

The experience conundrum: impact on programme design for part-time industrial, experienced students

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Research Domain: Learning, Teaching and Assessment

Abstract

Part-time study is challenging for universities and students alike: work-life-study balance, timely graduation and module schedule to name but three. These candidates have valuable experience (knowledge and skills) that is not often fully recognised or reflected in programme design. This paper explores the strategic and pedagogic/androgogic context for this problem identifying key programme design aspects. Evolution of practice over the last 3 years for a purely part-time course at Coventry University will be detailed and evaluated against identified principles in transformational learning, active-learning strategies and reflective practice. Particular consideration of a recent approach around a FHEQ level 4 bridging module indicate that creative and robust approach can be taken that recognises the positive aspects of experienced candidates whilst recognising the challenges and demands of part-time students.

Introduction

“... but I have substantial work experience, surely that will allow me some exemptions on the course?”

“Why am I having to do this [module], as I have had the work-based training on this?”

Whilst these are not directly attributable quotations to particular students, these are typical questions that the authors have received at Open Days and in discussions with company employees who are looking to achieve a degree. Generalising from these observations, the question that this paper will explore is “What is the significance of prior technical experience of industrially-employed applicants for programme design”.

This paper will consider the significance of this question in relation to pedagogic and androgogic theories, where programme design reflects admissions, transition, and teaching, learning and assessment strategies. The evolution and evaluation of approaches to this ‘experience conundrum’ on a purely part-time course within the Faculty of Engineering and Computing at Coventry University will be detailed to consider whether this forms a possible solution.

Strategic context

Whilst there is no UK government industrial policy, these policies exist in other countries, and provide a focus for strategic investment priorities with the aim of securing national competitive advantage; such planning highlights required skills and capabilities, amongst other attributes, but within education such definition is of key importance. Such strategies have supported expansion in the UK Higher Education (HE) sector, typically around full-time undergraduate for A-level leavers and, in the workplace, have increased the required educational levels for senior and managerial positions. Consequently, successful employees now need a degree, where a lower technical qualification was previously acceptable. On return to university they can find themselves on courses designed and implemented for full-time students, where the curriculum matches often to professional body requirements (e.g. UK-SPEC in Engineering – Engineering Council 2008) and not to the specific needs of the employee/student.

The employees possess contextual knowledge - an aspiration of full-time course design (as well as professional bodies) - but do we recognise this experience on access to HE for these candidates? From the students' and universities' perspective, due recognition has the positive impact in that their period of study is reduced; such considerations are strategically important for universities where completion and progression rates are important metrics and evidence indicates the lower achievement against these metrics of part-time students. Accreditation for Prior Experiential Learning is possible and best-practice guidelines do exist (QAA 2004), yet such an approach considers only "what is experience worth on entry to a course" and not how all experiences can be incorporated into the programme. So, what should a university-level course be offering these industrial students?

Pedagogic and androgogic perspectives

Figure 1 covers some key points that influence programme structure and the process of learning; these can be adapted to work with standard course design methodologies, e.g. D'Andrea 2005: Figure 2.

Whilst enquiry-based learning approaches may appear relevant, this pedagogy assumes limited knowledge before the problem and significant prior knowledge may short-circuit the learning process. Problem solving learning represents a (social) constructivist perspective (Vygotsky 1962), but requires active facilitation. However, such an active approach to knowledge-practice may resonate well with experienced practitioners. WBL is of use within programme design, particularly around teaching, learning and assessment strategy as encourages contextualisation of academic content in a work-placed environment.

Transformational learning aims to embrace the learners' prior perspectives (not facing them with barriers) and encourage critical evaluation and reflection. In summary, suitable active approaches that fully reflect the students' viewpoint are important; programmes must transition students from practice to critical reflection (starting from 'concrete experience' in Kolb 1982).

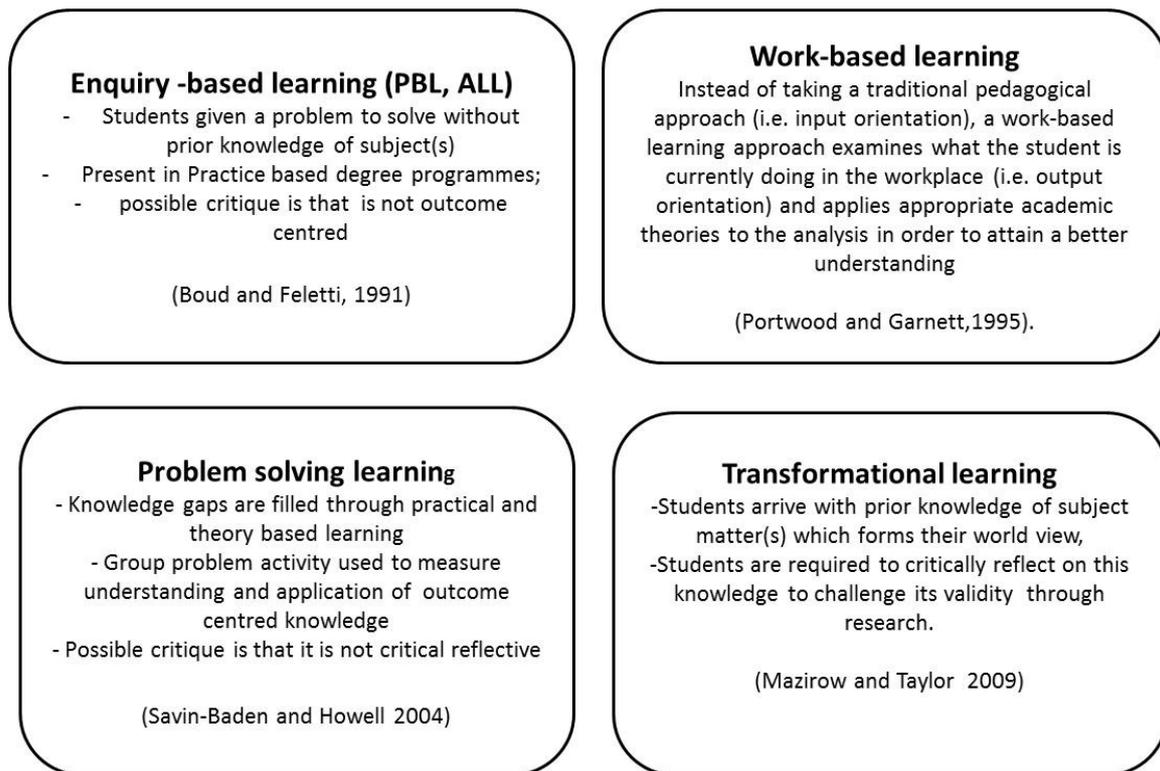


Figure 1: Review of relevant literature on active learning strategies

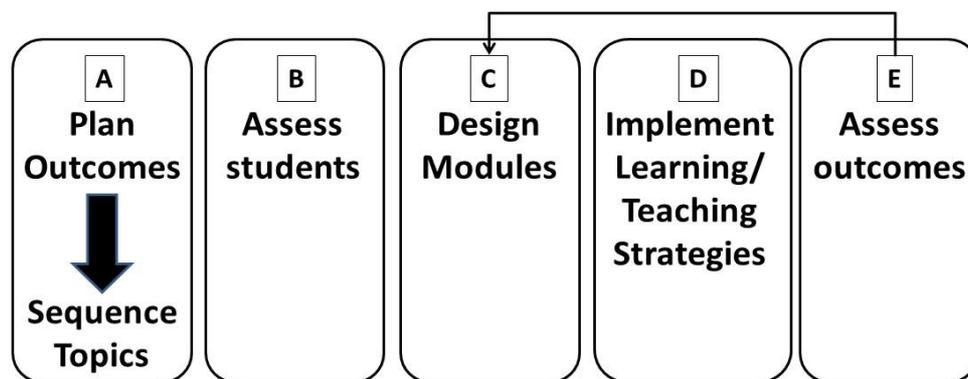


Figure 2: standard programme design model (D'Andrea 2005)

Context, practice and policy evolution and evaluation at Coventry University

An undergraduate engineering course at Coventry University has run for over 20 years, the last 10 in a purely part-time delivery mode as an evolution of the existing full-time course. The part-time course was implemented as a progression pathway for HNC/HND students, so only FHEQ level 5 and 6 modules are taught.

There are two key aspects that will be reported – i) value of experience on entry and supporting transition and ii) how is experience being used within the programme.

During the last 3 years, significant evolution of practice around consideration of this experience has taken place for access purpose (Table 1). In part, an increase in applicants,

who are seeking to find academic equivalency for their experience has provided impetus for change.

An action research approach has been taken: quantitative data on those students seeking experience recognition, their previous qualifications, grades and differential between students groups (those with and without experiential credits) will be detailed along with course team staff observations and student feedback.

As a case study, the introduction of a FHEQ level 4 bridging module; was presented recently along with initial results (Smith, Wilson and Swanson 2012). In this presentation, further evaluation based on the longitudinal progression of the first cohort of students as well as the second cohort will be presented.

Moreover, as part of on-going programme evolution, two new FHEQ level 5 modules have been introduced in 2010 – one around 'Data Analysis and Management' and the other around 'Operations Management'. Analysis of the module teaching, learning and assessment strategies highlight that the students perform best and learn most when they can both bring prior knowledge and are challenged to reflect on their current practice.

These case-studies, within this wider longitudinal project, will highlight many of the principles and policy and course design aspects.

Conclusion

In conclusion, results within the course at Coventry University indicate that due consideration of transformational learning, reflective practice and utilising of existing problem-solving skills afford an effective curriculum design approach that fully recognises the prior transferable skills and experience that industrial candidates possess. Is there an experience conundrum – yes, but it can be addressed.

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Table 1: evolution of experience for access onto course and point of entry

Areas of experience considered	Experiential assessment method; course access route			
	2009/10	2010/11	2011/12	2012/13
FHEQ L3 qualifications and experience	CV and pass interview demonstrating application; enter degree at start of L5		CV, maths diagnostic test; L4 bridging module with written experiential portfolio → enter degree at start of L5	
FHEQ L4 qualification and experience	CV and pass interview demonstrating application; enter at top-end of L5		CV and completion of proforma to document experiential equivalency to L5 modules; enter at top-end of L5	Merit/distinction for L4 qualification → CV and completion of proforma to document experiential equivalency to L5 modules; enter at top-end of L5
				Pass for L4 qualification → CV, maths diagnostic test; L4 bridging module with written experiential portfolio → enter degree at start of L5
FHEQ L5 qualification and experience	CV and pass interview; enter at top-end of L5		Merit/distinction for L5 qualification; enter at top-end of L5	
			Pass for L5 qualification → CV and completion of proforma to document experiential equivalency to L5 modules; enter at top-end of L5	