

Designing Postgraduate Professional Courses: a case study from Forensic Psychology

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Introduction

Designing postgraduate professional courses presents specific challenges. These are explored in this account of the redesign of an existing psychological testing course, originally created for occupational psychology postgraduates, for a different cohort of students, postgraduates on forensic psychology courses.

One of the most common tasks for a forensic psychologist is the assessment of offenders, victims, witness and criminal justice personnel using a variety of psychometric tools (e.g., attitude scales and personality inventories). The correct administration, scoring, interpretation and feedback of the results of these psychological tests are skills regulated by psychology's professional body, the British Psychological Society (BPS), through its Certificates of Competence in Occupational Testing. The first of these is Level A. Likely employers of forensic psychologists (e.g., the National Offender Management Service, NOMS) both employ psychometric testing and are aware of the BPS's certification of the necessary professional skills. Holding a Certificate of Competence in Occupational Testing (Level A) is therefore a significant advantage to a MSc graduate entering the forensic psychology employment market.

The purpose of the revised course is to provide students with a thorough grounding in the general foundations of psychological testing (theoretical and conceptual), and to develop in students the performance skills associated with the competent administration and interpretation of ability and aptitude tests. Successful completion of this course would enable students to apply for the British Psychological Society's Certificate of Competence in Occupational Testing (Level A).

Course Design: approaches and models

The starting point for this design process is not a needs analysis, partly because it is clear within the profession of forensic psychology and in the experience of the

forensic psychology course team at this institution that a need for this course clearly exists. This has been evidenced both in terms of objective rationale and by the regular numbers of forensic psychology students from earlier course cohorts who signed up to take part in previous versions of this course aimed at Occupational Psychologists.

According to Toohey (1999), the spiral process of course design starts with a fixed element. There are two fixed elements in this case: the broad subject matter of the course and the assessment standards (British Psychological Society, 2004). Two complementary approaches to course design have been found to be useful and have been adopted: the instructional systems approach and the constructive alignment approach.

Instructional Systems Approach

The instructional systems approach to course design (Romiszowski, 1984, cited in Toohey, 1999) was refined from the earlier performance or systems-based approaches (e.g., Tyler, 1949, cited in Toohey, 1999). The characteristics of an instructional systems approach are establishing precise and useful objectives, planning study methods and then testing achievement of objectives (Romiszowski, 1984, cited in Toohey, 1999). These three essential phases are all present in the psychological testing course that has been designed.

Adoption of the instructional systems-based approach is due to a large extent to the requirements of the Certification Scheme for which this Course is being designed. This certification scheme has provided both a detailed list of competencies that form the basis for learning aims and outcomes for the new Course, and has specified that to gain the required certification, students must demonstrate that they adequately meet all of these competence criteria. This fits closely with the systems approach to course design which views the goal of learning as becoming a skilled performer and that the appropriate evidence for this achievement is the kind of performance that an individual is capable of (Toohey, 1999). Indeed Toohey notes that an instructional systems approach is particularly suited to the design of professional preparatory programmes, of which the course being redesigned in the present case is one. Equally, competency-based education, explicitly adopted by the BPS in relation to the present course, is cited as the most recent example of the systems approach to course design (*ibid.*).

The instructional systems approach takes the view that learning is facilitated best when learning goals are analysed into their component knowledge and skills, which are then carefully structured and sequenced so that new learning builds on previous learning until complex performances can be mastered (Toohey 1999). Considering the best way to structure and sequence learning tasks has resulted in a fairly diverse approach to both teaching and learning tasks and to assessment tasks (see below). This approach reflects the need to include theoretical and conceptual underpinnings

of the desired performances, as well as the performances of competence themselves.

Finally, an instructional systems approach to course design is concordant with the use of virtual learning environments and multimedia resources (Toohey, 1999), for example as the means to demonstrate skilled performance and to allow students to develop and practice their skills. As such the present course will be supported in the first instance by a WebCT course involving written resources, weblinks, a discussion forum, video & audio clips of skilled performance, and interactive quizzes (McAlpine, 2004), as well as all of the course documentation and formal assessment tasks.

An instructional systems approach, however, falls short in certain respects. Firstly, Toohey (1999) suggests that an instructional systems approach conveys a position in which values are not important. But in the present course there is a significant element in the curriculum content where consideration needs to be given to the ethical and professional issues inherent in the way that the psychologist interacts with both their clients and the test candidates. Another limitation of this approach is that it does not give much guidance on the nature of the teaching, learning and assessment activities that a student should engage in, focussing more on their ordering and ultimate goal.

Constructive Alignment Approach

Somewhat implicit in the three key phases of the instructional systems approach is a notion of what some have called instructional alignment (Biggs, 1996; Cohen, 1987) and what others have called design coherence (Knight, 2002). Instructional alignment refers to the matching or aligning of learning and teaching activities, course team philosophy and assessment methods. That is, to link this idea to the instructional systems approach, the study methods planned and implemented (phase two) should provide affordances in the learning environment (features that have the potential to help with the learning or performance tasks by, for example, helping students to take approaches to study that will improve their chances of success (Knight, 2002)). These in turn would assist students in the achievement (phase three) of the precise course objectives (phase one).

Consideration of the idea of instructional alignment also clarified the initial absence of an explicit shared course philosophy for this course. Exploring the course team's teaching philosophy and approach in respect of any course is an important part of the curriculum cycle (Errington, 2004; Yorke & Knight, 2004). It is essential to ensure that a shared belief system (and therefore the same implicit values) consistent with the curriculum design (i.e., aligned) is developed and shared before the start of the course. Thus, discussions were held with the rest of the forensic teaching team to explore our philosophies, values and beliefs in relation to this course. The discussions resolved in identifying the instructional systems approach as representing our dominant philosophy in regards to this course, but we also placed a significant emphasis on ethical and professional practice. To further clarify

expectations, the full range of formative and final assessments and course support materials will also be made available to students at the start (Gibbs, 1992b, cited in Allan, 1997).

The instructional alignment approach has been developed through the inclusion of ideas of constructivist theories of learning and meaning. The resultant constructive alignment approach (Biggs, 2003) has as a key element the centrality of the learner's activities in learning. Specifically, constructivist theories suggest that learners create meaning based on their existing knowledge and experiences through both individual and social activities (Biggs, 1996; 2003). Thus, what the teacher does is less important than what the student does (Shuell, 1986). Equally, an analysis of the learners' likely previous experiences and prior knowledge would be helpful in designing the teaching and learning activities of the course, and this has been done in the present instance (see below). In thinking about what the student does, Wood (1995) notes that substantive learning occurs in situations where there is conflict or surprise, across time or through social interaction. Thus the teaching and learning activities include case studies to provide contexts for learning that encompass points of debate (e.g., a complex ethical situation) or potential difficulty (e.g., feeding back poor test results to a test candidate). The notion of social activity in promoting learning has been implemented in the form of group tutorials at key points in the academic year and through the use of group work (e.g., role-plays) in practical role-play and simulation exercises (i.e., 'performances of understanding'). Thus the teaching and learning activities have been designed to encourage motivation and active participation of the students (Honkimäki, Tynjälä & Valkonen, 2004), and therefore deep learning of information and application as opposed to passive (dis)engagement with the course.

In designing this course, attention has been given to the likely knowledge and experiences that students may have, and particularly might share. Despite an institutional push towards complete modularity within London Metropolitan University, the British Psychological Society (BPS) has insisted that accredited postgraduate courses in psychology be restricted to only those students who have accreditation of their previous psychology training through the Society (the BPS's Graduate Basis for Registration or GBR). This effectively restricts each module within the MSc in Forensic Psychology (including this proposed partially embedded Level A course) to students who are enrolled on this MSc. This has some advantages in terms of course design. Specifically, in terms of shared knowledge, students will come from a restricted academic background that can be used to provide some basis from which learning can progress. For example, all students can be assumed to have a basic knowledge of statistics and probability (although some revision activities and assessments will be provided to refresh this knowledge). Another advantage of restricted entry onto this course is that embedding elements of the Level A course across modules of the MSc will be possible without disadvantaging any student who is eligible to participate in the course. Finally, all students could be assumed to have

an interest in, and as the academic year progresses, some knowledge of, forensic psychology. In terms of shared experiences, it is also likely, given their age and position, that these students will have some experience of, or at least will have given some thought to being assessed for some purpose, for example for an interview place, or for a job. These experiences will form the basis for contextualising and concretising the course content in the early stages of the academic year; in later stages, case studies and contexts will be drawn from forensically relevant tasks and situations.

Design proposals

Teaching & Learning Activities

One of the starting points for this course design process was the course content set by the BPS. This includes both basic concepts / declarative knowledge and the creative application of this knowledge through appropriate professional practice. In this sense there is a degree of vertical integration in the course. Many of the areas of theoretical knowledge will be embedded into the existing teaching and learning activities of the course across the academic year (see 'Timetable' in Appendix). For example, basic concepts in statistics will be addressed through revision sessions and assessments in the module PYP003C Advanced Data Analysis (Autumn Semester). Issues of reliability and validity, the nature and appropriate use of different types of psychological test, and scaling and standardisation of test scores will be addressed within lectures or workshops in the module PYP002C Introduction to Assessment & Intervention (Autumn Semester). The legal and ethical context in which testing takes place (e.g., knowledge and understanding of the Data Protection Act; understanding of the professional Codes of Conduct and how to apply them) will be covered in PYP004C The Context and Professional Practice of Forensic Psychology (Spring Semester).

Other learning activities, e.g., development of professional skills, will not be embedded within existing course modules but will form part of a bespoke 3-day practical course to be held once during the Easter vacation and once during the summer vacation (depending on demand). Professional skills, such as the administration, scoring or feedback of scores on a psychological test, will be explored in small group discussions and practised through role-play / simulation exercises with opportunities for immediate peer and tutor feedback.

Students will also be expected to engage in directed self-study using open learning materials provided by the BPS in support of this qualification (Bartram & Lindley, 2000), as well as other sources of information and self-test opportunities (e.g., Janda, 1998). Self-study will be supported by a course reader, drawing on materials from key texts (e.g., Anastasi & Urbina, 1997; Rust & Golombok, 1999; Urbina, 2004). In support of their learning across all of the above teaching and learning activities, students will be provided with materials in paper and online formats. For example,

all relevant teaching session materials will be collected within a specific WebCT course where they will be available for quick and constant reference. Equally, students will be provided with a series of quick quizzes (initially on paper and later in interactive online format) to check their understanding of key concepts from the theoretical and academic (as opposed to practical) Units of the course. For example a quiz would be created to explore ethical dilemmas in test feedback, and another to check understanding of key aspects of the Data Protection Act. These will allow students to evaluate their understanding through a series of multiple choice questions based around case study vignettes, for each of which formative feedback will be available. Finally, student learning will be supported by an online discussion forum hosted on the WebCT course page, plus a series of optional face-to-face group tutorials in the latter half of the academic year.

Assessment Methods

As the ultimate goal is one of competence, the final assessment tasks will be made available to students at the start of the course, to help to clarify shared expectations of some of the intended outcomes of the course. There will be a range of assessment methods for this course, reflecting the fact that some of the competencies to be demonstrated are knowledge-based whilst others are skills-based. Thus the assessment of declarative knowledge / theoretical concepts will involve worksheets of short-answer or multiple-choice questions. The intention is that these can be completed by students undertaking the Level A Psychological Testing course at a point that suits them. Assessment of performances of competence will be through the evaluation of student performance during simulation exercises, or in the production of professional reports in response to case studies. To enable the provision of formative feedback to help students to develop their understanding of these concepts, teaching and learning activities will be accompanied by immediate peer and tutor feedback (for practical exercises) or written formative feedback (for online or written quizzes and worksheets)

The final assessment, a demonstration of the competencies required for award of the Certificate of Competence in Occupational Testing (Level A) is through the presentation of a Portfolio of Competence, which should be submitted to the Course Leader upon completion.

The Portfolio will consist of a range of different types of evidence, collected throughout the academic year, including:

- Tutor evaluations of role-plays of test administration (with accompanying video footage of the role-play itself);
- Tutor evaluations of role-plays of feedback of test results (with accompanying video footage of the role-play itself);
- Completed scoring sheets from at least three different psychometric tests.

- Completed interpretations of sets of test score data for two different clients / contexts.
- Example documentation to support a testing session (e.g., information for candidates; organisational policy on Data Protection).

A completed set of task sheets and printouts of completed WebCT 'final assessment' quizzes based upon the core underpinning knowledge required for psychological testing (e.g., key concepts in psychometrics; the Data protection Act). The Portfolio will be graded as either successfully evidencing or failing to evidence the competencies required by the BPS (as suggested by an instructional systems approach). A successful portfolio will convey eligibility to apply for the BPS's Certificate of Competence in Occupational Testing Level A. Unsuccessful portfolios will be returned to the student with feedback on which elements are in need of development. Students are able to resubmit their Portfolio when these issues have been addressed (as befits a competence-based assessment).

Course Evaluation Methods

As this will be a new course, students will explicitly be asked to give feedback about the operation of the course throughout the year via their student reps, who will present their points through the formal mechanism of the Course Committee Meetings. These meetings also provide a forum within which points can be discussed and where possible resolutions speedily achieved and communicated back to the student cohort. Historically, this has proven to be an effective method of communication between students and course team members in relation to course and module specific issues.

As an additional mechanism, once in each of the Autumn and Spring Semesters and the Summer period, a focus group would be arranged, within which students could discuss their experiences of the course and their progress to date. This is expected to be the most insightful source feedback for the course team. At about the same times, the course team will also gather to share their experiences of delivering the course.

Students will also continuously have the opportunity to provide feedback in the form of 'Start, Stop, Continue' format (through anonymous feedback forms) and at key points in the academic year will be explicitly reminded of this opportunity. However, past experience suggests that take-up of this opportunity may be very low.

More formally, for those aspects of the course embedded in existing MSc modules, feedback will additionally be obtained by the formal questionnaire procedure currently required for all modules in the Department. Finally, empirical data on numbers of students successfully completing the final assessments, time taken to completion, and number of attempts at the final portfolio will be collected and used

to help to evaluation the success of the course in terms of its outcomes as opposed to the student experience.

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Biographical note

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Appendix: Course Timetable

Teaching Period		Teaching & Learning Activities	Support & Evaluation Activities	Suggested Completion Dates for Formative & Summative Assessments
Autumn	Weeks 1-5	PYP002C PYP003C	Orientation meeting	PYP003C Revision Exercise Quiz 1
	Weeks 6-10		Course Committee	Quizzes 2-5
	Weeks 11-15		Focus group 1 Formal feedback PYP002C & PYP003C	Worksheets U1 & U2
Spring	Weeks 1-5	PYP004C	Tutorial 1	Quizzes 6-8
	Weeks 6-10		Tutorial 2 Course Committee	Worksheets U3 & U4
Easter Break		3-day practical course (1 st cohort)		U5 & U6 practical reports (1)
Spring	Weeks 11-15	PYP004C	Tutorial 3 Focus group 2 Formal feedback PYP004C	Quizzes 9 & 10 U7 worksheet
Summer	June	3-day practical course (2 nd cohort)	Tutorial 4	U5 & U6 practical reports (2)
	July		Tutorial 5 Focus group 3	Portfolio Overview Portfolio Submission
	August			
	September			