This paper reports three studies about preparing Further Education (FE) students for the transition to Higher Education (HE) by improving their understandings of HE assessment criteria. In study 1, students and tutors in both FE and HE were interviewed for a qualitative analysis of their understandings and expectations about assessment criteria. In study 2, students in FE and HE completed questionnaires measuring self-rated understanding and ability about assessment criteria, and beliefs about essay writing. Studies 1 and 2 both showed that FE students were more confident than HE students about their understanding and ability in relation to assessment criteria, but FE students’ understandings suggested more surface approaches to learning and more naïve epistemological beliefs. In study 3, a workshop intervention to improve FE students’ understandings of HE assessment criteria was evaluated in a comparative longitudinal trial. The intervention reduced FE students’ self-rated understanding and ability, and promoted more sophisticated beliefs about essay writing, by comparison with students who received standard tuition. We concluded that interventions to develop more realistic understandings of what is required in academic writing could be used to prepare FE students more effectively for the transition to HE.

**Keywords:** Assessment criteria, Further Education, Access courses, A level courses, university, psychology, transitions, achievement, progression.

**General introduction**

To make a successful transition from Further Education (FE) to Higher Education (HE), students must adjust to different styles of teaching, develop deeper and more autonomous approaches to learning, and prepare in different ways for assessment. A comparative study of teaching methods, for example, found that at A level there was greater reliance on tutor-provided content and less expectation of autonomous study, and critical analytic skills development was mainly limited to preparation for specific exam questions, whereas university students were expected to be more autonomous and were encouraged to develop more general analytical skills for assessment (Ballinger, 2003).

Understanding written assignments is a key issue for first year HE students. In one sample, nearly half (47%) reported difficulties with writing essays, and 78% did not know what markers were looking for in their essays (Pain & Mowl, 1996). Many HE students are prone to misconceptions about what counts when their assignments are assessed (Norton, 1990; Norton et al., 1996), and
there are substantial mismatches between staff and student understandings of the meanings of assessment criteria (Harrington et al., 2006a; Merry et al., 1998; Norton et al., 1999; Williams, 2005). Some forms of study support in HE have aimed to improve students’ understandings of the criteria that are applied to their written work (Bloxham & West, 2004; Defeyter & McPartlin, 2007; Elander, 2003; Pain & Mowl, 1996; Rust et al., 2003). One approach focuses on seven core assessment criteria that are common across institutions and disciplines in HE: addressing the question, demonstrating understanding, critical evaluation, developing arguments, structuring, using evidence, and using academic language (Elander et al., 2004). Meeting these criteria requires complex skills and deep approaches to learning (Elander et al., 2006), and criteria such as critical evaluation, development of argument and using evidence are closely related to the development of general analytical skills that Ballinger (2003) reported were encouraged to a greater degree in HE compared with FE. Workshops on those core criteria have improved university students’ understandings of what is required in academic writing (Harrington et al., 2006b; Norton et al., 2005), so this approach could be applied to help prepare FE students for the transition to HE.

This paper reports three studies on the development and evaluation of an intervention to help FE students understand HE assessment criteria. The first was a qualitative interview study in which students in FE and HE were asked about their understandings of HE assessment criteria for written assignments, and how they believed they could meet those criteria in written work, and tutors in FE and HE were asked about how the criteria applied to the work of the students they taught. The analysis focused on key differences between the understandings and beliefs of students and tutors in FE compared with those in HE. The second study approached the same issues in a quantitative way, using a questionnaire survey to assess FE and HE students’ self-rated understanding and ability in relation to HE assessment criteria. The third study evaluated a workshop intervention, which was informed by the results of studies 1 and 2, and aimed to improve FE students’ understandings and beliefs about HE assessment criteria.

All three studies took place at a UK dual-sector institution offering both FE and HE, and focused on psychology students in both sectors. The studies were not independent of one another; some of the students who took part in study 1 also took part in studies 2 and 3.

Study 1: Qualitative analysis
Introduction
Qualitative research can inform the development of learning interventions by providing detailed descriptions of students’ conceptualisations and understandings of assessment criteria. Comparative qualitative research, for example, was used to highlight differences between HE student and tutor understandings of assessment criteria (Harrington et al., 2006a), but to our knowledge there have been no qualitative comparisons between FE and HE students’ understandings.

Teaching methods have been shown to differ between FE and HE (Ballinger, 2003), and tutors in HE can make unfounded assumptions about how students were taught prior to entry to HE (Birnie, 1999). Students experiencing transition difficulties may fall back on practices they learned prior to HE (Clerehan, 2003), so FE and HE tutors’ understandings and expectations about assessment criteria could also affect student transitions to HE.

In this study, FE and HE students were asked about their understandings of core assessment criteria, and tutors were asked about their expectations of students in relation to those criteria. Qualitative methods were used to compare understandings and expectations between FE and HE, and compare student understandings with tutor expectations in each sector.
Assessment criteria intervention

Participants
There were nine FE and seven HE student participants. The FE students comprised five Access and four Psychology A level (two AS, two A2) students, ranging in age from 16 to 52 years (mean 19 years). The HE students comprised six undergraduate psychology students (two 1st years, three 2nd years and one 3rd year), plus one psychology Graduate Diploma student, ranging in age from 20 to 35 years (mean 27 years).

There were three FE and five HE tutor participants, who taught the courses taken by the student participants. The FE tutors all had over 10 years teaching experience, and the HE tutors had between two and 17 years teaching experience.

Data collection
Students were interviewed individually or in groups, according to participant preference. There were nine individual interviews (four with FE students, five with HE students) and two group interviews (one with five FE students, the other with two HE students). Tutors were all interviewed individually. Individual interviews lasted approximately 30 minutes and group interviews approximately one hour.

The interviews covered each of the seven core assessment criteria for written assignments in Higher Education: addressing the question, demonstrating understanding, critical evaluation, developing argument, structuring, using evidence, and using academic language. Students were asked what they understood each of the criteria to mean and what they believed they should do to meet the criteria in their written work. Tutors were asked how each of the criteria applied to work submitted by students on modules they taught, and what they believed students should do to demonstrate the criteria in written work.

Data analysis
The interviews were audio-recorded, transcribed and analysed using thematic analysis (Boyatzis, 1998; Glaser & Strauss, 1967). The general analytic approach involved six phases: familiarisation with the data, generating initial codes, searching for potential themes, reviewing these themes, defining and specifying each theme, and describing the themes in a written report (Braun & Clarke, 2006). The specific analytic strategy was that employed previously in a qualitative analysis of differences between HE staff and student understandings of assessment criteria (Harrington et al., 2006a). This involved analysing for semantic themes in relation to each of the criteria and each sector (FE and HE), and identifying thematic contrasts between HE and FE. First, a dominant theme was identified for each criterion and each sector in turn. Second, the dominant themes for each sector were juxtaposed to identify areas of contrast or difference between FE and HE. Third, overarching themes were identified that captured the contrasting understandings held in each sector across the seven criteria.

Results
The overarching themes were that the assessment criteria were understood in FE more in terms of the selection and inclusion of ‘correct’ content material and the reproduction of ‘facts’, whereas in HE they were understood more in terms of the analysis and transformation of material. The dominant themes in relation to each of the assessment criteria are summarised in table 1.
Table 1. Dominant themes in understandings of assessment criteria in FE and HE

<table>
<thead>
<tr>
<th>Core criterion</th>
<th>Further Education</th>
<th>Higher Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addressing the question</td>
<td>Including relevant rather than irrelevant facts.</td>
<td>Relating the material to the essay question.</td>
</tr>
<tr>
<td>Demonstrating understanding</td>
<td>Including all the right facts. Giving accurate details.</td>
<td>Interpreting information.</td>
</tr>
<tr>
<td>Critical evaluation</td>
<td>Finding strengths and weaknesses of approaches. Focusing mainly on weaknesses.</td>
<td>Making judgments about research and approaches.</td>
</tr>
<tr>
<td>Developing argument</td>
<td>Not required in A level writing. Aggressive/assertive types of argument.</td>
<td>Developing a standpoint backed up by evidence.</td>
</tr>
<tr>
<td>Structuring</td>
<td>Not required in A-level writing. Surface structure (introduction, main body, conclusion, word count).</td>
<td>Structure related to argument.</td>
</tr>
<tr>
<td>Using evidence</td>
<td>Including descriptive detail (eg names of researchers and theories).</td>
<td>Using evidence to support argument and evaluation. Focusing on quality of sources (eg peer-reviewed research).</td>
</tr>
<tr>
<td>Using language</td>
<td>Using specialised terminology.</td>
<td>Creating clear and coherent sentences.</td>
</tr>
</tbody>
</table>

**Addressing the question**

Students in both sectors understood this to mean not deviating from the question in a general sense, but whereas all four of the A level students gave responses focusing mainly on including the ‘right’ information, five out of the seven HE students focused on relating the material to the title and restructuring it to make it relevant or relate it to the question:

- ‘Not going off on irrelevant information, nothing to do with your question’ (A2 FE student)
- ‘You can find what is relevant and you can structure it to the particular answer’ (Year 2 HE student)
- ‘Addressing the question would be tackling ... key terms and what they mean in relation to that question’ (Graduate Diploma HE student)

Access students’ understandings were mixed, with some resembling those of A level students and some those of HE students:

- ‘Not going on a tangent because that is the only thing you remember’ (Access FE student)
- ‘Being selective with the information you know and not putting everything you know in to prove that you know it but actually tailoring the information you have towards the purpose they intend’ (Access FE student).

Tutors in both sectors interpreted addressing the question as referring to whether students understood the specific question or title posed. However, FE tutors expected A level exam questions and assignment titles to be worded in predictable ways, for example ‘describe and evaluate’, and to refer to broad areas of the subject, which meant that ‘writing everything you know’ about a topic was not such a bad strategy provided the answer contained some description and evaluation. FE
tutors therefore looked for students’ ability to select and include information that was relevant to the question:

‘So the way they will fail to answer the essay question is by writing the complete wrong topic or just describing instead of describing and evaluating. Those would be the typical problems’ (FE tutor)

HE tutors, by contrast, expected students to actively reorganise material to give specific answers to questions that were designed to challenge students to be more creative. They also emphasized the importance of relating material back to the question, and viewed this as evidence of active engagement with the material:

‘That means tailoring your answer, writing an answer that is specifically designed to respond to the title that has been set ... It’s not just material and theories in this general subject’ (HE tutor)

‘If a student addresses the question it means that they take a body of knowledge and they move that knowledge around so that it actually provides a response to the question’ (HE tutor)

Demonstrating understanding
FE students were more confident than HE students about their understanding of this criterion, but three of the four A level students perceived it to mean including all the ‘correct’ material. This view seemed to reflect a surface approach to learning and belief in a model answer, with marks awarded according to the amount of ‘correct information’ included:

‘It is just if you are consistent and you write correct information then you are able to demonstrate understanding ... If we have it all in we are demonstrating understanding’ (AS FE student)

Some Access students’ responses seemed to indicate more sophisticated beliefs about demonstrating understanding:

‘Not merely regurgitating what you have been told but using your own words ... and interpreting. Do you think interpreting?’ (Access FE student)

Two of the HE students described feeling uncertain about understanding this criterion, but on further probing, five of the students gave explanations that revealed an understanding related to deep learning processes such as interpretation and structuring of material to meet the title or question of the assignment:

‘You basically need to interpret what you read instead of simply just rewriting what you read. That is the way of showing understanding’ (Year 2 HE student)

Three of the HE students suggested that writing in one’s own words was important, suggesting a link between demonstrating understanding and avoiding plagiarism:

‘ I suppose it means writing in your own words, to show that you understand what you’ve written ... I suppose that is what it means, I am not sure’ (Year 2 HE student)
FE tutors conceptualised demonstrating understanding mainly in terms of accurate description with specific examples and appropriate use of terminology, whereas HE tutors emphasized the importance of students making the material their own by interpreting or synthesizing it in relation to the question:

‘At A level that would be describing the little parts, eg, describe how some drugs work in schizophrenics ….’ (FE tutor)

‘If they haven’t then interpreted what that [material] means in terms of the question then to me they don't understand what they have just written so being able to add just one or two sentences throughout the essay interpreting what they have just discussed … that demonstrates that the student knows exactly what they are doing’ (HE tutor)

Critical evaluation
All the students in both sectors understood this to mean including the pros and cons of an issue, but FE students were more confident in their understandings, and three of the four A level students focused on presenting weaknesses or criticisms:

‘You can't just be positive all the time. You have to say what was wrong’ (AS FE student)

‘If they ask you to evaluate you have to criticize it as well as just describing’ (A2 FE student)

‘It means to take it apart to look some of the weaknesses (Access FE student)

Several HE students were more hesitant about the meaning of critical evaluation, although in four of the seven cases, the HE students’ descriptions hinted at more sophisticated understandings:

‘That one I don't like ... I just don't get it. I think it means to go through the journal or case study or whatever and to look at what is good and bad ... I am not sure ... It’s to go through everything and just evaluate it, but I am not sure’ (Year 2 HE student)

‘Critically evaluate is where you can look at the material and you can read the books and from that you can weigh up what you think, so you don't just take the material at face value, you can weigh up the pros and cons in each of the arguments’ (Graduate Diploma HE student)

FE tutors saw A level as not requiring critical evaluation, so they expected students to encounter it only rarely (although they did expect students to encounter ‘discuss’, which they considered to mean describing the strengths and weaknesses of material). They expected students to be given a ‘matter of fact’ understanding, which did not involve challenging or evaluating evidence or theories:

‘Theories are put forward but without the ifs and buts’ (FE tutor)

‘At university I would say that you would also have to evaluate the evidence. [But at A level] ... if the study is good enough to get into a text book, it is probably a good study’ (FE tutor)

HE tutors, on the other hand, saw critical evaluation as an important activity that is about making judgments from a detached or objective perspective:
Assessment criteria intervention

‘I suppose what we mean by critical evaluation, is one where you adopt a detached stance of the thing you are critically evaluating, being prepared to look at it objectively’ (HE tutor)

‘To be able to look at the evidence you provided and relate it to some area outside the immediate sphere you are looking at ... you are fitting it into a much wider context’ (HE tutor)

**Developing argument**

The A level students tended not to see the relevance of argument, and all four equated it either with presenting two sides of an issue, or being assertive:

‘To say both sides I think. I think in psychology you don't have to create an argument in an essay ... I would just describe what it is and then discuss it and you might not have to argue at all’ (AS FE student)

‘When you have your strengths and weaknesses and then you come to a conclusion in the end’ (A2 FE student)

‘I am not sure about that one ... that they are fully justifying it, that is, they are putting their point across fully and in a quite strong way’ (A2 FE student)

The Access students’ understandings were more variable, with three of the five students giving explanations that included adopting a stance:

‘You need to put views forward, not necessarily your own but either side of the ...’ (Access FE student)

‘... saying whether you agree or disagree with what is being said. So you are taking a particular stand’ (Access FE student).

HE students’ understandings were more consistent, with six of the seven referring to adopting a stance in their explanations of argument, and several referring to the importance of evidence:

‘Choosing side, choosing a stance and back it up with evidence’ (Year 1 HE Student)

‘To get several references for the argument and also against the argument. To compare them, to see if there is enough evidence to support what you are trying to say’ (year 2 HE student)

FE tutors saw developing an argument as not required in A level coursework, and advised students instead to memorise and reproduce. They recognized that this affected the learning experience, and would have preferred students to engage with material and think critically, but saw the scope for this as limited by the assessment boards, which they believed required students to learn in quite a passive way:

‘... they know that they don't really have to develop an argument or put forward their own views so much as repeat things from textbooks’ (FE tutor)

‘There is ... never really an opportunity for taking one side and constructing an essay to support that side of the question’ (FE tutor)
'It is kind of disappointing to tell the students that if they evaluate an argument ... no one is going to be interested in what they think. They just have to replicate, know what a load of psychologists thought, because it is done in quite a superficial way. There is no time to really do too much thinking for yourself. It is more important to know the standard line, the standard research' (FE tutor)

For HE tutors, however, creating an argument was a crucial part of a good essay and an integral part of addressing the question. They highlighted the importance of making a balanced argument, positioning both an argument and counter-argument and evaluating the two:

‘So in reading that question you need to think what is the argument, draw the argument out ... and then being able to structure your own essay around that argument’ (HE tutor)

‘It’s being able to take position on something, and to be able to put forward in logical and coherent way to support that argument, and then subsequently to predict if you like a counter-argument ... and deal with those ...’ (HE tutor)

Structuring
All four of the A level students described structure in rather superficial terms, such as beginning, middle and end, or putting things in order, and one A level student did not see structure as important for written work:

‘Oh, introduction, main body and conclusion’ (A2 FE student)

‘How you structure your sentences and paragraphs and what you have contained in your essay, which order, if the order is consistent, in chronological order, and not just any order’ (A2 FE student)

‘For psychology there isn’t really a structure, you know you start with basic info like who it is and maybe a quick sentence about what they have done and then you start answering the question but there is not really a conclusion either ... Not really, it’s just a paragraph about the most important points you can think of. There is no real structure’ (AS FE student)

The HE students also all described structure as involving a beginning, middle and end, and recognised that structuring was related to the flow and organization of the essay:

‘It’s about how it flows, how each flows into the other without jumping from one place to the other, but letting it flow’ (Year 2 HE student)

Unlike A level students, Access students wrote longer coursework essays, and some demonstrated more sophisticated understandings of structure, but they were also much more concerned than A level or HE students with aspects of presentational structure such as word counts and line spacing:

‘It means you are meant to make a plan. Even if you don’t want to make a plan, it has to look like you done one. You have to structure it to the question’ (Access FE student)

‘But then somebody said, how many words should my introduction be? And someone would want [to be] really specific – how many words and sentences’ (Access FE student)
Assessment criteria intervention

HE students were sometimes uncertain about structuring, but four of the seven gave evidence of understanding the relationship between structuring and argument:

‘The structure I struggle with. I think they want to see the essay flowing properly’ (Year 1 HE student)

‘I think mainly the way you use your evidence so your argument should be structured, you shouldn’t put one for then one against, then one for then one against. You should put all the fors in one category and then continue with other things that are against what you are arguing’ (Year 2 HE student)

FE tutors believed the A level requirements meant that students were not trained in essay structure, whereas HE tutors saw structure as related to the coherence of student writing, and, in the most impressive cases, as related to argument:

‘In fact I have even got it from a senior examiner … that structure is just not marked for at AS’ (FE tutor)

‘I feel it is a shame they never have to write for 45 minutes. They write for 20 or 25 minutes on a topic so they don’t ever get the training in the idea that structure is important’ (FE tutor)

‘So rather [than] having an essay which has evidence for, evidence against, evidence for, evidence against, and then more evidence against and then more for. To then say “ok let’s present that coherently” and present all of the evidence for and then all the evidence against, and be able to get a clear flowing structure’ (HE tutor)

‘When I am really impressed with how an essay or piece of assignment is structured it is when the structure of what is written is built around the argument that is developing or the case that the student is making, so it shows they know how to organize the material’ (HE tutor)

Use of evidence

Both FE and HE students described using evidence to back up other essay content, but all four FE students related evidence to descriptive content without referring to quality of evidence, whereas four of the seven HE students related evidence to argument, and four HE students referred to quality of evidence and/or the importance of peer-reviewed research:

‘Well we can’t get full marks on that unless we have brought in another source like a quote or something’ (AS FE student)

‘You have to use studies and names of researchers and psychologists who have done studies in the past within your essay. You have to back up what you are saying’ (A2 FE student)

‘That means to find other theorist or psychologists to prove what you are saying is true or not true … to support what you are arguing or what you are saying’ (Year 2 HE student)

‘It’s very inappropriate to use say google or stuff that has not been peer-reviewed because it is not scientific’ (Year 2 HE student)
Both FE and HE tutors saw evidence as important, but only the HE tutors referred to students’ ability to assess the quality of evidence:

‘I would look ... where students get their evidence from in order to support their critical evaluation and create their argument. So I would look at the quality of it [the evidence]. I will also look at their ability to evaluate the evidence that they use ... It is what they are putting forward and their understanding of their limits and quality of it’ (HE tutor)

Use of language
For both FE and HE students, using academic language involved adopting a new voice that they experienced as complex and alien to some extent. Most of the FE students (including all the A level students) saw using terminology as a key to academic language:

‘... and you try to make it sound better than just common. Making it more academic’ (AS FE student)

‘Longer words and technical words. You got to remember that in memory you have the working memory model and the phonological loop, so you have to refer to that’ (A2 FE student)

‘So you are using the actual theory based words that are appropriate to that subject’ (Access FE student)

Several HE students emphasized the importance of incorporating complex terms in clear and simple sentence structures:

‘So you have to keep it simple but keeping it on a higher level’ (Year 3 HE student)

‘Your writing style should be a concise clear way. And often the simpler the better’ (Graduate Diploma HE student).

Both FE and HE tutors described wishing their students would use less informal language such as ‘kids’, ‘info’, or ‘mum’, but only HE tutors described the tension between students’ use of academic language and their developing their own styles by writing in their own words:

‘I remember telling the students after the exam not to say that the Oedipus complex is that “boys fancy their mums” ... So it is reasonably important that they use the more formal style of language’ (FE tutor)

‘I think sometimes they think, you must write less in your own words and you must copy more from the internet or textbooks. This is often when students do get into problems with plagiarism, because they know they have to write in an academic style, they are not quite sure how to go about it’ (HE tutor)

‘It’s quite difficult to define what you actually expect from students as academic language because clearly they are not meant to all write in the same way. And of course they don’t have the style of people who have been writing in high quality journals’ (HE tutor)
Discussion

The FE students, and especially A level students, were more confident about understanding the assessment criteria, but placed more emphasis on selecting and including 'correct' material, and explained their understandings in ways that suggested surface approaches to learning and naïve epistemological beliefs (beliefs about knowledge; Hofer & Pintrich, 1997). The HE students, by contrast, expressed more uncertainty but explained their understandings in ways that indicated deeper approaches to learning and more sophisticated beliefs about knowledge, with an emphasis on interpretation and integration.

The approach we adopted was to focus separately on each of the core criteria. University assessment criteria are often presented separately in this way, as if they were entirely distinct from one another (e.g., Elander, 2002), but in fact the criteria are quite closely related to one another, which can make understanding and engaging with them difficult for students. In the present study, examples of students showing understandings of the way the criteria were inter-related were mainly confined to HE students. The A level students seemed to understand the criteria as more or less independent aspects of written assignments, whereas the HE students described several of the criteria in terms of others, for example describing ‘demonstrating understanding’ in terms of ‘addressing the question’ and ‘use of language’, and describing ‘argument’, ‘structure’ and ‘use of evidence’ in terms of one another.

The HE students also showed more appreciation than the FE students of the distinction between understanding the criteria and being able to translate that understanding into practice. One HE student commented:

'My opinion is that most students they know this assignment criteria but it is difficult for them even by them reading the feedback like I said, it is difficult for them and for me to putting it into practice ... Sometimes I think I just concentrate on one thing and then forgetting completely about other things which is not good. It is really difficult to keep everything together ...'

In a previous qualitative study that contrasted HE tutors’ and students’ understandings of assessment criteria, tutors tended to understand the criteria in terms of the internal thought processes required to produce good written assignments, whereas students understood the criteria more in terms of the manipulation and presentation of the content material of an assignment (Harrington et al., 2006a). In the present study differences between sectors were much more marked than differences between students and tutors in each sector, but the sector differences were broadly consistent with those between tutors and students in the previous work, with FE students and tutors placing greater emphasis on selecting and including ‘correct’ material, and the HE students and tutors emphasising interpretation and analysis.

The similarity between tutors’ and students’ understandings within each sector seems to imply that student differences between sectors do not result simply from differences in students’ attitudes, dispositions or abilities, but are shaped by exposure to specific learning cultures. For example, FE tutors explained that critical evaluation and argument were not required at A level, and that students were encouraged instead to learn material that was presented as correct, mainly because of the short-answer format of A level assessments and a perception that examiners focused on content knowledge. The FE tutors expressed some regret about this, explaining that it often took the ‘engagement and fun’ out of the learning process and describing how ‘it is kind of disappointing to tell the students that ... no one is going to be interested in what they think’, but the effect was to
encourage surface approaches to learning and naïve beliefs about knowledge that could disadvantage students in the transition to HE.

**Study 2: Questionnaire survey**

**Introduction**
The purpose of study 2 was to complement study 1 with a quantitative comparison of FE and HE students’ beliefs and understandings about assessment criteria and academic writing, and provide baseline FE student data for the evaluation of the intervention described in study 3. We also wished to examine the relationship between beliefs and understandings and grade achievement in each sector, and compare the beliefs and understandings of HE students who had and had not previously studied psychology at A level.

**Participants**
There were 74 FE and 190 HE students. FE students comprised 68 (92%) studying psychology A level (43 AS, 25 A2), and 6 studying Access courses with psychology modules. Ages ranged from 16 to 37 years (mean 18.4 years), and 54 (73%) were female. The HE students comprised 152 (80%) psychology undergraduates (62 year 1, 44 year 2, and 46 year 3), 32 studying the psychology Postgraduate Certificate or Diploma, and 6 MSc Health Psychology students. Ages ranged from 18 to 56 years (mean 27.6 years), and 160 (84%) were female.

**Questionnaire survey**
Questionnaires measuring self-rated understanding and ability about assessment criteria, and beliefs about essay writing, were distributed during timetabled classes. For self-rated understanding and ability there were 15 statements with 5-point Likert-type response scales (‘strongly disagree’ to ‘strongly agree’) about assessment criteria generally and specific core criteria. A total score, with higher scores indicating greater self-rated understanding and ability, was obtained by summing across items and dividing by 15. For beliefs about essay writing there were three items with true/false/don’t know response options. The questionnaire was adapted from those used in research with HE students (Harrington et al., 2006b; Norton et al., 2005), with many identical items. Gender, age, course, year of study, and, for HE students, previous A level or Access courses were also recorded.

**Grade achievement**
Grade data was collected only for students who specifically consented. For FE students, grades on entry to FE (prior to the survey) were recorded as QCA points converted into GCSE grades, using a standard conversion system, and coded as 1=D, 2=C, 3=B, 4=A. Grades were treated as missing if they could not be converted for qualifications taken overseas or more than 10 years previously. Access and A level grades achieved at the end of the academic year (several months after the questionnaire survey) were recorded as the mean across assessments, coded 1 (E) to 5 (A). For HE students, grades were recorded as mean grades across modules during the year of the survey and coded as 1=fail, 2=pass, 3=lower second, 4=upper second, 5=first. In each case, higher scores indicate greater grade achievement.
Results

Table 2 shows that both groups’ self-rated understanding and ability was greatest for knowing what is meant by structuring (item 5), addressing the question (4) and building an argument (9), and lowest for items about understanding critical evaluation (11) and knowing how to evaluate (13). Self-ratings were higher for FE than HE students for the total score and 11 out of 15 individual items, so that although the difference was significant for only one item (14, knowing how to detect bias), the trend was for greater self-rated understanding and ability among FE students. There was one item (15, knowing how to cite and reference) for which scores were significantly higher among HE students.

Table 2. Self-rated understanding and ability: mean total scores and numbers agreeing or strongly agreeing with each statement

<table>
<thead>
<tr>
<th>Number (percent) agreeing/strongly agreeing:</th>
<th>FE (n=74)</th>
<th>HE (n=190)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (SD) total score</td>
<td>3.66 (.45)</td>
<td>3.53 (.58)*</td>
</tr>
</tbody>
</table>

1. I know what criteria are applied to my essays and written work 50 (68%) 133 (70%)
2. I understand what the marking criteria mean 53 (72%) 132 (70%)
3. I know I can meet the assessment criteria 49 (66%) 115 (66%)
4. I know what is meant by “addressing the question” in my essay 57 (77%) 145 (76%)
5. I know what is meant by “structuring” my essay 65 (88%) 150 (79%)
6. I have a good idea how to structure my essay to ensure it addresses the essay title 47 (64%) 122 (64%)
7. I know what my tutors are looking for when they judge whether I understand the issues I am writing about 47 (64%) 99 (52%)
8. I have a clear idea of how I can demonstrate understanding of theories and concepts in my essays 44 (60%) 97 (51%)
9. I understand what it means to build an argument in an essay 58 (78%) 132 (70%)
10. I have a clear idea what strategies I can use to build an argument in my essay 38 (51%) 94 (50%)
11. I understand how to critically evaluate 38 (51%) 88 (46%)
12. I understand what is considered appropriate evidence in my subject 48 (70%) 116 (61%)
13. I know how to evaluate the quality of a book or journal or internet source 35 (47%) 72 (38%)
14. I know how to detect bias in written sources 53 (72%) 64 (34%)b
15. I know how to cite and reference material appropriately 37 (50%) 129 (68%)c

a T = 1.75, p = .08.
b χ² = 29.5, p < .001.
c χ² = 6.6, p = .010.

Among FE students, self-rated understanding and ability was higher among males than females (T=2.8, p=.007) and was correlated with level of study (Access<AS<A2, r=.40, p=.001), but was not correlated with age (r=-.04, p=.76) or grade achievement prior to (r=.03, p=.85) or following the survey (r=-.03, p=.88). Among HE students, self-rated understanding and ability was significantly correlated with level of study (r=.21, p=.007) and grade achievement (r=.38, p<.001), but not with age (r=-.01, p=.95), and did not differ between males and females (T=0.9, p=.37).

Table 3 shows student beliefs about essay writing. HE students were significantly more likely to believe that complex sentences and elaborate language should be avoided in essay writing, and there were trends for more HE students to believe that structuring relevant material is more important in addressing the question, and for more FE students to believe that expressing one’s own view is more important in developing an argument.
HE students who had not previously studied A level psychology were more likely to believe that structuring relevant material is more important in addressing the question; 62% agreed (74/119), compared with 44% (23/52) of those with A level psychology, $\chi^2 = 4.1$, $p = .04$.

Table 3. Beliefs about essay writing: Numbers (percent) of students agreeing with each statement

<table>
<thead>
<tr>
<th>Statement</th>
<th>FE (n=74)</th>
<th>HE (n=190)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In order to “answer the essay question”, structuring some relevant material to the essay title is more important than including ALL the right information</td>
<td>33 (45%)</td>
<td>99 (52%)</td>
</tr>
<tr>
<td>Developing an argument in an essay is more related to putting one’s own view forward than examining the pros and cons of an issue</td>
<td>19 (26%)</td>
<td>34 (18%)</td>
</tr>
<tr>
<td>When writing an essay one should avoid using complex sentences and elaborate language</td>
<td>10 (14%)</td>
<td>101 (53%)*</td>
</tr>
</tbody>
</table>

* $\chi^2 = 32.7$, $p < .001$.

**Discussion**

The results were consistent with study 1 in suggesting that FE students overstated or misstated their understanding and ability in relation to HE assessment criteria, although the results of the two studies were by no means identical. In relation to developing argument, for example, study 1 suggested that HE students placed more emphasis on adopting a stance and presenting a view, whereas in study 2 there was a (non-significant) trend for FE students to be more likely to believe that putting one’s own views forward is more important than examining the pros and cons of an issue.

The positive correlation between HE students’ self-ratings and grade achievement suggest that the questionnaire was a valid measure of understandings and abilities required for HE assessments, whereas FE students’ self-ratings were not associated with grade achievement. Perhaps that is because FE students misstated their understanding and ability, or because most FE assignments involved short-answer examinations and structured coursework rather than extended essays. Both could be true, for FE students’ limited experience of essay writing is a likely reason for overstated or misstated understanding and ability.

The limited appreciation by FE students of what is required in academic writing in HE may be reinforced by a learning culture that emphasises content over analysis, leading students to hold rather naïve beliefs about what constitutes analysis and evaluation. For example, 72% (53/74) of FE students believed they knew how to detect bias in written sources, whereas study 1 had shown that their tutors believed learning content was more important than evaluation at A level, and that critical evaluation was not specifically taught.

The fact that HE students who had previously studied A level psychology were more likely to believe that ‘including all the right information’ was more important than ‘structuring some relevant material to the essay title’ also suggests that students take approaches to learning with them from A level to university; further evidence that A level is not necessarily a good preparation for HE.

**Study 3: Workshop intervention**

**Introduction**

Programmes to prepare students for entry to university have been shown to improve student retention and achievement (Knox, 2005) and to help widen participation (Yorke & Thomas, 2003). To our knowledge, however, preparatory interventions have not previously focused on understandings
of assessment criteria. The purpose of study 3 was to evaluate such an intervention for FE students, using direct evaluative feedback and follow-up measures of self-rated understanding and ability, and beliefs about essay writing, from students who received the intervention and those who received standard tuition.

We adapted workshop materials and protocols that had previously been positively evaluated with HE students (Harrington et al., 2006b; Norton et al., 2005) for delivery to FE students. Following studies 1 and 2, the intervention aimed to enable FE students to examine and re-evaluate their understandings of what is required in academic writing, appreciate the more complex requirements for writing in HE, and develop more concrete understandings of the criteria and strategies that could help meet them. In some cases this would involve reductions in self-rated understanding and ability, whereas most study skills interventions aim to increase student confidence. However, the first step in any process of change, including academic skills development, is recognition that change is necessary, and a decrease in self-rated understanding and ability may signify a process of increasing actual understanding and ability.

Previous initiatives in HE have also focused on countering erroneous student beliefs, for example to counter inaccurate but widely held beliefs about implicit ‘rules of the game’ in student assessment, such as that using big words, technical terms or jargon will impress the marker (Norton et al., 1996). Research in HE has also highlighted the importance of moving from abstract to concrete understandings of assessment criteria. In one study, for example, students seemed to appreciate the importance of ‘developing an argument’ in academic writing (they rated that criterion as highly as their lecturers did), but in an essay assessment exercise they failed to recognise a well developed argument, and marked the essay down for what they perceived as the presentation of the author’s own opinions (Defeyter & McPartlin, 2007).

There were two one-hour workshops with materials including prepared essays on topics relevant to FE modules. Workshop 1 involved discussion of the core criteria, supported by a handout and worksheet. Students received two essays to read and assess for workshop 2, using a prepared form. Workshop 2 involved small group work to assess the essays, followed by discussion about how each essay met or did not meet the criteria, with prepared notes on each essay (materials and protocols are available from www.writenow.ac.uk). Workshops delivery was flexible, with more or less time spent on different elements depending on the needs and interests of students.

Participants
Approximately half the students received the workshops (43 students, comprising 31 A level psychology students (16 AS, 15 A2) and 12 Access students) and the remainder received standard tuition (49 students, comprising 37 A level psychology students (27 AS, 10 A2) and 12 Access students). This was achieved by incorporating the workshops into the teaching programmes for some but not others of the groups (classes) in which students were taught. Baseline self-rated understanding and ability (recorded for study 2) did not differ between students assigned to receive the workshops or standard tuition (T=.45, p=.66).

Evaluative feedback
A feedback questionnaire, completed after workshop 2, comprised 13 statements with 5-point Likert-type response scales (‘strongly disagree’ to ‘strongly agree’) about potential outcomes from the workshops (eg., ‘the workshops helped me to understand assessment criteria’) and core assessment criteria (eg., ‘the workshops helped me to critically evaluate’). Wherever possible, the
same wording and response formats were used as in evaluations of similar workshops for HE students (Harrington et al., 2006b; Norton et al., 2005), to allow comparisons across the literature. Feedback questionnaires were completed by 31 (72%) of the students who received the workshops. Ages ranged from 16 to 52 years (mean 19.1 years), and 71% were female.

**Follow-up questionnaire survey**
Self-rated understanding and ability, and beliefs about essay writing, were measured 4-6 weeks after the workshops, using the same questionnaire as in study 2, distributed in timetabled classes to students who had received the workshops and those who had not. Follow-up questionnaires were completed by 50 students, of whom 33 were enrolled on psychology A level programmes (13 AS and 20 A2) and 17 on Access courses. Ages ranged from 16 to 39 years (mean 20.5 years), and 71% were female. Follow-up survey participants included 16 A level students (5 AS and 11 A2) with complete baseline (study 2) data, of whom six received the workshops and 10 received standard tuition. Grade achievement data at the end of the academic year, several months after the intervention delivery, were available as described in study 2.

**Results**
Table 4 shows evaluative feedback. Over half (17/31) the participating students agreed that the workshops helped them understand assessment criteria, and nearly two-thirds (20/31) agreed they helped them understand what makes a good essay, compared with only 10% (3/31) who agreed that the workshops confused them about the assessment criteria and what makes a good essay. However, although 42% (13/31) agreed that the workshops would help them to write better essays, only 20% (6/31) agreed that they helped them to feel more confident about writing. The feedback also suggested a difference between understanding the criteria and being able to meet them, for the proportion of students agreeing with statements about actually demonstrating specific criteria ranged from only 23% (7/31, for demonstrate understanding) to 39% (12/31, for critically evaluate, use evidence, and structure).

<table>
<thead>
<tr>
<th>“The workshops…”</th>
<th>Numbers (percent) of FE students (n=31) who agreed or strongly agreed with statements about the workshops</th>
</tr>
</thead>
<tbody>
<tr>
<td>... helped me to understand assessment criteria</td>
<td>17 (55%)</td>
</tr>
<tr>
<td>... confused me about the assessment criteria</td>
<td>3 (10%)</td>
</tr>
<tr>
<td>... helped me to understand what makes a good essay</td>
<td>20 (65%)</td>
</tr>
<tr>
<td>... confused me about what makes a good essay</td>
<td>3 (10%)</td>
</tr>
<tr>
<td>... will help me to write better essays</td>
<td>13 (42%)</td>
</tr>
<tr>
<td>... will not help me to write better essays</td>
<td>3 (10%)</td>
</tr>
<tr>
<td>... helped me to feel more confident about writing</td>
<td>6 (20%)</td>
</tr>
<tr>
<td>... made me feel anxious about writing</td>
<td>4 (13%)</td>
</tr>
<tr>
<td>... helped me to critically evaluate</td>
<td>12 (39%)</td>
</tr>
<tr>
<td>... helped me to use evidence</td>
<td>12 (39%)</td>
</tr>
<tr>
<td>... helped me to develop an argument</td>
<td>11 (36%)</td>
</tr>
<tr>
<td>... helped me to structure</td>
<td>12 (39%)</td>
</tr>
<tr>
<td>... helped me to address the question</td>
<td>11 (36%)</td>
</tr>
<tr>
<td>... helped me to demonstrate understanding</td>
<td>7 (23%)</td>
</tr>
<tr>
<td>... helped me to use language</td>
<td>10 (32%)</td>
</tr>
</tbody>
</table>
A 2 (baseline vs. follow-up) x 2 (workshops vs. standard tuition) repeated measures ANOVA was conducted for students with complete baseline and follow-up questionnaire data. Mean self-rated understanding and ability scores are given in figure 1. There was a significant main effect of time ($F=8.2$, $p=.015$), with self-rated understanding and ability decreasing from baseline to follow-up, but no main effect of group ($F=0.1$, $p=.75$), and a marginally significant interaction ($F=3.6$, $p=.08$), with greater reductions in self-rated understanding and ability among those who received the workshops.

Fig 1. Changes in self-rated understanding and ability among FE students

Fig 2. Changes in FE students’ beliefs about essay writing: proportions believing that ‘structuring some relevant material to the essay question is more important that including all the right information’

We also examined changes in the belief about essay writing that differentiated HE students with and without A level experience in study 2. Figure 2 shows the proportions of students who believed that
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structuring some material to the title is more important than including all the right information. Believing in the importance of structuring material increased among those who received the workshops, but fell among those who did not, and log-linear analysis revealed a significant 2 (agreement vs. disagreement) x 2 (workshops vs. standard tuition x 2 (pre- vs. post-intervention) interaction (G²=11.75, p<.025).

There was a marginally significant correlation between follow-up self-rated understanding and ability and post-intervention grade achievement (r=.28, p=.09), but no significant impact of workshop attendance on follow-up grade achievement (T=1.5, p=.15)

Discussion
The longitudinal comparative evaluation showed that the intervention led to reductions in self-rated understanding and ability, and changes in beliefs about essay writing. The results are a preliminary indication that interventions like this can help FE students achieve more realistic understandings of HE assessment criteria, and develop more sophisticated beliefs about essay writing. Students who did not receive the workshops became more likely over time to believe that it is more important to ‘include all the right information,’ suggesting that the standard A level or Access tuition reinforced a surface approach to learning.

The findings from the evaluative feedback and comparative evaluation were broadly convergent; only 20% of attending students (6/31) agreed that the workshops made them feel more confident about essay writing. Reductions in confidence did not appear to have direct affects on anxiety, however; only 13% (4/31) believed the workshops made them anxious about writing. The evaluative feedback also highlighted the gap between understanding the criteria and ability to meet them, in the same way as reported for HE students (Harrington et al., 2006b). The intervention had no effect on grade achievement, but perhaps this was to be expected considering that study 2 had shown no correlation between self-rated understanding and ability and grade achievement among FE students.

The use of the same questionnaire items as in evaluations of similar interventions in HE enabled comparisons across the literature. For example, among first year HE students who received workshops on assessment criteria, 51% reported that they helped them to understand assessment, and 64 % felt they would help them write better essays (Pain & Mowl, 1996). Among one group of 50 HE students who received workshops on assessment criteria, 55% believed they helped them write better essays (Harrington et al., 2006b).

The numbers involved in the longitudinal comparative evaluation were small, but in other respects the evaluation was methodologically strong, relative to other research in this area. Most evaluations of interventions to improve HE student understandings of assessment criteria have compared students from one cohort with those from another (Bloxham & West, 2004; Defeyter & McPartlin, 2007; Norton et al., 2002; Pain & Mowl, 1996), or compared students who decided whether or not to attend workshops (Harrington et al, 2006b; Norton et al., 2005; Rust et al., 2003). The present comparison was between groups of students from the same cohort who were assigned either to receive the intervention or standard tuition, the intervention was incorporated into modules for the groups who received it, and students were tracked longitudinally to assess changes in understanding and beliefs.

General discussion
These studies showed that FE students have greater confidence than HE students in their understanding of assessment criteria, but that the FE students’ understandings suggested more
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surface approaches to learning and more naïve beliefs about knowledge. They also showed that interventions can counter FE students’ overstated understanding and ability, and promote more sophisticated beliefs about academic writing.

A number of factors should be borne in mind when considering the results. First, the numbers of participants were small and the findings may not automatically generalise to the wider population of students. Second, many of the FE students took part in at least two of the three studies. This could potentially have influenced the results, for example if taking part in a focus group affected students’ understandings about the assessment criteria in a way that primed or prepared them for the intervention. Third, all three studies focused on psychology students. In other subjects, students’ and tutors’ understandings and beliefs about assessment criteria may differ from those observed here, and interventions to improved FE students’ understanding of HE assessment criteria in other subjects would need to take account of those differences.

However, studies 1 and 2 are the first direct comparisons to our knowledge between FE and HE students’ understandings of university assessment criteria, and study 3 provides the first evaluation to our knowledge of an intervention to help FE students understand those criteria. The approach could be adapted and applied more widely to smooth the transition to HE. The workshop protocols, materials and evaluation questionnaires are available at www.writenow.ac.uk, and we would welcome adaptations for other subjects and settings. Likely challenges for future development and research in this area include:

1. Making preparatory interventions as relevant as possible to FE study and assessment, in order to maximise engagement among students who may be preoccupied by achievement at A level.
2. Examining further the interplay between reductions in confidence and increases in understanding and ability.
3. Closing the gap between improvements achieved in understanding the assessment criteria and less impressive changes in perceived ability to meet those criteria.
4. Demonstrating benefits for FE students over the longer term, including HE achievement and progression.

Intervening in FE to prepare students for the transition to HE will need a careful balance to be struck between maximizing orientation to HE and minimising impact on FE study. It is perhaps even controversial whether FE is the right point at which to prepare students for different requirements in HE. It is arguably appropriate that learning in FE is mainly content-driven, and that this is consistent with surface approaches to learning and naive beliefs about knowledge. Students and tutors in HE presumably benefit from substantial learning in FE of ‘facts’ and ‘correct information’, which provides a platform on which deeper learning can build.

However, the transition to HE is one that often causes difficulty and distress, with many students failing to progress beyond the first year at university (National Audit Office, 2007), despite widespread attempts to intervene as early as possible in HE. Study 1 seems to indicate that the differences between FE and HE in approaches to learning, writing and assessment are greater than many educators in HE may appreciate. It may therefore be useful to develop closer communities of practice of FE and HE tutors to improve mutual understandings about how students’ written work is assessed in each sector, and help orientate FE students to the changes in the ways their learning will be assessed in HE. In the longer term, transition issues may need to be addressed by policy initiatives to narrow the gap between learning and assessment in FE and HE.
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James Elander is head of the Centre for Psychological Research at the University of Derby, UK. With a longstanding interest in the application of psychology to student learning, he has a special interest in student writing.

References


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