

## **Do students see the benefits? An exploratory study of undergraduate accounting students' perceptions of a programme focussed assessment.**

Julia Osgerby, Paul Jennings and Alison Bonathan

The University of Winchester Business School,  
Faculty of Business, Law and Sport,  
The University of Winchester, Romsey Road, Winchester, Hampshire, SO22 5FT, United Kingdom

Corresponding Author: Julia Osgerby  
Phone: +44 (0) 1962 827510  
e-mail: [julia.osgerby@winchester.ac.uk](mailto:julia.osgerby@winchester.ac.uk)

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We confirm that the manuscript has been read and approved by all named authors and that there are no other persons who satisfied the criteria for authorship but are not listed. We further confirm that the order of authors listed in the manuscript has been approved by all of us.

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Julia Osgerby

Paul Jennings

Alison Bonathan

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## **ABSTRACT**

Degree programme modularisation is popular to develop degree pathways, student choice and economic use of resources. Modularisation has been criticised for its potential to create disjointed learning environments and assessment limitations. Programme Focussed Assessment (PFA) describes an assessment process based on measuring students' attainment of multiple programme level learning outcomes. While the literature describes benefits associated with PFA such as improving student satisfaction, student confidence, assessment validity, pedagogy, feedback, student reflection and motivation, there is relatively little research of students' perceptions about PFA. This paper reports on an exploratory study which investigated the perceptions of students undertaking PFA at the end of Year 1 of an Accounting and Finance Degree. The study found students had positive perceptions about some of the claimed benefits of PFA. However, other findings were more ambiguous. The paper examines the findings from students' and institutional perspectives and concludes with a set of recommendations for practice.

Key Words: Programme Focussed Assessment; students' perceptions.

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## **1. Introduction**

The United Kingdom (UK) Quality Assurance Agency (QAA) for Higher Education provides a library of Subject Benchmarking Statements (QAA, 2015). Academic institutions can use these statements as the start point for designing degree programmes with defined educational aims, an explicit curriculum and holistic programme learning outcomes, which are statements of what a learner should know, understand and be able to exhibit at the end of the degree programme. The QAA expects that degree-awarding institutions will ensure qualifications are awarded only where programme learning outcomes are demonstrated through an assessment that meets appropriate standards (QAA, 2015). Programme Focussed Assessment (PFA) is characterised by the appraisal of students' attainment of programme level learning outcomes, rather than the achievement of study module learning outcomes. The literature describes possible institutional motivations for implementing PFA and the likely benefits for students. However, there appears to have been only limited study of the perceptions of students undertaking PFA.

In 2016 a Business School at a British university implemented PFA for an undergraduate accounting degree programme. There were two goals for this initial stage of PFA. Firstly, to learn how to create a PFA, where students' overall attainment could be measured against the programme's learning outcomes. This work was influenced by the UK Programme Assessment Strategies (PASS) Project (2012), which offers advice on the methodology for assessing programme level outcomes at many stages during and at the end of academic programmes (Jessop & Tomas, 2016; PASS, 2012). Secondly, the intention was to provide students with pedagogic opportunities to integrate and deploy some of their accountancy knowledge and skills using real-life data presented in case study form. This exploratory study aimed to back further PFA development work within the institution as well as contributing to the PFA literature by investigating the impact of PFA on students' perceptions of its claimed benefits of improved satisfaction, confidence, preparedness, assessment validity, pedagogy, feedback, reflection and motivation.

This paper first reviews the literature about the proposed benefits ascribed to PFA, which provides a structure for investigating students' perceptions. The next section describes the research methodology and how the opinions of the sample of undergraduate accounting

students using PFA were examined. Finally, the findings are presented and discussed leading to some general practice recommendations.

## 2. Literature review

Table 1 summarises the range of potential benefits ascribed to PFA as described in the literature. As this paper is about students' perceptions of PFA, potential outcomes associated with specific institutional issues such as student retention and financial efficiency are not considered further.

Table 1  
PFA outcomes described in the literature.

PFA could improve:	Sources
1 Assessment of programme learning outcomes	(Jessop, El-Hakim, & Gibbs, 2014; McDowell, 2012; PASS Project Report, 2012; Turner & Baskerville, 2013)
2 Student satisfaction	(McDowell, 2012; Jessop et al., 2014.)
3 Validity and appropriateness of assessment	(Ashford-Rowe, Herrington, & Brown, 2014; Guilkers, Bastiaens, Kirschner, 2014; Rust, 2002; Tummons, 2010)
4 Pedagogy	(Beattie, Collins, McInnes, 1997; Biggs, Kember, & Leung, 2001; Bok et al., 2013; Boyce, Williams, Kelly, & Yee, 2001; Donnison, 2012; McDowell, 2012; Knight & Yorke, 2003; Scouller, 1998; Scouller & Prosser, 1994; PASS, 2012; Rust, 2002; Wynn-Williams, Beatson, & Anderson, 2016)
5 Feedback and students' self-reflection	(Amundson, 2006; Grohnert, Beausaert, & Segers, 2014; Maree, Ebersöhn, Molepo, 2006)
6 Students' motivation	(Rust, 2002; Svinicki, 2004)
7 Relevance and preparation for employment	(Boud, 2000; Boud & Falchikov, 2006; Knight & Yorke, 2003; Yorke & Knight, 2006)
8 Student retention	(Yorke, 2001) Subject to a parallel study.
9 Institutional financial efficiency	(Knight, 2000) Subject to a parallel study.

### 2.1 *Assessing programme learning outcomes*

Subject modularisation of degree programmes is a popular and widespread design technique to provide a clear and bounded structure, programme pathways, subject optionality, student choice, ease of administration and economic use of resources. Typically, all modules will contain one or more formative and summative assessments using a range of techniques to evaluate student performance, attainment and capability. The perspective of the literature and accompanying developments in the past twenty years has shifted from considering assessment, not only as a tool to determine grades by assessing knowledge and skills but as a device to provide feedback to students and tutors about learning outcomes and use of the

assessment process itself as a learning mechanism. Assessment is described in the literature as a comprehensive multi-faceted educational process which has the power to affect all stages of the learning process. Also, such assessment must be considered in the context of measured institutional quality which is visible at a national level (Bok et al., 2013; Scouller, 1998; Van Der Vleuten et al., 2012; Watering, Gijbels, Dochy, & Rijt, 2008).

Modularisation of degree programmes has been criticised for creating the potential for disjointed learning environments which focus solely on modular learning outcomes, at the expense of inter-module linkages and programme level skills (Bloxham, Boyd, Chesney, Ginty, & Nutall, 2007; Boud & Molloy, 2013). In practice, the importance of such concerns may be relatively hidden from view as students perceive a greater need to focus on the specific immediate needs of study modules and their assessment activities (Maas & Leaby, 2005; Jessop et al., 2014). Additionally, there are concerns that in a modular assessment environment, students are likely to devote a significant part of their study time preparing for and undertaking formative and summative modular assessments (Harland, Mclean, Wass, & Miller, 2015). Modular assessment may leave students with little time for broader learning experiences or development of programme level learning outcomes (Jessop & Tomas, 2016; Price, Carroll, & O'Donovan, 2011). In this context, accounting curricula have been criticised for placing too much emphasis on solving simple small problems within discrete learning modules. Such an approach may sacrifice the broader development of cognitive processes and other learning outcomes such as critical thinking and reasoning, which are often expressed as professional characteristics of accountants (Somers, Passerini, Parhankangas, & Casal, 2014).

There are arguments that a PFA approach clarifies (for students) the interconnectedness of study modules, provides better focus on the more holistic development of cognitive skills and reduces the amount of time spent on assessment activities (Bloxham et al., 2007; Boud & Molloy, 2013; PASS, 2012;). It is implicit that programme learning outcomes are hierarchically related to detailed underlying learning outcomes (LO) for each, often modularised component of a degree programme. PFA offers the opportunity for overall horizontal assessment focussing on a cluster of programme learning outcomes at the end of a chosen period. Alternatively, PFA can be conducted vertically, measuring changes in students' attainment of selected programme level outcomes as students develop over time (PASS, 2012). Whatever way a PFA is implemented, it offers a potential mechanism to assess key programme learning outcomes, where students should perceive benefits such as a

reduction in the amount of time spent in modular assessment, more active learning and increased satisfaction (PASS, 2012).

## 2.2 Student Satisfaction

Assessing undergraduate students' satisfaction with their degree programmes is already conducted annually in the United Kingdom. The National Student Survey (NSS), introduced in 2005, is coordinated by the UK Higher Education Funding Council for England (HEFCE) with the aim of improving the public accountability of universities and assisting applicants in making informed choices (HEFCE, 2016). The NSS explores students' perceptions of the quality of their degree programmes using seven measures, of which one examines the topics of assessment and feedback. Table 2 shows an extract from a selection of recent NSS surveys (results are the sector results for full-time students in England) which identified consistently low levels of measured student satisfaction for assessment and feedback compared to other measures covering teaching provision and overall satisfaction.

Table 2  
NSS Measures - Assessment and Feedback (HEFCE, 2016)

	% Satisfied: (England full-time students)			
	2013	2014	2015	2016
5. The criteria used in marking have been clear in advance.	75	76	77	77
6. Assessment arrangements and marking have been fair.	76	76	77	77
7. Feedback on my work has been prompt.	68	69	70	71
8. I have received detailed comments on my work.	70	71	72	72
9. Feedback on my work has helped me clarify things I did not understand.	65	66	68	68
<b>Overall Satisfaction</b>	<b>85</b>	<b>86</b>	<b>85</b>	<b>85</b>

Jessop & Tomas (2016) argue that students' relative dissatisfaction with assessment and feedback is due mainly to fragmented approaches to assessment design, where overall programme learning outcomes have not been considered when implementing individual module assessments. One of the claimed benefits of PFA is that it can reduce assessment load, as students can sometimes feel over-assessed at a modular level (Jessop & Tomas, 2016; Price et al., 2011). It is also argued that the way students approach their learning may be affected by not only how it is assessed, but also their subjective perceptions of the validity and relevance of the assessment to their education and the real-world (Ashford-Rowe et al., 2014; Rust, 2002; Tummons, 2010). The implementation of PFA with its focus on integrating knowledge and higher order cognitive skills to explore appropriate real-world data may have a positive influence on the subjective perceptions of students and should be explored further.

### 2.3 *Pedagogy*

The theory of constructivism hypothesises that individuals assemble their knowledge through continuous active cognitive processes which are adaptable to changing circumstances. It proposes that learning occurs when new knowledge and experience is brought to an individual's attention, where it is assessed in the context of what is already known. Such an approach is supported by processes of experience, learning about oneself (self-reflection) and representing knowledge within the mind (Ausubel, Novak, & Hanesian, 1968; Barner, 2010; Doolittle & Camp, 1999; Steffe & Gale, 1995). It is suggested that PFA and its focus on programme level learning outcomes support a cognitive constructivist learning paradigm, where the assessment itself is part of the learning process (Bok et al., 2013). Such a constructivist approach should encourage students to integrate knowledge, skills and understanding developed during supporting modular learning within a broader overall programme context (Barner, 2011; Brunton, Brown, Costello, & Walsh, 2016; Doolittle & Camp 1999; Fosnot, 1996; Steffe & Gale, 1995). In this constructivist context, the pedagogic concepts of 'deep' and 'surface learning' (Marton & Säljö, 1976; Pask 1976) and 'slow scholarship' (Knight & Yorke, 2003) are relevant. The selection, consciously or unconsciously, of students' deep and surface learning approaches are likely driven by their perceptions of value, meaning and understanding of the material being studied (Biggs et al., 2001; Wynn-Williams et al., 2016). Students experiencing a surface learning approach, which may be a product of the fragmented modular assessments, are likely to rely on recall, reproduction, application of standard techniques and straightforward right or wrong short answers. Programmes fostering a surface approach within their study modules are likely to be characterised by a heavy workload, high contact time and excessive repetitive assessment with short-lived learning outcomes. Whereas a deeper learning approach is more likely to require a well-structured holistic design and integrated content, where knowledge is required to be interrelated and coupled to the development of generic higher-order skills such as analysis, critical thinking, and problem-solving (Beattie et al., 1997; Biggs et al., 2001). However, there does not appear to be a simple separation between students' surface/deep learning approaches. Wynn-Williams et al. (2016) argue that it is essential for students to identify when deep and surface level learning is appropriate. For example, the subject of accounting requires considerable knowledge of relatively low-level processes and techniques which are easily tested. However accountants need to deploy integrated higher level cognitive skills to articulate difficult managerial concepts and procedures; requiring more

complex integrative assessment (Beattie et al., 1997; Biggs et al., 2001; Boyce et al., 2001; Donnison, 2012; Knight & Yorke, 2003; McDowell, 2012; Rust 2002; Scouller, 1998; Scouller & Prosser, 1994; Wynn-Williams et al., 2016).

Harland et al. (2015) found that students were so busy working towards meeting the requirements of an assessment strategy (whatever the weighting), that they had little time for anything else. With frequent short assessments, this strategic approach was continually being reinforced and over time becoming more pronounced. In contrast, a 'slow learning' approach is described as implementing learning strategies over a more extended period to develop sophisticated skills, knowledge and understanding to support higher level learning outcomes (Knight & Yorke, 2003).

PFA has been proposed as an assessment technique likely to support a constructivist, deep and slow learning approach to enable students to achieve programme learning outcomes. Students may perceive PFA as offering opportunities to utilise, connect and integrate what they have been learning in different study modules, mainly if PFA is applied to real-world contexts (*using real-world data with uncertain boundaries, and knowledge and skills in unfamiliar situations*) (Doolittle and Camp, 1999; McDowell, 2012).

#### 2.4 *PFA Feedback and students' reflection*

An assumption underlying assessment feedback is that it is a catalyst for students' personal reflection about their knowledge, skills and understanding. PFA offers an opportunity for students to reflect on programme level outcomes, where, from a constructivist perspective, they make sense of the learning process and their strengths and weaknesses and can be motivated to plan for their future development. The literature links PFA feedback to opportunities for students to clarify their life choices, identify goals and plan appropriate actions associated with the expectation of raising personal understanding, capabilities, motivation, educational engagement and personal achievement. Personal development planning (PDP) is a process which requires a student to reflect upon their learning performance and their accomplishments. The process includes planning their development needs by identifying personal goals and the creation of an individual action plan (Amundson, 2005; Bullock & Jamieson, 1998, Maree et al., 2006, Mariott & Teoh, 2012; Rust, 2002).

#### 2.5 *Students' motivation, perceived relevance and preparation for employment*

An assumption underlying PFA is that it can act as a motivational tool to engage students to take a more comprehensive view of the subjects they are studying (PASS, 2012).

Rust (2002) argues that students gain a deep approach to their learning when they are intrinsically motivated because they perceive the relevance, importance and value of what they are being required to do. Students' motivations and engagement are likely to be quite variable based on their perception of an assessment. Students may be engaged and perform well in an assessment because they 'like' the subject or perceive they are 'good at' a subject. However, there are likely to be many contributory motivational factors such as subject familiarity, learning approaches, learning styles, type of assessment products required (e.g. essays or short mathematical demonstrations), composite assessments (written and oral), marking weights (e.g. critical comment attracting higher marks), contributions to final degree grade, assessment frequency and timing, and assessment criteria. There may also be a range of looser and less stable factors influencing students' motivation and performance; such as perceptions of ease (or difficulty), novelty, innovation, relevance to the real-world, personal confidence, personal skill levels and expectancies (Mariott & Teoh, 2012; Rust, 2002; Svinicki, 2004; Watering et al., 2008;). From the contexts of motivation and assessment relevance, PFA may offer an opportunity to modify accounting curricula to equip students with appropriate non-subject specific skills and competencies to prepare them for real-world applicability and to enhance their chances of employment (Boud, 2000; Somers et al., 2014).

### *2.6 Students' perceptions of PFA*

The literature provides an insight into the potential opportunities which PFA offers and the benefits which students are likely to perceive. However, students' perceptions, reported attitudes and preferences are likely to be unpredictable, volatile and complete. Wynn-Williams et al. (2016) describe a 'clumsy' relationship between desired outcomes (teachers' perspectives), the perceived learning environment (institutional perspectives), and student perceptions which are affected by multiple layers of motivations. Students' perceptions of assessment are likely to play a large role in how they interact with the assessment process and can have either positive or negative influence on the performance itself. There appears to be little research about the impact of PFA on students' perceptions. This paper reports on a study which has explored students' perceptions of PFA based on the proposed benefits of PFA identified in the literature which cover perceptions of assessment, student satisfaction, validity, pedagogy, feedback, self-reflection, motivation, relevance and preparation for employment.

## **3. Methodology**

### 3.1 *The Form and Context of the PFA*

This PFA study was undertaken at the end of the academic year 2015-2016 in a British university, where PFA was implemented for an undergraduate degree programme in Accounting and Finance leading to a BA (Hons). The degree programme is made up of study modules, valued in Credit Accumulation and Transfer Scheme (CATS) points, where students need to obtain 360 CATS Points to graduate. The first year of the programme consists of five taught modules, each with a module-specific assessment, and one assessment module: the PFA. Each module has 20 CATS points. There are no timetabled classes allocated explicitly to the PFA Module; technical preparation for PFA is included in the taught modules, which are delivered by different lecturers, covering Financial and Management Accounting, Business Economics and Finance, Managing People and Projects, Ethics and Sustainability and Company Law. As there were no specific classes for the PFA, the Programme Leader created a clear 'roadmap', which describes in detail the study module requirements, expectation and arrangements for the development of programme level knowledge. The roadmap was an Excel table which showed each of the five modules, self study periods and a 24 week plan (two semesters). Several different practice exams based on different companies and topics were drafted: for example one covered financial accounting, ethics and law while another example focussed on a different industry and-concentrated on management accounting, ethics and finance. By providing several different PFA examples, it demonstrated to students that they could not guess the areas that might appear in the final assessment. At the start of the term, the tutors created a timetable for releasing these PFA examples to students. The timetable was also made available to students; this ensured that the students explicitly understood that they were being prepared for the PFA and could see how this work was embedded in the programme. A Canvas page (an online learning platform) was created so that all of the material related to PFA was stored in one place. Once Semester 2 commenced, the Canvas page was populated with more practise examples with abbreviated sample answers and marking criteria. For this example of PFA, students undertake practice assessments in class and during private study leading to a final summative PFA at the end of the year. Students receive detailed feedback on all practice assessments.

In this first year, the summative PFA consisted of a real-world case study issued in advance to students and previously unseen integrative tasks to be completed under examination conditions. The contents of the PFA document pack, based on the published Annual Report and Financial Statements of Tesco, are summarised in Figure 1. The students

were required to complete a series of tasks utilising and integrating technical knowledge, business understanding and ethical awareness as well as the use of presentation, analysis and evaluation skills.

<p><b>Precis of the PFA (Tesco Case Study)</b></p> <p><b>Students' resources</b> (provided in advance):</p> <ul style="list-style-type: none"><li>• URL links to research Tesco before the written phase of the PFA;</li><li>• High level strategic statements;</li><li>• Statement of commercial issues;</li><li>• Statement of company values;</li><li>• Tesco Business Model;</li><li>• Statement of business priorities;</li><li>• Statement on the perceived way forward;</li><li>• Income Statement;</li><li>• Balance Sheet.</li></ul> <p><b>Some example integrated assessment tasks</b> (unseen by the students until the day of the assessment):</p> <ul style="list-style-type: none"><li>• <i>Calculate (to two decimal places) the operating profit ratio for 2014 and 2015;</i></li><li>• <i>Describe and evaluate the growth and profitability of the business in 2014 and 2015; suggesting reasons why one Tesco's store might have higher profits than another.</i></li><li>• <i>Explain three ethical challenges facing Tesco.</i></li><li>• <i>Evaluate whether or not the new Tesco corporate governance arrangements will enable the company to comply with the UK Corporate Governance Code.</i></li></ul>
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Figure 1: Example contents of the PFA Task Pack

This PFA was designed to fit into the pattern of examinations at the end of Year 1, attempting to minimise students' anxieties about this form of assessment and, because it was a significant change to assessment practice, limit its initial scope to a format well understood by students. Therefore, the PFA was a cautious prototype while extending its implementation to Year 2 and 3 with more open-ended approaches was still under consideration. The summative PFA document pack, which set the boundaries of the assessment, was released to students 24 hours in advance and students were required to complete the previously unseen questions within three-hours under examination conditions. For the PFA, the students were required to demonstrate a broad knowledge and understanding of the main principles, technical language, concepts and methodologies of accountancy and finance including the legal, ethical, business, professional and social factors covered in all the first-year study modules. They were assessed according to criteria at Table 3, based on the current institutional method and informed by the

developing approaches used by professional accounting bodies for similar work at that time; for example, The Institute of Chartered Accountants in England and Wales (ICAEW, 2014).

Table 3  
Allocation of weighted marks for the Accounting PFA

<u>Major Section</u>	<u>Sub Section</u>	<u>Marks Allocation</u>
Technical Knowledge & Professional Understanding (50%)	Technical accounting knowledge	30%
	Business understanding	10%
	Ethical awareness.	10%
	Use of information	20%
Transferable Knowledge & Skills (50%)	Analysis	20%
	Evaluation	10%

Feedback was provided to students using the headings at Table 3 and students were advised on their strengths and weaknesses. At the start of the next academic year, students attended a seminar where they received the regular class level feedback, but with a significant change in approach. Students were now provided with detailed individualised oral and written feedback from the tutorial team about their possible strengths and weaknesses based on the categories shown in Table 3. These comments and advice were linked to Year 2 PDP, where the students were required to undertake a period of personal reflection and develop a PDP based on the identified areas of personal weaknesses. The feedback from the PFA was intended to play a significant part in the reflection process.

### 3.2 *The Exploratory Study of PFA*

This case study explored students' perceptions about the use and value of PFA at the end of Year 1 (Level 4) undergraduate Accounting course. To collect the perceptions of students a quantitative (questionnaire-based) approach and qualitative (focus group) approach were used. Focus groups are an accepted methodological instrument, which allows researchers to gather rich qualitative data from targeted populations. Furthermore, focus groups enable informal probing of the issues and observation of participants' responses, interactions and behaviours (Osgerby & Rush, 2015). This type of approach has proved to be successful in previous studies which evaluated students' perceptions of assessment practices in accounting education (Caldwell, Weishar, & Glezen, 1996; Collins, Onwuegbuzie, & Jiao, 2006; Flores & Alonso, 1995; Friedlan, 1995; Marriott & Lau, 2008; Wilson, 1997).

A mixed method approach has been documented as having the advantage of providing methodological triangulation in educational research (Bryman, 1988; Collins et al., 2006;

Higgins, Hartley, & Skelton, 2002; Selwyn, 1998). Furthermore, a mixed method approach can produce more compelling evidence and has been used successfully to collect students' perceptions in extant literature from research into the accounting pedagogy (Yin, 2006; Marriott & Teoh, 2012).

Ethical consent to undertake this piece of research was granted by the Faculty's Ethics committee, and participants were aware that their participation in the study was voluntary and that their responses to the questionnaire were anonymous. Although 67 students completed the PFA, only 43 students (25 male/18 female) completed the questionnaire. Most students (93%) were aged between 18 and 23 years. 14% of the sample were international students. 91% of students reported the expectation to undertake a future career in Accountancy, business or finance. 23% of the sample stated that they had experienced a previous integrated assessment.

### *3.3 Questionnaire and Focus Group*

As no existing survey exploring perceptions of PFA by students could be found, the survey questionnaire was constructed specially for this study. It contained nine personal data questions, three questions about perceived overall performance in the PFA, an area for free text and thirty-nine randomly presented statements (questionnaire items) selected from a prospective list of one hundred and thirty-nine items based on aspects of the potential benefits of PFA identified in the literature. The questionnaire items were inspired by the literature sources shown in Table 1 and are presented in literature review order in the Appendix. Although some questionnaire items appear similar, they were worded to convey slightly different meanings. Students were invited to agree or disagree with the statements using a 5-point Likert Scale. The questionnaire was followed up with a focus group of 4 students. The focus group exercise was chaired and recorded by a separate member of staff and transcribed independently to reduce potential researcher bias.

## **4. Findings and discussion**

This exploratory study of accounting students' perceptions of PFA has generated a considerable amount of attitudinal data which highlights the complexity of students' varied perspectives and preferences about learning and assessment. The questionnaire data are listed in topic cluster order (as percentages against the Lickert Scale) and shown in the Appendix. In general terms, the questionnaire results show considerable complexity and variability in the perceptions of students about PFA. To provide a summary of the findings and to create a

basis for discussion, Table 4 lists clusters of students' perceptions of the proposed benefits of PFA; categorising the findings into supportive and unsupportive perceptions.

<b>Table 4: Pattern of students' perception responses about the PFA.</b> (Questionnaire item text paraphrased.)		
Areas	Supportive perceptions (Majority agreement showed)	Unsupportive perceptions (NCM = no clear mode)
Overall Satisfaction	<u>PFA - effective learning experience</u> (70%). PFA workload not too demanding (54%). (*) Not overwhelmed by materials (65%). (*)	PFA – was well managed (NCM). (*) PFA – student view: results as expected (NCM)
Confidence & Preparedness	PFA experience increased my confidence (56%).	I was more apprehensive about PFA (63% agreed). I needed more preparatory tuition (51% agreed). I did not lack confidence in applying current knowledge & skills (NCM).
Validity	PFA not too complex (at end Year 1) (62%). (*) PFA is not a repetition or other tests (58%). Prefer PFA - a good valid test of overall knowledge and skills (51%). (*)	Prefer PFA – my tutors can see my overall capability (NCM).
Pedagogy (Making Connections)	<u>PFA showed me how to make connections</u> (83%). <u>PFA showed me new connections</u> (81%). My first-year modules encouraged me to think about interconnections (62%).	Prefer PFA - requires wider thought, analysis and linking (57% disagreed).
Pedagogy (Learning Approaches)	PFA brought my skills, knowledge & understanding together ... extended accountancy knowledge (72%). (*) Liked PFA ... work open ended (70%).	I expect to understand the bounds of what I need to learn (68% agreed). (*) Prefer short, straightforward answers (61%). <u>Rely on memorising facts, ideas, concepts, formulae and techniques</u> (74%). Accountancy - straightforward subject (NCM). Prefer future module assessment to require judgement and interpretation (49% agreed). Prefer PFA to demonstrate knowledge, skills and experience with interpretive answers (46% agreed).
Feedback (*)	<u>Satisfied with PFA feedback</u> (77%).	Prefer personalised PFA feedback privately with a tutor (47% agreed). Prefer PFA summary feedback in class then class discussion (NCM). Prefer personalised PFA feedback in writing (NCM).
Personal Reflection	<u>Reflecting on feedback - making action plan</u> (93%). <u>PFA enabled understanding of subject application in the workplace</u> (79%). <u>PFA module extended my overall understanding of accountancy</u> (72%). PFA gives an overall understanding of my skills and knowledge at the start of Year 2 (63%). I was surprised by my strengths and weaknesses identified by the PFA (63%). PFA has increased my level of interest in the subject of accountancy (58%). Satisfied with my overall PFA performance (56%).	
Motivation	PFA has motivated me to study accountancy more widely and in greater depth (56%).	PFA ... an enjoyable way of learning (NCM). More motivated if more marks toward my overall grading (NCM). (*)
Notes:		
<ul style="list-style-type: none"> <li>• Items with <math>\geq 70\%</math> students' agreement underlined.</li> <li>• No clear mode in findings (NCM).</li> <li>• Items are reflecting institutional management (*).</li> </ul>		

#### 4.1 *Satisfaction*

Many students agreed that this PFA was an effective learning experience (70%) (PASS, 2012), This was an opinion reflected in the Focus Group:

*'I did enjoy it [PFA] ... I found it interesting ... it was a good assessment'* (Student 1)

From students' perspectives, the findings show students (77%) were satisfied by the level of feedback (an NSS issue). Students also acknowledged increased confidence, pedagogic and reflection benefits, which are possible components of any measure of student satisfaction.

From the institutional perspective, perceptions are less clear. Students (54%) appeared content with the demands of the workload and were not overwhelmed by the PFA materials (65%).

Students (62%) reported they did not find the assessment too complex for the end of Year 1 (62%) providing some support that PFA does not contribute to perceptions of increased assessment load (Jessop & Tomas, 2016; Price et al., 2011). However, this must be seen in the context of an item in the first part of the Questionnaire where students (77%) agreed they had received results (positive and negative) they did not expect. There were also ambiguous findings for students' perceptions about the management of the PFA, student apprehensiveness, initial confidence and where students (51%) perceived the need for more preparatory tuition, a consensus view reflected at the Focus Group for example:

*'More timetabling [for preparation] is required ...'* (Student 1).

*'... I would have liked more guidance'* (Student 2).

The tutorial team has assessed these findings and some minor changes to the institutional arrangements for the PFA have been implemented. This cohort of students will graduate in 2018 and, until then, any contribution by this instance of PFA towards their NSS summary satisfaction levels will be unknown.

#### 4.2 *Validity*

Only half the students (51%) perceived the PFA to be a good test of overall undergraduate knowledge and skills at the end of Year 1, and there were mixed perceptions about PFA being a test of overall capability with one-third of students (35%) providing no view about this. While students (58%) perceived the PFA as not repeating previous

assessment, one quarter did, and there were positive and negative sentiments expressed at the Focus Group:

*‘PFA ... is really useful for dealing with the real-world’ (Student 3)*

*‘What is the point of us doing it [PFA] because you are doing five other exams ... so why do you need to do it at all, perhaps it is adding commercial awareness’ (Student 2)*

Students (51%) agreed that the PFA would permit tutors to make a more valid judgement about their abilities, but this must be seen in the context that students (77%) were surprised by their PFA results, which were provided in a new format. In general terms, many students appeared to be unconvinced about the validity of PFA, and this may require further study.

#### 4.3 Pedagogy

Significantly, most students agreed that PFA is an approach to stimulate making intermodular connections (83%) and new connections (81%) in their accounting studies. Students (72%) agreed they perceived PFA brought their knowledge and skills together, extending their knowledge. This was also reflected in comments made by the Focus Group:

*‘It [PFA] consolidates everything you learn in other modules’*  
(Student 1).

*‘PFA ... allows you to bring everything together’ (Student 3)*

These perceptions appear support the idea that PFA offers a remedy to some of the criticism of degree modularisation (Bloxham et al., 2007; Boud & Molloy, 2013; Jessop et al., 2014; Maas & Leaby, 2005;). The idea of making connections provides some evidence that PFA has potential to support a constructivist approach (McDowell, 2012).

The questionnaire contained provocative statements about learning approaches and covered some of the leading implied characteristics of shallow and deep learning found in the literature and which students are likely to perceive. Many of these accounting students agreed with statements which might imply characteristics of ‘deep learners’. Students (72%) acknowledged that PFA extended their overall understanding of the subject and students (70%) liked the PFA because it required judgement and interpretation. However, many of these accounting students agreed with sentiments which might be considered as the expected characteristics of ‘shallow learners’. Students (61%) preferred short answer assessment

items, and students (74%) agreed they relied on memory to achieve good marks. From an institutional perspective, students (68%) agreed with a preference for understanding the exact bounds of what they are required to learn. There were also some contradictory findings. Students (70%) agreed they preferred open-ended work, but from an institutional perspective, only 49% of students agreed they would prefer the extended use of modular assessment requiring the deployment of integrated accountancy skills such as analysis, interpretation and judgement. There was also an ambiguous student response about extending the use of PFA where students (49%) would prefer to continue to use PFA to demonstrate knowledge and skills through interpretive activities. These results appear to support Wynn-Williams et al. (2016) which suggests that students switch between deep and surface approaches to learning depending upon the assessment approach, a pattern of behaviour that may be exacerbated by the underlying technical nature of the subject of accounting. However, it is concluded that while students may appreciate pedagogic benefits, a single instance of PFA is probably unlikely to change students' deep-seated learning behaviours.

#### 4.4 *Feedback, self-reflection & preparation for employment*

There was no consensus about the enjoyment level, and students (63%) were surprised by the identification of their strengths and weaknesses. From an institutional perspective, while 77% of students reported being satisfied by the level of feedback from the PFA process, there were no majority preferences for a specific form of feedback, and the level of 'neutral responses' varied from 28% to 37%. At the Focus Group, students could not agree on a preference for feedback method, and this will be subject to further institutional study. Feedback was a major discussion point at the Focus Group:

*'I found the feedback with the tutors very useful'* (Student 2).

*'I had feedback just on my own, and I did learn something from it'* (Student 1).

*'My feedback showed me that my answers were a bit short and I needed to be more confident and expand my answers'* (Student 2).

*'It helped me find out where my weaknesses are'* (Student 3).

It was encouraging to find that during the questionnaire period many students (93%) appeared to be following up the PFA feedback and were utilising it as the basis for action planning to support PDP. One of the arguments advanced for PFA is the relevance to the real world (Boud, 2000; Rust, 2002) and that it can assist with developing employability skills. These results appear to support this view where students (79%) agreed that the PFA had improved their

understanding of the skills and knowledge required for accounting in the workplace with most students indicating increased interest in the subject of accountancy. It is concluded that PFA, and its associated improvements in student feedback, offer the potential to improve students' awareness of their study requirements and provide a motivational basis for PDP.

#### 4.5 *Motivation*

Student's perceptions of the motivational aspects of PFA were mixed. A bare majority of students (56%) agreed they were motivated to study accountancy more widely and in greater depth because of PFA, but 28% were neutral, and 16% disagreed. Only 47% of students agreed they would now study accounting more widely, whereas, many 35% expressed no view. It is unclear if the singular use of PFA can act as a motivational tool to engage students to take a broader look at the subjects they are studying (PASS, 2012). From an institutional perspective, students (47%) report they would have been more motivated if the PFA had contributed more marks toward their end of year grading. However, this could be construed as a motivational aspect of any form of assessment.

### 5. **Conclusions**

This exploratory study of accounting students' perceptions of PFA has generated a considerable amount of attitudinal data which highlights the complexity of students' varied perspectives and preferences about learning and assessment. This study illustrates how students are likely to perceive some of the main benefits ascribed to PFA, assessing programme level learning outcomes and leading students to reflect on this skills and knowledge. However, even where students perceive the benefits of PFA, a single instance of PFA does not appear to change students' personal preferences or learning styles.

Students do appear to perceive many of the benefits attributed to PFA, but there seem to be many factors in play. From the students' perspective their confidence, apprehensiveness, need for preparatory tuition, learning styles and individual motivation may be essential factors in the success of PFA. From an institutional perspective, sound design, sound task management, production of valid tasks, not repeating module assessment tasks and matching feedback style to student preferences may be important factors. This study demonstrates students appear to perceive some of the proposed benefits ascribed to PFA, but these perceptions are not unanimous. The validity and volatility of these attitudes should be determined by further questionnaire refinement and annual surveys. The mixed and somewhat ambiguous results indicate a need for more study in this area.

## **6. Recommendations for practice**

From the findings from this exploratory study, the following practical suggestions are made to potential implementers of PFA.

- The use of well-designed PFA is recommended, but it must be part of a more extensive development package of students' higher order skills and knowledge, which are defined by programme level outcomes.
- While students may perceive and acknowledge the benefits of PFA, it is likely to cut across the ingrained learning approaches of students and may not in itself change students' underlying learning behaviours. Therefore, PFA should be considered as only one tool in the student development toolbox.
- PFA should not repeat assessment undertaken elsewhere in a programme. A PFA should be a carefully designed product to evaluate programme level learning outcomes, which have been integrated with and supported by underlying study modules.
- A Programme Team should have a clear 'roadmap', available to students and tutors, which describes in detail the study module requirements, expectation and arrangements for the development of programme level knowledge and skills. Details of how to design a programme assessment matrix can be found in Brunton et al., 2016.
- Students undertaking PFA must be prepared carefully. Students should be made aware of the context of the PFA, so they see the value of engaging with it. Tutors should be explicit about the knowledge and skills required to undertake the PFA; ensuring students have sufficient opportunities during underlying study modules for adequate preparation.
- A PFA can appear overwhelming to students, and they are likely to require close tutor support and guidance during PFA preparation to overcome potential anxieties.
- A PFA should have sufficient value in the overall grading process to encourage to engage students in attempting to gain the maximum benefits from its use.
- The feedback process should be part of further structured activities such as formal reflection, personal development and action planning.

## **7. Limitations and scope for further work**

The exploratory case study was based on a limited sample of students, and the investigation was based on one cycle of PFA in a single subject. However, the exercise has provided faculty academic staff responsible for maintaining and developing undergraduate PFA with useful experience and the institution some confidence in its use. Future work will address these limitations by:

- Increasing the sample size and refining the questionnaire and repeating the survey during the next few years may lead to improved statistical treatment of the data.
- Widening this work within the institution to include students already undertaking various forms of PFA within other programmes.
- Investigating of academic staff perceptions.
- Carrying out comparative work between students undertaking PFA and non-PFA using other, different programmes.

## APPENDIX: QUESTIONNAIRE FINDINGS

### Part 1: Biography and general questions

1	What is your gender?	Female	42%
		Male	58%
		Not Stated	
2	What is your age group?	18-20	67%
		21-23	26%
		24+	7%
3	Are you an international student?	International Student 1	14%
		Not International 2	86%
4	Is English your first language?	English 1st language	67%
		English not 1st language	33%
5	On graduation I expect to have a career in the field of:	Accountancy	65%
		Business & Finance	26%
		Management	2%
		Something Else	7%
6	I expect to gain professional qualifications in accountancy after graduation?	Yes	93%
		No	9%
7	Have you ever undertaken an integrated assessment before?	Yes	24%
		No	76%
9	Was the overall mark for the PFA as you expected?	Less than expected	38%
		As expected	24%
		Better than expected	38%

### Part 2: Questionnaire items and Lickert Scale.

(Lickert Scale: SD/D = Strongly Disagree/Disagree, N = Neutral, A/SA = Agree/Strongly Agree)  
(Table sorted by Literature Review headings and means.)

Question	Perceptions of:	Frequency % (n=43)					Mean
		SD	D	N	A	SA	
<b>SATISFACTION WITH PFA</b>							
(McDowell, 2012; Jessop et al., 2014; PASS, 2012; Turner & Baskerville, 2013.)							
43	PFA was an effective learning experience.	0	9	21	56	14	<b>3.74</b>
31	I was not overwhelmed by the amount of pre-seen material for the PFA.	0	16	19	49	16	<b>3.65</b>
45	The preparation, assessment tasks and feedback provided by the PFA module was an effective learning experience.	7	9	21	53	9	<b>3.49</b>
27	Compared to other modules, I found that the PFA workload was not high and demanding	4	23	19	40	14	<b>3.35</b>
38	The PFA was well managed by the tutors.	9	12	33	37	9	<b>3.26</b>
<b>CONFIDENCE &amp; PREPAREDNESS</b>							
(McDowell, 2012; Jessop et al., 2014.)							
12	Compared to my previous assessments I was more apprehensive about undertaking a PFA.	0	14	23	56	7	<b>3.56</b>

46	The PFA experience increased my confidence as an undergraduate student in accountancy.	7	9	28	51	5	<b>3.37</b>
26	Compared to other module assessments, I needed further preparatory tuition before carrying out the PFA.	5	30	14	42	9	<b>3.21</b>
32	I did not lack confidence in my ability to focus and apply the accountancy knowledge and skills I had been developing during the first year of real-world case studies.	9	33	9	44	5	<b>3.02</b>

#### **PFA VALIDITY**

(Ashford-Rowe, et al., 2014; Guilkers, et al., 2014; Rust, 2002; Tummons, 2010)

##### ***Validity (about me)***

14	I prefer PFA because it was a good valid test of my overall undergraduate knowledge and skills at the end of Year 1.	5	19	26	42	9	<b>3.33</b>
17	I prefer PFA because my tutors could make a more valid decision about my overall capability as a student of accountancy compared to other modules.	5	19	35	33	9	<b>3.23</b>

##### ***Validity (of approach)***

11	I see PFA as not just a repetition of what had already been tested in the other year 1 module assessments.	5	21	16	51	7	<b>3.35</b>
33	I found PFA of my accountancy skills and knowledge not to be too complex to take place at the end of year 1.	5	19	14	53	9	<b>3.44</b>

#### **PEDAGOGY**

(Beattie et al., 1997; Biggs et al., 2001; Bok et al., 2013; Boyce et al., 2001; Donnison, 2012; McDowell, 2012; Knight & Yorke, 2003; PASS, 2012; Rust, 2002; Scouller, 1998; Scouller & Prosser, 1994; Wynn-Williams et al., 2016.)

##### ***Making Connections***

40	PFA has shown me how to make connections between the first-year taught study modules.	0	9	7	67	16	<b>3.91</b>
23	The preparation for PFA made me see <b>new</b> connections between the accountancy skills and knowledge I had been learning.	2	7	9	65	16	<b>3.86</b>
15	My first-year modules prepared me adequately to make connections between all the accountancy skills and knowledge I had been learning.	0	9	28	56	7	<b>3.61</b>
47	I prefer the form of PFA because I like assessments which require wider thought and analysis - linking varied ideas together.	5	26	26	33	12	<b>3.21</b>

<b>Item</b>	<b>Perceptions of:</b>	Frequency % (n=43)					<b>Mean</b>
		<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	
<b><i>Learning Approaches- Potential 'Shallow Learner' Indicators</i></b>							
36	I expect to understand the bounds of exactly what I need to learn for each accountancy module assessment.	0	5	28	63	5	<b>3.67</b>
22	I normally prefer to answer assessment questions with short straightforward answers.	0	26	14	40	21	<b>3.56</b>
30	I rely on memorising facts, ideas, concepts, formulae and techniques to achieve good marks in assessments.	5	12	9	74	0	<b>3.54</b>
19	I was motivated to study accountancy because I believed it to be a straightforward subject, so I could gain a high classification degree.	5	35	12	44	5	<b>3.09</b>
<b><i>Learning Approaches - Potential 'Deep Learner' Indicators</i></b>							
42	The PFA module brought my skills and knowledge together in a way that extended my overall understanding of accountancy.	0	9	19	65	7	<b>3.70</b>
25	I like PFA because the work required was more open-ended.	5	16	9	56	14	<b>3.58</b>
44	I now would prefer the future end of module assessments to be based on the wider integrated use of my accountancy skills and knowledge/ analysis/ interpretation/ Judgement.	0	28	23	40	9	<b>3.30</b>

37	I prefer to carry out PFA where I can demonstrate my undergraduate accountancy knowledge, skills and experience with interpretive answers.	2	30	21	44	2	<b>3.14</b>
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**FEEDBACK, SELF-REFLECTION & PREPARATION FOR EMPLOYMENT**

(Amundson, 2006; Boud, 2000; Boud & Falchikov, 2006; Grohnert et al., 2014; Knight & Yorke, 2003; Maree et al., 2006; Yorke & Knight, 2006)

28	I was satisfied with the amount of PFA feedback I received.	2	12	9	65	12	<b>3.72</b>
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16	I would prefer to receive personalised PFA feedback about my performance in discussion privately with my tutor.	0	26	28	26	21	<b>3.42</b>
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29	I prefer to receive overall summary feedback in class and then take part in class discussions about the summary feedback.	9	12	37	37	5	<b>3.16</b>
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24	I would prefer to receive personalised PFA feedback about my performance from my tutor in writing.	5	26	33	28	9	<b>3.12</b>
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48	I am now going to reflect on the feedback I have received and make an action plan to improve my accountancy skills and knowledge.	2	2	2	60	33	<b>4.19</b>
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49	The PFA module has enabled me to better understand how to apply my accountancy skills and knowledge in the workplace.	0	9	12	63	16	<b>3.86</b>
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42	The PFA module brought my skills and knowledge together in a way that extended my overall understanding of accountancy.	0	9	19	65	7	<b>3.70</b>
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21	I prefer PFA because it has given me an overall understanding of my skills and knowledge as I start my second year of study.	0	12	26	56	7	<b>3.58</b>
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18	I was surprised by the strengths and weaknesses identified by the PFA gradings and tutors' feedback.	0	23	14	47	16	<b>3.56</b>
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34	PFA has increased my level of interest in the subject of accountancy.	2	14	26	53	5	<b>3.44</b>
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41	I was satisfied with my overall PFA performance.	5	35	5	47	9	<b>3.21</b>
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**MOTIVATION**

(Rust, 2002; Svinicki, 2004)

35	The style of work undertaken during the PFA has motivated me to study accountancy more widely and in greater depth.	2	14	28	49	7	<b>3.44</b>
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20	Compared to other modules, the PFA module provided an enjoyable way of learning.	7	33	35	23	2	<b>2.81</b>
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39	I would have been more motivated if the PFA had contributed more marks toward my overall grading.	7	40	23	26	5	<b>2.81</b>
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