'enhanced' or 'increased' was preferred to developed because 'developed' was interpreted to mean starting from a zero position. For other items 'developed' was thought appropriate;
- questions which required a response to be generalised (eg across modules, content, methods of delivery or programme staff), proved problematic for many students because they felt their experiences were not consistent (eg the quality of modules varied);
- questions that rated regularity/frequency/consistency were problematic since there were varying interpretations. This was especially difficult for distance learning and part-time students when it referred to aspects of courses which they assumed related to being on site. Questions that used 'frequent opportunity' for example, were interpreted widely – as one student noted, "frequent could be anything - once a week or more or five times a week or two times a month";
- students were not comfortable with rating their own performance, eg "my ability to work to a high standard has developed during my programme".

## 1.3 Considerations for the future

During this cognitive review process, a number of considerations for taught postgraduate survey design and for potential future reviews of PTES have been highlighted. This includes: the importance of revisiting the review process in the future to ensure questions remain relevant to the changing student body and interpretation remains consistent and accurate; the potential for prioritising themes within the survey for deeper exploration; the option of including past survey respondents to follow up on their actual responses in depth rather than considering how they might answer a question; and the importance of including a wide student cohort in cognitive testing with the potential for a larger cognitive interview project. This review has highlighted how informative and useful cognitive interviewing can be in the survey design process and that flexible approaches to cognitive interviewing can yield rich results. However, skilled and experienced interviewers are needed to ensure cognitive questioning works appropriately in different contexts.

## 2. Introduction

In 2012, a wide-scale review was commissioned of the Postgraduate Taught Experience Survey (PTES) to evaluate the survey's fitness for purpose, including some pilot cognitive testing of items. This review evidenced the need for changes to various questions in the survey and a wider programme of cognitive testing.

Following this work, in May 2013, the Higher Education Academy (HEA) embarked on a significant redesign of PTES questionnaire and commissioned CooperGibson Research to undertake a detailed cognitive review of PTES. The broad objective of this review was to explore how students understand and interpret PTES questions in order to inform the design of the national survey. It aimed to conduct a series of cognitive interviews with postgraduate students to review the questions in PTES and explore proposed alternatives.

The objectives were to:

1. test the face validity and interpretation of the experience-related questions proposed for retention in PTES, as well as any alternative questions proposed;
2. where tests reveal significant problems with face validity and interpretation, to propose and test alternative wordings;
3. to provide evidence which assists the sector in the interpretation and use of PTES results;
4. to contribute to a robust evidence base underpinning PTES.

### 2.1 Methodology

#### The cognitive interview process

The methodology was broadly qualitative utilising cognitive interview techniques. Cognitive interviewing focuses on survey questions (rather than the administration procedures of surveying) and the cognitive processes that respondents use to answer survey questions. In the process of cognitive interviewing, the researcher can use two key cognitive interviewing methods - think-aloud interviewing and verbal probing techniques.<sup>1</sup>

PTES review utilised both these approaches to cognitive interviewing by presenting each question to postgraduate student respondents and asking them to explain how they arrived at their answer. The interviewer also asked respondents to explain their understanding and interpretation of questions and specific terms or words within individual questions, explain why specific words were potentially problematic and to explore alternative options for phrasing questions.

The cognitive review of PTES was very much an iterative process based on four stages of fieldwork. After each stage of data collection, findings were fed back to the HEA and revisions to questions took place with changes and additions introduced to test in the next round.

While cognitive interviewing is normally conducted face to face with individual respondents, the methodology for this cognitive review also explored use of these techniques within focus group situations and over the telephone. The advantage of a focus group approach is that group discussion can produce data and insights that would be less accessible without the interaction of a group setting; listening to others' verbalised experiences can stimulate

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<sup>1</sup> Willis, G. (1999) *Cognitive Interviewing: A "How To" Guide*. pp1-5.

discussion and ideas in participants. Group dynamics, therefore, can encourage discussion of personal interpretation of questions as well as alternative interpretations and implications. The telephone interviews also offered a more cost-effective and convenient method for students to provide their feedback.

The approach involved:

- in-depth face-to-face cognitive interviewing with individual postgraduate students;
- in-depth telephone cognitive interviewing with individual postgraduate students;
- focus groups with postgraduate students using cognitive interviewing techniques.

All face-to-face interviews were conducted within university campus locations and each interview lasted one hour on average. Postgraduate students were recruited through university mailing and promotion activity conducted by PTES officers. Students were asked to volunteer to take part and were provided with an incentive of £30 for face-to-face interviews and £10 for telephone interviews for doing so.

### **Sample of postgraduate students**

In total, 11 universities were involved in the cognitive interview process across England, Scotland and Wales and 77 postgraduate students. The universities were pre-1992 and post-1992, representing the Russell Group, University Alliance, 1994 Group and small specialist institutions.

The postgraduate students represented a wide range of subject areas, including sciences, engineering, IT, business, arts and humanities, teacher training, STEM and medicine. There were a range of ages involved, males and females and a near even split of home and international students - 32 international and 45 home students. Due to the time of year, the full-time students (54) were over represented in the sample compared with the 18 part-time and distance learning students. The sample breakdown is provided in Appendix 1.

### 3. Cognitive review findings

The cognitive review process strives to refine survey question design to ensure accurate and consistent interpretation. However, it must be acknowledged that the breadth of parameters of the postgraduate student body is large and so it is a difficult but not insurmountable task to make PTES fit for purpose, easily comprehended by all students as well as providing the depth of information needed. Differences between students affecting their interpretations of questions might include area of study, age, place of domicile (home or overseas), command of the English language, mode of study, career aspirations, home/living circumstances and reason for study. The questions on the survey, therefore, need to be formulated as simply as possible without losing the depth or coverage of meaning the words give.

For such a varied student body, cognitive interviewing is crucial to designing a robust survey. Simple misunderstanding of words or phrases can be highlighted easily, such as where some international students do not understand the words 'reflect' or 'motivate'. In the process of designing questions it is important to consider the use of words which can easily be misinterpreted or provoke emotive interpretations, for instance the word 'developed' in 'developed a high academic standard' implies to some students that they didn't have a high academic standard before starting the postgraduate programme. The lack of meaning of some proposed questions for some students, such as in the question, 'I feel part of an academic community', also made questions inappropriate for inclusion since a suitable measure and phrasing could not be found.

The range of modes of study and types of courses made it difficult for all students to relate easily to all proposed questions, including for example, 'I have applied principles or theories learned on my course to new situations'. Students who were not on vocational courses or were studying out of interest for the subject (where the course was not related to career progression) did not feel the question was applicable to their situation.

This section of the report therefore provides an overview of the wide range of feedback from a variety of postgraduate students and, in doing so, illustrates the range of interpretations that can occur from what can appear to be a simple question. The report provides an explanation of testing rounds and changes taking place to specific questions as the review progressed with feedback against questions and variants of questions. It examines both the development of the final questions in PTES 2014 plus the testing and rejection of those found not to work well (some of which had previously been used in PTES but most of which had been newly suggested by institutions, PTES Advisory Group, the HEA and by students themselves).

The following sections of the cognitive review findings are structured according to the themes/sections of PTES questionnaire. As the question items went through several rounds of cognitive testing and many went through a range of iterations, for clarity, the final version of each question item is shown on the left with a summary of student feedback and commentary alongside. Any questions not included in the final version of the questionnaire are discussed separately towards the end of this chapter in section 3.11.

### 3.1 Teaching and learning

This is one of the most important sections in PTES and, as such, has been through all rounds of testing to review all questions, different iterations of questions and students' responses to these.

#### **My course has enhanced my academic ability**

Originally introduced as an alternative to the question on course challenge, 'my course has enhanced my academic ability' was included to ensure there was some form of assessment of knowledge development. The term 'academic ability' was typically interpreted by students as applying knowledge and using it. In addition, testing included 'my programme has stretched my intellectual development' and many preferred to use the term 'academic ability' as 'intellectual development' sounded "more theoretical". Students felt using 'ability' was more appropriate as this is wider than developing knowledge and can include developing skills. A discussion was also held around the use of 'stretched', 'challenged', 'broadened', 'enhanced' and 'deepened'. Some felt that 'stretched' and 'challenged' had negative connotations inferring they may be struggling with the course. They felt the three alternatives were more appropriate to postgraduate level study and that 'enhanced' was preferable to broadened since they felt this level of study requires in-depth understanding rather than a broad knowledge base. Final rounds of testing confirmed that students preferred the use of 'enhanced my academic ability'.

#### **The learning materials provided on my course are useful**

After several rounds of testing 'the learning materials helped me to learn' and 'the learning materials enhanced my learning', students showed a preference for 'the learning materials provided on my course are useful' as it was simple, concise and easy to understand. Learning materials could be wide ranging but most students could think of examples and relate to this term easily.

#### **There is sufficient contact time (face to face and/or online) between staff and students to support effective learning**

This item was well received by the majority of students. When discussing the staff it may relate to they considered lecturers, academic advisors, supervisors and, for some, programme directors.

#### **I am happy with the support for my learning I receive from staff on my course**

Students generally preferred the inclusion of 'for my learning' to ensure the question does not relate to the broader learning experience. The use of 'staff' was discussed; some preferred to be more specific by using 'teaching staff' although due to there being a range of staff who could support learning (eg laboratory technicians), it was felt that 'staff' should be used to ensure these were included. Testing also looked at the use of 'tutors' and although distance learning students could relate well to this, the majority of students preferred staff or teaching staff.

## 3.2 Engagement

It was felt important for universities to receive feedback about how well they facilitate students' engagement in, and contribution to, their own learning experience.

**I am encouraged to ask questions or make contributions in taught sessions (face to face and/or online)**

This item was tested in all four rounds of the cognitive review process. Students tended to refer to asking questions, answering questions, suggesting ideas, voicing opinions and giving presentations. The term 'taught session' was discussed considerably and although some distance learning and part-time students felt they did not have taught sessions, overall, students felt it best to retain this phrase to avoid confusion over the context of the question. An original question tested included 'usually' in the wording but this was felt to be particularly problematic, especially for part-time and distance learning students who felt their opportunities to make contributions in taught sessions were limited. Students also referred to the difficulty of generalising across all of their taught sessions – "some lecturers just stood at the front and lectured with no contributions, others invited participation from students". As an alternative, 'within my course, I feel my suggestions and ideas are valued', was felt to be quite a different question and students showed a slight preference for the original.

**The course has created sufficient opportunities to discuss my work with other students (face to face and/or online)**

An item which has been through several rounds of testing and different iterations. Previous versions stated 'I have frequent opportunities...' and 'I am usually encouraged...', however, distance learning and part-time students in particular found the reference to frequency here problematic since they tended to interpret the question as referring to face-to-face interaction and thought it quite personal. In an earlier version, clarification was added as to whom they might discuss their work with, 'peers, family, work colleagues', but students felt this irrelevant, particularly the reference to family – "why would you discuss it with family and work colleagues, why would they be interested?" After several rounds of testing, students suggested the use of 'sufficient' rather than 'frequent' as it was easier to interpret. They also highlighted confusion as to whether the question referred to opportunities to discuss work in taught sessions or outside of these, eg in social interaction. To overcome this confusion, they suggested using 'the course has created'.

**My course has challenged me to produce my best work**

'My course has challenged me to produce my best work' was developed out of several rounds of cognitive testing. It aims to assess academic challenge and development. Original versions tested included, 'I feel motivated to put as much into studying as I can' and 'my ability to work to a high academic standard has developed during my programme'. These were not well received especially by international students who were not clear on their meaning; they particularly did not understand the word 'motivated', whether it meant driven or productive or whether it was to do with time or effort, or "is it connected with other people's actions or the student?" They also commented that these versions of the question were requiring them to rate their own development which they did not feel comfortable with and using the word 'developed' implied they were starting from a low base with respect to a high academic standard. In later rounds of testing, 'my course has challenged me

to produce my best work' generated mixed responses. Some did not like the term 'best work'; some felt their work could always be better so it would be difficult to rate and they questioned how they would know whether it was their best work.

### **The workload on my course has been manageable**

'The workload on my course has been manageable' evolved through the cognitive interviewing. Students had a preference for this wording as the original alternative 'I could cope with the workload on my programme' was deemed too personal and was putting the student at fault if they did not fully agree with the statement – "I could cope with the workload on my programme is about personal ability"; "you will get a skewed response, most people will say yes even if they feel pressured. If you disagree, you are almost damning yourself". Likewise 'the volume of work means I can always complete it to my satisfaction' was discounted by students since they felt many would say they could always perform better and achieve more – "I would never say I had completed my work to my satisfaction, there is always something extra you could do. No-one would be satisfied". In addition, students were not comfortable with 'the amount of work allows me to give each task sufficient attention' as they felt every student would like more time for assignments/tasks and not all tasks require the same attention. They therefore preferred 'the workload on my course was...' as this was less personal. Variants of this statement were tested, such as using 'reasonable' which was considered to be ambiguous and in conflict with experiences of part-time students who had other commitments alongside postgraduate study. Students suggested the term 'manageable' which was tested and accepted as simple and easy to understand and answer in later rounds.

### **I have appropriate opportunities to give feedback on my experience**

Students were comfortable with answering 'I have appropriate opportunities to give feedback on my experience'. They talked about assessment forms they would complete for modules and giving feedback through tutors.

## **3.3 Assessment and feedback**

Two key items were tested from this section of PTES questionnaire. One item achieved varied feedback with multiple interpretations and therefore was not included in the final version of the survey (see section 3.11). It had been decided previously to retain the other three items in this scale to permit comparisons with the undergraduate National Student Survey.

### **Feedback on my work (written or oral) has been useful**

The item referring to receiving academic feedback was tested using two variants. There was an overall preference for the more concise and simple version 'feedback on my work (written or oral) has been useful' over 'feedback on my work has helped me to clarify things I did not understand', although this alternative did not cause particular issues. A decision was made to use the preferred option. Also it was felt that feedback is broader than 'clarifying things'.

### 3.4 Dissertation or major project

**Are you currently planning, undertaking or have completed a dissertation or major project as part of your course?**

- Yes
- No

Early feedback determined that the initial qualifying question asking whether students were completing or had completed a dissertation or major project, needed further clarification because some students were unsure as to what the terms 'dissertation' and 'major project' might refer to. Examples of long essay, independent research project and laboratory project were included as a result. During later testing rounds students found this question simple and straightforward to answer.

**If 'yes', what stage of your dissertation or major project are you currently at?**

- Planning
- Currently doing
- Completed

The follow-up item which determines the stage students are at with their dissertation or major project was equally simple for most students to answer. Testing of this question asked students to review three types of response options. Initially, students were presented with options of 'planning', 'currently doing and at an early stage', 'currently doing and around midway' and 'completed'. The majority of students felt they could answer the question although one or two suggested the options were open to interpretation. A small number suggested using percentage terms, eg 'completed 25%', 'completed 50%'. This alternative was tested in later rounds and although students could answer the questions, they did not have a preference over the original structure. Indeed, some suggested the response options could be much simpler with three statements; 'planning', 'currently doing' and 'completed'. Most students could cope with either structure although international students seemed to feel more comfortable with the latter version. This simple structure was, therefore, incorporated into the survey.

**I am happy with the support I received for planning my dissertation/major project (topic selection, project outline, literature search, etc)**

Two further questions about students' dissertation/major project experiences were cognitively tested. 'I am happy with the support I received for planning my dissertation/major project (topic selection, project outline, literature search, etc)' was slightly amended as a result of feedback. There were a number of interpretations of what the planning stage involved. Students referred to activities such as having discussions with the supervisor, deciding on a topic, conducting research, writing a proposal/outline and having research methods training. The examples provided in brackets were added to this question to provide further clarification.

**My supervisor provides helpful feedback on my progress**

The wording of this item was generally preferred to 'I have contact with my supervisor/s, appropriate for my needs'. Initial testing referred to students having regular contact with their supervisor which students tended to interpret in different ways and many commented that they may not require regular contact. As a result, 'regular' was replaced with 'appropriate'. When testing 'having appropriate contact' against 'helpful feedback', students could answer both but later testing rounds found a preference for 'provides helpful feedback' as they could relate to this easily and felt that having contact did not necessarily mean it would be helpful, the former statement was therefore more meaningful.

### 3.5 Organisation and management

**I was given appropriate guidance and support when I started my course**

This was the result of testing what students thought of their course 'induction'. There were a range of interpretations of induction from a discussion with staff, tour of the campus, registration, being shown how to log on to the university system, presentation/meeting to find out about the course structure and content, to a few days or a week induction period. Most students could remember their 'induction', although this term was more difficult for international students to understand clearly. As a result, the wording of the question was revised to the current statement which was more straightforward for students to respond to during later testing rounds.

**I am encouraged to be involved in decisions about how my course is run**

While students liked the idea of this question, they felt it may be difficult to comment as they would not see the results of their feedback being actioned and, as such, this question could generate large proportions of negative responses. Nevertheless, it was felt that 'I am encouraged to be involved in decisions about how my course is run' was a worthwhile question and should be trialled. Including a question which focuses on exploring how feedback has been acted upon was a request made by a small number of students during the cognitive interview rounds.

### 3.6 Resources and Services

**The library resources and services are good enough for my needs (including physical and online)**

Round one of the cognitive interviewing explored a question on the adequacy of library facilities. While most students were reasonably comfortable with this style of question, distance learning students were less so because they were not sure if online resources such as online journals were included. Students therefore suggested the alternative, 'the library resources and services are good enough for my needs (including physical and online resources)'. Later testing rounds found this revised question to be suitable and relevant to all students engaged in the cognitive review.

**I have been able to access general IT resources (including physical and online) when I needed to**

An initial question referring to the adequacy of computing resources and facilities was deemed to be less applicable to distance learning students as they spent less time on campus than others. Some also suggested the facilities might be made available by the university but either access was problematic or the facilities were not working at times when they were required. The alternative suggested by students and tested in later cognitive interview rounds, 'I have been able to access general IT resources (including physical and online) when I needed to', was found to be applicable, easy to understand and answer.

**I have been able to access subject specific resources (eg equipment, facilities, software) necessary for my studies**

An initial question on specialist resources proved problematic for many students as they found the term to be particularly vague and were unsure how to interpret it. In addition, distance learning students did not feel the question related to their circumstances as they tended to think of the use of physical spaces such as laboratories or equipment. While, during four separate testing rounds, some students said the question was suitable and relevant,

many did not. The final cognitive interview round therefore tested the alternative, 'I have been able to access subject specific resources (eg equipment, facilities, rooms, software) necessary for my studies'. This revised version was slightly easier for students to relate to, including distance learning students, particularly with the examples provided in the brackets.

**I am aware of how to access the support services at my institution (eg health, finance, careers, accommodation)**

This item did not highlight any particular issues during cognitive testing. Some distance learning and part-time students did say the services were less relevant to them but they did know how to access them so they would be able to answer the question appropriately – "it is straightforward but it doesn't apply to me because I am at a distance, I would tick not applicable".

### **3.7 Skills development**

**As a result of the course I am more confident about independent learning**

This item was tested in several cognitive interviewing rounds. Variants were explored such as, 'as a result of the course I am confident in directing my own learning'. Students struggled with this version - particularly international students - as they were not sure whether it was referring to the work that the course was asking of them or the additional learning they were doing themselves. Some felt the question was more about project management. Another variant, 'I have developed a more sophisticated approach to learning' was tested in round two and feedback suggested that there were different interpretations of sophisticated approach – "better study skills, essay writing, research etc" or "learning independently", or "higher than undergraduate level". Across later rounds of testing, students gave a clear preference for using 'independent learning' since this was more straightforward, easy to relate to and with less room for multiple interpretations.

**My confidence to be innovative or creative has developed during my course**

This was not particularly problematic. Most students could relate to the two concepts in one way or another. Although many thought that being innovative related more to science subjects and being creative to the arts, all could find examples of how they had been innovative or creative even if they were not on these types of programmes, for example by focusing on a new area of investigation for an essay or dissertation – "I came up with a research proposal, innovation is part of it".

**My research skills have developed during my course**

Similarly, 'my research skills have developed during my course' was relatively simple and straightforward for students to respond to. The only discussions were around the use of examples to clarify the term 'research skills'. Some students felt that the examples were not necessary and others found them helpful. Various examples were discussed, such as research methods, ethics, critical analysis and practical skills. The only contentious example was 'ethics' which some law and arts students found irrelevant. On balance, it was decided to remove the examples from the question since many students felt them unnecessary and potentially restrictive – "you

don't need the brackets as they are examples – they vary from module to module”.

**My ability to communicate information effectively to diverse audiences has developed during my course**

The original question ‘as a result of this programme my communication skills have improved’ had previously been found to be too basic for PGT level students. The new question ‘my ability to communicate information effectively to diverse audiences has developed during my course’ sparked a variety of interpretations. Some international students felt the question referred to their adequate use of the English language although, overall, most students felt the question was about “getting ideas across effectively and clearly so people understand”. There were also varying responses to ‘diverse audiences’, which presented considerable difficulty for distance learning students who felt their opportunities to present to different audiences were limited. Many international students felt this term referred to peers on their course from different backgrounds, others felt it referred to “an audience that might not know about your key areas of study, people from different backgrounds and with different subject knowledge”. Overall, there was no consensus on the wording of this question. It was understandable and straightforward for most although not relevant to all.

**I have been encouraged to think about what skills I need to develop for my career**

As a result of feedback from students, questions were devised which addressed the guidance and support they received, particularly with transition and careers support. Within this section of the questionnaire, there are two questions which refer to developing skills for a career.

‘I have been encouraged to think about what skills I need to develop for my career’ is more about the content/focus of the course rather than the impact of the course as a whole. It was originally worded ‘I am encouraged to reflect on my professional development needs’ which the majority of students, especially international students, but also home students, did not understand due to their uncertainty of what professional development needs might mean – “professional development, does this mean future career development?” Several international students were also unclear about the word ‘reflect’. This question also referred to ‘future career’ which was problematic for those not on vocational courses or those studying out of interest rather than as career progression.

**As a result of the course I feel better prepared for my future career**

Likewise, this second item on developing skills for a future career was problematic for those who were not career orientated, where career development was not a need or where career aspirations were not clear. It was however, viewed as a more general version of the above in that it was referring to how a course provides general skills development and preparation for a career rather than specifically addressing career aspirations and related skills needs. It was, therefore, viewed as simple to respond to.

### 3.8 Overview

#### Overall, I am satisfied with the quality of the course

As a general overview, 'overall, I am satisfied with the quality of the course', was tested in the first round of cognitive interviews. Later testing was not necessary as the question did not pose any issues.

### 3.9 Motivations

The question asking for main motivations for taking the postgraduate course was straightforward for students to respond to. They felt that the response options covered most scenarios. Similarly, the question which asked why students were studying their qualification at the particular institution was considered to have a good range of response options. One option was added however, around 'the content of the course' as students identified this as an important reason.

### 3.10 About your education and career

Some questions from the final section asking for demographic and programme related content were cognitively tested in later rounds of fieldwork. They did not pose any particular problems since students are familiar with this style and type of question.

The questions around programme funding sources were generally felt to be clear with an appropriate range of response options although some students had identified overlaps between some of the self-funding options (personal income, savings or various loan options). The multiple-choice format of these questions will reflect this possibility of overlap.

### 3.11 Rejected question items

The following items were explored through the cognitive testing rounds and were not included in the final version of PTES 2014 because they either generated multiple and inconsistent interpretations, included wording that some students could not understand or were not relevant to the majority of students.

#### Consistency of teaching

Students had difficulty answering a question which explored how consistent the quality of teaching was as they were having to generalise and tended to default to an overall evaluation of teaching. There were a variety of interpretations of the word 'consistently'. One student commented that consistently meant "all the way through or most of the time", another said it meant "in general, overall or the norm for three-quarters of the year or more". One student commented that the question was vague, "what does consistently mean – over time or over lectures?". Some said they had given lower ratings because they had experienced poor quality at the start of their course and others gave lower ratings because they had experienced variation of teaching across staff – "one of the course lecturers was very disorganised, most others have been good" and "I would disagree, people who I have had most contact with have been consistently good but one lecturer was poor". Several suggested using instead, 'overall the teaching on my course has met my expectations' as they felt this to be a personal value judgement they could make. However, previous research had found that using 'expectations' can be problematic. It is clear students were struggling to respond to this question accurately and interpret it consistently.

## Academic community

One question which did not fare well in testing was, 'I feel part of an academic community'. Many students did not understand what the term 'academic community' referred to. Some questioned whether the term referred to the whole university and several said this term made them think of course peers although often this related to those on small courses. Distance learning students struggled with the term since they were external to the university environment – "it is strange if you are not attending college, you aren't part of the community. To be part of an academic community you need to have face-to-face contact with people". A part-time student made similar comments, "I don't feel part of an academic community since I am part-time but I also work alone as a maker of things..." An alternative was tested, 'I feel part of a group of students and staff committed to learning', although not all were happy with this, distance learning and part-time students again felt it was not relevant to them and most suggested that using the term 'group' made them think of their tutor group. This question was therefore generating inconsistent and inaccurate interpretation and was removed as a result.

## Depth of learning

A question was designed to cover depth of learning and originally was phrased as 'assessment methods require in-depth understanding of programme content'. This received varied responses with some suggesting it was not clear what 'programme content' meant. As an alternative, 'in-depth knowledge and understanding of complex ideas' was tested but students felt that this was too vague and suggested using 'knowledge of the subject being assessed'. While most students preferred this option, they felt it was important to 'demonstrate' the knowledge, leading to the final version; 'to do well in assessments I needed to demonstrate in-depth knowledge of the subject being assessed'. However, given the view that this question would not provide insightful feedback and that international students sometimes had difficulty interpreting it accurately, the question was not included in PTES.

## Social learning spaces

A question on social learning spaces was initially put to students and there were various interpretations such as 'Moodle' and room booking facilities. Due to concerns about how applicable the question would be to all student groups it was removed.

## Pastoral support from staff

One question which sparked substantial discussion was 'there is at least one member of staff at my institution who is interested in my overall well-being' and the alternative 'overall, staff at my institution are interested in my well-being'. The question aims to ascertain the extent to which students are supported pastorally. While students could provide an answer to both versions, they generally found the first version easy to relate to and would be more likely to give a negative response to the second version because "all staff aren't interested in my well-being". Distance learning and part-time students also felt that the second version was not relevant to them as they liaised with a small selection of staff. Some felt this version of the question related to the institution being interested in their well-being and could not see the point of the question. Another alternative was also tested, 'there are staff who are interested in my overall well-being'. For this version, students thought of different types of staff such as lecturers, course leaders, different academics, and supervisors and they also questioned the use of the term 'well-being' and whether this meant their social well-being or health – "it could be massive – spiritual, mental, physical, psychological, health". There did not appear to be any real consensus on the version to use and many students felt that the question was not worthwhile. The question therefore, was not included in the final version of the questionnaire.

## Applying theories to practice

One further proposed question was tested but removed because it was difficult for many students (particularly full-time students) to relate to. 'I have applied principles or theories learned on my course to new situations', was straightforward for those in part-time employment to answer. However, those who were full-time students and those who were studying out of interest for a subject (and therefore, the course did not relate to their current employment) found it difficult to think of examples of when they might apply the knowledge they had developed to practice – "it depends on the context, if you are doing a course as a bit of fun, it isn't appropriate, it is ok if you have a job"; "I can't think of examples of how I have applied principles or theories, I am a solicitor doing a history course for fun". Some full-time students could only relate it to their course experience – "I am thinking of doing the dissertation and how I applied the theories".

## Work-based learning

In initial rounds of cognitive testing, the survey included a question to explore the extent of work-related learning across the student group. The original wording of this question asked if students were currently or had undertaken any work-based learning related to their studies. However, many students did not fully understand the term work-based learning, including home and international students – "what does work-based learning mean here?". The question was further tested using revised terminology as suggested by students responding to round one of the cognitive interviewing, 'are you in employment, internship or undertaking a placement or work experience that is related to your programme?'. While this was much more straightforward and all students could interpret it correctly, the question was removed as work-based learning did not apply to the majority of students. Other variants were also tested and dropped due to poor interpretation and understanding, such as, 'my programme is effectively integrated into my work-based learning', 'my work-based learning has contributed to my professional development' and 'I have solved real problems as part of my work-based learning'.

## 4. Summary and concluding comments

The cognitive review process has been a useful tool for supporting the design of survey question items for PTES, a project which also involved wide consultation and quantitative testing of data from previous iterations of PTES. The individual and group discussions highlighted key areas of wording and phrasing issues that had not previously been identified. The students were able to explain their thinking when answering questions, highlight where questions were unclear or ambiguous and had potential for multiple interpretations. They were also able to make useful suggestions about how to revise the wording of questions, fill any significant gaps and structure the questionnaire.

There was merit in using alternative methods along with the traditional face-to-face individual cognitive interviewing. Telephone interviews gave a relaxed and convenient option for students to respond and a cost effective method. Focus groups provided a group dynamic in which discussions of the meaning and interpretation of questions, phrases or words and making suggested alternatives were fruitful.

### 4.1 Key messages

General comments and findings relating to PTES include:

#### Overarching messages

- overall, students felt that the questions tested were relatively clear and most could provide an answer to most questions, although there were differing interpretations for some questions and difficulties with specific terminology;
- there was a clear preference for the use of 'course' rather than 'programme';
- some questions were deemed to be less relevant to distance learning or part-time students because they were interpreted to relate to experiences on campus or in face-to-face sessions (eg 'I have been encouraged to ask questions or make contributions in taught sessions');
- students felt that some questions did not fit well in certain sections (although it was noted that they reviewed extracts of the questionnaire rather than the full survey).

#### Messages relating to retained question items

- the final versions of questions showed more consistent interpretation during cognitive testing; on the whole students were comfortable with the wording of items and with the ease of providing a response;
- students requested that space was provided on the questionnaire to clarify certain responses;
- suggestions were made by students to include questions around providing feedback, academic and pastoral support offered, careers advice, workload and access to resources.

#### Messages relating to discarded question items

- the removal of a number of problematic questions has improved the relevance of the survey for the majority of students across a wide student cohort;
- some terminology was particularly problematic for international students. Commonly used words/phrases were not recognised, eg 'motivated', 'reflect', 'professional development', 'work-based learning'. Simple language appeared to be paramount to aid their understanding;
- there was a preference for some words over others, however this appeared to be dependent on context. For example, in one case 'enhanced' or 'increased' was

preferred to developed because 'developed' was interpreted to mean starting from a zero position. For other items the 'developed' was thought appropriate;

- questions which required a response to be generalised (eg across modules, content, methods of delivery or programme staff), proved to be problematic for many students to respond to because they felt their experiences were not consistent (eg the quality of modules varied);
- questions that rated regularity/frequency/consistency were problematic since there were varying interpretations. This was especially difficult for distance learning and part-time students when it referred to aspects of courses which they assumed related to being on site. Questions that used 'frequent opportunity' for example, were interpreted widely – as one student noted, "frequent could be anything - once a week or more or five times a week or two times a month";
- students were not comfortable with rating their own performance, eg 'my ability to work to a high standard has developed during my programme'.

The above points have been acted on resulting in for example: the use of 'course' rather than 'programme'; simplification of terminology and removal, where possible, of words that were particularly problematic for international students; rephrasing questions to ease generalisations across course structures and staff; clarifications (eg use of brackets) to ensure questions relate to all types of students including distance learners and part-time students; and reviews of the positioning of questions within the sections of the questionnaire.

## **4.2 Considerations for taught postgraduate survey design and future reviews of PTES**

While this review has enabled considerable refining of the survey questions, it will be important to review PTES questions in the future and analyse survey results to check consistency of understanding and relevance of questions in order to further hone the survey for the most robust findings. Over time changes in the student body's attributes due to student body composition, general life and culture changes as well as higher education changes will affect interpretations and how students answer questions. Cognisance might be taken of these changes in future review planning.

Additionally, further prioritisation of areas of questioning could be used to focus more deeply on some of those areas. It might be that if teaching and learning, for instance, is regarded as the main priority then further in-depth questions could be asked on this theme with fewer questions asked in other areas. In saying this it will be important to keep the survey to a reasonable length. It may be helpful to choose one area per year to focus on, however this means that comparison year upon year for the more detailed questions would not be possible.

On reflection, cognitive interviewing works well with postgraduate students and the use of focus groups in tandem with cognitive interviewing has been very beneficial. This would be a useful technique to use in subsequent work on PTES question formulation. However, skilled and experienced interviewers are needed to ensure cognitive questioning works appropriately in a group situation.

In order to provide a different facet of analysis it might be useful to consider interviewing past survey respondents to follow up on their responses in depth. A larger cognitive interview project would provide more comprehensive information and it would be possible to include a wider range of students, particularly international students and different modes of study.

## 5. Appendix 1: HEA – PTES cognitive review interview record

University	Programme type	Subject	Type of student
<b>English Post-92 GuildHE</b> <b>(4 x telephone interviews)</b>	Part-time	Post Graduate Certificate in Education	Home
	Part-time	Human Resources	Home
	Part-time	Psychotherapy	Home
	Full-time	Postgraduate Diploma in Nursing	Home
<b>English Post-92 Universities Alliance</b> <b>(2 focus groups = 15 students)</b>	Full-time	Information Systems	International
	Full-time	Finance	International
	Full-time	Finance	International
	Full-time	Engineering	International
	Full-time	Sociology	International
	Part-time	Psychology	Home
	Full-time	Psychology	Home
<b>Distance Learning Post-92 Universities Alliance</b> <b>(4 x telephone interviews)</b>	Distance Learner	Science	Home
	Distance Learner	Youth and Education	Home
	Distance Learner	Arts and Humanities	Home
	Distance Learner	Design and Engineering	Home
<b>English Post-92 Small &amp; Specialist</b> <b>(2 x telephone interviews)</b>	Part-time	Crafts	Home
	Full-time	Animation	International
<b>English Pre-92 Non-aligned</b> <b>(6 x face-to-face interviews)</b>	Full-time	Architectural Engineering	International
	Full-time	Economics	International
	Full-time	Biology	Home
	Full-time	Economics	International
	Full-time	Wellbeing	International
	Full-time	TESOL	International

University	Programme type	Subject	Type of student
<b>English Pre-92 Russell Group</b> (9 x telephone interviews)	Full-time	Education	Home
	Part-time	Zoology	Home
	Full-time	Law	Home
	Full-time	History	Home
	Part-time	Social Work	Home
	Part-time	History	Home
	Part-time	Social Research	Home
	Part-time	Engineering	Home
	Distance Learner	Heritage	Home
<b>Welsh Pre-92 Russell Group</b> (2 focus groups = 8 students)	Full-time	Research Methods	Home
	Full-time	Biology	Home
	Full-time	Marketing	Home
	Full-time	Business Administration	Home
	Full-time	Urban Studies	Home
	Full-time	English Literature	Home
	Full-time	Social sciences	International
	Full-time	Politics	International
<b>Scottish Pre-92 Russell Group</b> (2 focus groups = 9 students)	Full-time	Literature	International
	Full-time	Food security	Home
	Full-time	Linguistics	International
	Full-time	Linguistics	International
	Full-time	Psychology	International
	Full-time	Electronics	International
	Full-time	Criminology	International
	Full-time	English	Home
	Full-time	Childhood Studies	International

University	Programme type	Subject	Type of student
<b>English Pre-92 Russell Group</b> <b>(2 focus groups = 10 students)</b>	Full-time	Business and Management	Home
	Full-time	Environmental Assessment	International
	Full-time	Accounting	International
	Full-time	Educational Management	International
	Full-time	Museum Studies	Home
	Full-time	Fashion and Marketing	International
	Full-time	Biology	International
	Full-time	Educational Management	International
	Full-time	Chemistry	International
	Full-time	Economics	Home
<b>Welsh Pre-92 Non-aligned</b> <b>(5 x face-to-face interviews)</b>	Full-time	Finance	Home
	Full-time	History	Home
	Full-time	History	Home
	Full-time	Environmental Conservation	Home
	Full-time	Human Rights	International
<b>Welsh Post-92 Non-aligned</b> <b>(5 x telephone interviews)</b>	Distance Learner	History	Home
	Distance Learner	Religious Studies	Home
	Distance Learner	Classical Studies	Home
	Distance Learner	Classical Studies	Home
	Distance Learner	Classical Studies	Home

Note that distance learning students were generally on part-time courses.