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Learning outcomes and assessment strategies for a psychology sandwich placement year

Peter Reddy & **Ros Hill**,
Neuroscience Research Institute, Aston University.

Abstract

The aim of this action research study was to identify learning outcomes for assessing work-related transferable skills during undergraduate psychology sandwich year placements as part of an ongoing cycle of development of the placement. The merits of assessing such skills are considered in relation to the role of universities in preparing undergraduates for the world of work together with National Vocational Qualifications and other assessment frameworks. Focus group discussions with final year ex-placement students contributed to the development of questionnaires to identify transferable skills. The questionnaires were administered to current placement students and their employers. Focus group and questionnaire responses were generally supportive of the idea of skills assessment. Possible learning outcomes and their incorporation into placement year assessment along the lines outlined by James (2000) are discussed. The importance of moving on to devise an assessment package to help placement students become reflective, autonomous learners is emphasised.

Introduction

We propose to take an action research approach, after Zuber-Skerritt (1992), to investigate learning outcomes and assessment strategies for our psychology sandwich year placement. By this we mean that we intend to develop and implement policy from the results of our research and then to observe and reflect on it with a view to further development.

Should universities explicitly prepare undergraduates for the world of work? The white papers 'Higher education: A new framework' (1991) and 'Education and training in the 21st century' (1990) call for competence-based training in a system of mass higher education. Barnett (1994) argues that traditional forms of higher education concentrate on 'knowing that' but in addition to academic competence, operational competence or 'knowing how' is sought by business and government. Thus, the key question is not 'what do students understand?' but 'what can students do?' The Training Agency (1989) has proposed or encouraged initiatives such as Higher Education for Capability. Similar views emerge or are implicit in the work of the

National Council for Vocational Qualifications (NCVQ) and the Management Charter Initiative.

Is it realistic to aim to assess undergraduates' transferable skills during a placement year? Ryan, Toohey & Hughes (1996) argue that health service clinical placements are able to do this through tightly structured collaborative arrangements and joint appointments that help unify the academic and the practical. They suggest that other work placements do not aim specifically at skills development but have more nebulous aims such as 'giving students insight into the world of work' or 'helping them integrate into the work environment'. If Ryan *et al.* are right, it will be difficult to specify skills that are relevant across work environments. The context of the placement is therefore important. Medical and clinically related practitioners presumably have clear and explicit vocational contexts. However, psychology undergraduates take placements reflecting the range and breadth of the subject and a very wide range of related applications. It seems unfair and discriminatory to aim an assessment system only at the minority who will become professional psychologists. Thus the context of the psychology placement assessment has to encompass research, clinical and other professional work and a wide range of related employment open to graduates of any discipline. More specifically, psychology students apply for placement jobs open also to students of biological and neurological sciences, behavioural sciences, professions allied to medicine, social sciences, numerate and statistically literate subjects, and business studies. Psychology then may not be a special case in terms of specific skills but may be so in terms of breadth. To assess undergraduates' transferable skills during a placement year therefore, we must find aims and methods able to flexibly reflect this breadth of application.

One possible approach to doing this is the National Vocational Qualifications (NVQ) model. The NVQ framework offers a competency-based model of workplace-based training. NVQ uses a portfolio approach within an open time frame. Candidates are required to collect evidence against performance criteria that are each defined by a number of range statements. For example, in relation to marketing there are requirements to demonstrate competence in relation to specific performance criteria operationally defined by a smaller number of elements that are clustered into a number of units. Thus NVQ Level 4 management has four key roles from which are derived nine units, 26 elements and numerous performance criteria. The portfolio is presented for assessment by a competent assessor (possessing the relevant TDLB assessor/verifier awards) who may also carry out a viva voce examination.

Both Morgan (1997), with a pilot study, and Edmunds, Carter and Lindsay (undated) have used NVQ Level 4 management for accreditation of competence with business studies placement undergraduates at Glamorgan and Greenwich Universities respectively. The scale of the NVQ portfolio requirement implies a substantial commitment on the part of all three parties in the placement, especially the student. Indeed Morgan reports that only three of eight student participants were ultimately credited with any units in his pilot study. Nonetheless, Morgan concludes that higher level NVQs offer a unique opportunity for students to put into practice academic knowledge and understanding within a vocational setting. He does report problems with using NVQs and these fall into three main areas: concerns over the validity and value of the approach, practical difficulties in gaining experience and evidence to fulfil requirements and concerns over resource implications.

Starting with concerns with validity and utility, Wolf (1994) found that NVQs were only slightly related to later occupational success. Although higher-level NVQs

include theoretical as well as practical assessments they have been criticised (e.g. Smithers, 1993) for ignoring the knowledge and understanding which underpins competent action and for looking only at the evidence produced by the candidate. Thus candidates whose underpinning knowledge and understanding, or indeed competence, are weak may succeed at NVQ given support in gathering evidence. Although other forms of assessment are not immune from this kind of criticism, such concerns have tended to undermine NVQ in academic eyes and may substantiate the poor validity reported by Wolf. Otter (1992) also argues that while there is a focus on the reliability of assessment, there is little on validity.

Practical difficulties faced by the students in Morgan's (1997) pilot study included the limited amount of time available and the lack of access to the range of tasks required, especially the requirement for evidence of staff supervision. There were also difficulties created by the need for paper-based documentary evidence and concerns over confidentiality of evidence. A major concern for both the university and placement organisations was the resource requirement of NVQ. Morgan (1997) reports an average of five two-hour visits per student as being necessary for advice and support by university staff which, with travel and preparation time, he sums to 80 hours for the eight students involved. If students were placed at a distance the figure would be higher still. He estimates that a further eight hours per candidate are required for portfolio assessment. Placement organisations also expressed concerns about the drain on their time posed by NVQ assessment and Morgan suggests that they would look to the university concerned to provide additional resources.

The Greenwich BA Business degree, the focus of Edmunds *et al.*'s report, is a specifically vocational degree with a mandatory sandwich year placement, so a close match between vocational competencies and NVQ Level 4 management performance criteria is possible. The Greenwich business degree is similar to a medical or a social work qualification in its explicitly vocational nature but also similar to a social science degree in the diversity of occupational settings graduates may move to within a broadly business field. Despite the vocational nature of the degree Edmunds *et al.* report student resistance to NVQ particularly in relation to its perceived value. They present detailed results about the NVQ units attempted, with only one student out of 23 reported as gaining the full NVQ Level 4 award (with a further three projected to), but all students achieving at least one unit.

Edmunds *et al.* suggest that integrating NVQ standards into the business degree would be beneficial. They also identify the main barriers to this. They see these as negative staff and student attitudes to the value of the NVQ qualification, concern over the bureaucratic, complex and time consuming nature of assessment, and unwelcome additional workload. They are also concerned with 'jargon and inaccurate and confusing descriptions… endemic in the language of the standards' (p.59), difficulty in gathering evidence and student unfamiliarity with portfolio systems. A telling figure cited is that there are between three and four times as many NVQ Level 3, 4 and 5 registrations nationally as awards, a figure that they rightly point out cannot be explained by the length of time taken to develop competence or prepare for assessment.

In sum, it seems that NVQ is too flawed to offer a model for placement assessment at undergraduate level, certainly for psychology. The portfolio approach is too prescriptive to cope with a range of placements and vastly too paper based not to be a major burden to all parties. The absence of underpinning knowledge and inadequate evidence of validity suggests that it can easily turn into a pointless and bureaucratic paper chase. The resource implications are not necessarily insuperable but their allocation on the scale Morgan indicates would be

required, or at the milder but still substantial level undertaken by Edmonds *et al.*, would need correspondingly large benefits to be identified. Such benefits are not readily apparent.

A much less bureaucratic approach is offered by James (2000) who reports on the TransLang initiative, which is concerned with the assessment of transferable skills amongst non-specialist modern language students. James is not concerned with work placement but he does suggest that the TransLang experience may be of value to higher education as a whole as it specifies transferable skills in learning objectives. James argues that explicit assessment of skills is important in drawing students' attention to their importance but that skills in isolation may appear artificial and meaningless. He suggests that the parallel acquisition of a set of skills is one of the hidden benefits of academic study and cites the DfEE and CVCP (1998) report in advocating an embedded approach in which the construct (the skill) and the context are tightly meshed. Such an approach would apply in a work placement where skills are an integral part of work competence and would enable explicit assessment without skills being perceived as artificial or irrelevant as might be the case at another point during the degree. James (2000) reports that the project design group identified four skill areas for languages (communication, cognitive skills, subject skills, and self-management) and suggests that other skill areas such as information technology and numeracy may be more central in other academic areas.

James (2000) goes on to elaborate how the TransLang model could be applied in the curriculum. He argues for grading at three levels rather than as a percentage or as a simple pass/fail, for the use of concise level descriptors and for transparency and clarity in line with the proposal of Bloom, Krathwohl and Masia (1964) for clarity in the language of educational objectives. He is suitably cautious about introducing further paperwork into higher education but makes a case for the benefits of skills assessment. The model proposed is not aimed at placement assessment but we feel that it could be usefully adapted. Unlike the NVQ model no portfolio is required and the consequent paper chase is avoided, as are the time-consuming portfolio assessment and validation procedures. The complex structure and baroque language of NVQ performance criteria and range statements are replaced by simple assessment grids with level descriptors at three levels.

The aim of this action research study is to investigate the feasibility of using an approach similar in conception to the TransLang model to assess the work-related transferable skills of psychology undergraduates undertaking a placement year while addressing some of the problems with the current placement assessment process. Psychology students at Aston University have the opportunity to spend their penultimate year in a work placement. Both students and employers informally report considerable development of skills. However, although the placement year has general aims with regard to the development of transferable and work-related skills, these are not clearly defined or directly assessed. In order to address this, a first step was to identify learning outcomes that may be acceptably applied to the range of placements taken by psychology undergraduate students.

Methodology

Design

- *Interviews.* Ten placement students and their employers were interviewed informally, during routine supervision visits, about their attitudes to employer assessment of work-related transferable skills. This informal data is not reported here but the positive response of students and employers to placement work performance being cast in transferable skills terms and assessed by employers for

inclusion with academic assessment encouraged the formal research below.

- *Focus groups.* Three focus group discussions about the placement experience as a whole were carried out with final year ex-placement students and audiotape recorded. Analysis of these contributed to the design of a placement student and an employer version of a questionnaire. The focus group method was chosen because of its potential to offer insight into students' social representations of the placement year. In bringing people together who had not long completed a placement we wanted to see what kinds of representations emerged through group communication and interaction processes as students made sense of their experience. The moderator sought to balance empathy and sensitivity with objectivity and adopted a position of possessing incomplete understanding and worked with a topic guide loosely in mind rather than from a script of questions. Participants were told that the main focus was on placement assessment and groups began with a discussion of whether the placement had been worthwhile. Other themes covered were about learning, growth and change, specific skills acquired, costs and benefits of the placement project as a means of assessment and issues about involving employers in assessment.
- *Questionnaire.* Questionnaires were posted to current placement students and their employers.

Participants

Thirty-two final year students, just over half of the previous year's placement students, responded to an advertisement offering money for participation and took part in focus group discussions. All 60 placement students and their employers were sent questionnaires with 57 per cent and 58 per cent response rates respectively.

Procedure

Three focus groups took place and two were successfully audio recorded and transcribed with the consent of participants. In one group, a technical problem with a directional microphone meant that transcription was not possible. Transcripts of the other two focus groups were analysed thematically and the themes identified were used to help devise two versions of a 51 item questionnaire. The questionnaire included 19 items on communication and teamwork (e.g. able to work as a member of a team, able to accept others' views at the expense of own); 27 items on initiative and effectiveness (e.g. can recognise limits to own competence and seek help, can produce work on schedule to a given time scale); and 5 items on information technology (e.g. able to use word processing software). Appendix 1 lists all 51 items. The employer version asked, for each item, if the employer thought it was appropriate to the placement and if they would be able to comment. (yes/no response). The placement student version asked if the item was appropriate and if the student would be willing to be judged on it. Response was by a four-point likert scale. Both questionnaires were posted to all 60 psychology placement students and employers with an explanatory letter and a return envelope.

Results and analysis

Focus group data

Discussion in all groups was broader than the aims of this study but strongly endorsed the value of a placement year. The strength of support was surprising as there have been concerns about the value of some types of placement. There was support for the retention of the placement project and for supplementing it with a measure of transferable and work-related skills. In one group the involvement of the academic supervisor in work-based assessment was thought important as a collaborative assessor or as a moderator. The following

themes were identified (number of participants per category given in brackets):
Communication (14). 'Interacting with other people', 'getting on with different kinds of people', 'talking with all different levels of people', 'use a different kind of [communication] technique', 'telephone communication' 'talking to people', 'had to communicate', 'conference communication', 'interviewing', 'I learned loads of communication skills', 'language was quite different', 'talking to...[men in suits]…I found they were just like my dad', 'you do learn to talk to people a lot better in lots of different ways', ' you learn a lot about how to sell'.
Time management (9). 'Organise self', 'organising', 'organisation…your placement really gives you that', 'time skills', 'organising my time', 'prioritising', 'you've got more time management awareness', 'we can plan and use our time better', 'time management is a good point'
Confidence (8). 'Confidence building', 'confidence', 'self confidence', 'feel more confident', 'confidence', 'confidence wise', 'confidence', 'more confident…not so scared of different things happening really'
Taking responsibility (7). 'Responsibility', 'solve a problem', 'learn how to be proactive', 'more resourceful', 'doing things', 'being proactive', 'self motivated'
Presenting self (4). 'Conduct yourself in a business way', 'sound confident', 'bluffing confidence', 'I wouldn't say I was more mature but I have the potential to act more mature'
Making presentations (3). 'A lot of talking in front of people', 'presentations', 'we were quite good at presentations'
Writing skills (3). 'Writing reports', 'sentence construction', 'letter writing'
Teamwork (2). 'Team working', 'ability to build up relationships within a team'.

These themes became the starting point for developing the two versions of the questionnaire.

Employer questionnaire

Thirty-four employers (57 per cent) representing all types of psychology placement returned questionnaires. All but one employer indicated willingness to complete the questionnaire to assess a student on placement (see Table 1).

Almost 50 per cent of employers agreed that all the items were appropriate. The high level of acceptance of the questionnaire as a whole perhaps illustrates employers' comfort with appraisal in principle, or perhaps response set. Although quite a large number of items were thought inappropriate by some employers, using a scree plot approach four items stood out as being thought inappropriate by seven or more respondents out of 34. These were:
Item 18: making a presentation (11 employers);
Item 19: using visual aids (12 employers);
Item 25: respond to a crisis (6 clinical and 1 non-clinical employers);
Item 35: initiate change (10 employers).

Student questionnaire

Thirty-five questionnaires (58 per cent) were returned. Only one student agreed or strongly agreed that all items were appropriate. All but eight of the 51 items were rejected (either disagree or strongly disagree that either item was appropriate to placement or would be happy to be judged on it) by at least one student. Students, it seemed,

Table 1: Number of employers willing to complete the questionnaire by frequency.

Not willing	Complete once a year	Complete twice a year	Complete three times a year
1	8	15	10

took a much more involved response to the questionnaire than their employers. Using a scree plot approach, items rejected by more than ten students as 'inappropriate' or not happy to be judged on stood out, were identified and are listed below in Table 2. Where students indicated that they did not agree that an item was appropriate a generally smaller number (except for Item 44) indicated that they were not happy to be judged on it (see Table 2). The number of items excluded by each respondent varied from 0–17 (0–33 per cent).

Discussion

In the focus group discussions there was wholehearted support for the placement year and a fair amount of support for the placement project as a means of assessment. There was general support for an attempt to measure and credit work related skills and cautious support for giving employers a role in assessment. Concerns were expressed about practical problems in assessment, fairness, reliability and validity.

Only one employer was not willing to assess transferable skills. With regard to which skills should be assessed, the remaining 33 employers were largely in agreement with the items identified in the questionnaire. Only four items were rejected by more than seven employers. Students were more likely than the employers to find the items inappropriate and were also unwilling to be assessed on many of the items. However, there was some agreement between employers and students on which items were the least appropriate. Two of these items, responding to a crisis (Item 25) and initiating change (Item 35), can be thought of as relating to students acting in a more senior capacity than was appropriate. For instance, in clinical placements where client contact is carefully regulated, it may well not be appropriate for placement students to be expected to respond to a clinical crisis. Two other items identified by students, taking a leadership role (6) and negotiating (9), perhaps also relate to this theme.

Table 2. Numbers of students (n = 35) indicating item not appropriate/not happy to be judged on item (where numbers greater than 10 in either category).

Item	Not appropriate to placement	Not happy to be judged on item
Item 6: take a leadership role	20	10
Item 9: negotiate effectively	15	11
Item 18: make a formal presentation	20	13
Item 19: use visual aids in a presentation	23	15
Item 25: respond to a crisis	11	5
Item 35: initiate change	17	12
Item 44: understanding factors underpinning organisation	8	10
Item 49: use spreadsheet software	14	9
Item 50: use data analysis software	13	9
Item 51: use software to produce charts and visual aids	14	8

The items most frequently rejected by both employers and students alike (Items 18 and 19) concerned making a presentation. It is not clear from the employers' responses whether their rejection of this item is because they do not value this skill or because the placement lacks an appropriate opportunity for this skill to be demonstrated. Given the findings of the focus group, where students who had completed a placement valued the acquisition of this skill, it may be that the student questionnaire responses were a reflection of the apprehension felt by many students of giving a presentation. The third area of concern for students, but not employers, was IT. The problem here appears to be more one of opportunity rather than unwillingness to be judged.

It was not possible to make clear distinctions between types of placement and student and employer responses except in the case of Item 25 (responding to a crisis) where six of the seven employers rejecting the item were clinical. The main difficulty here is the wide variation in placement even within one category. Some clinical placements allow considerable client contact, others very little. Some students are part of large teams alongside clinical assistants and doctoral students; others act as personal psychological assistants to relatively isolated practitioners. Some who are largely research assistants ultimately have quite sophisticated involvement with design and analysis whereas others have to struggle to rise beyond data entry. Some placements cut across boundaries and the variety of paid 'business' (a very loose term in this context) placements in the public and private sectors is enormous.

The willingness of employers to rate transferable skills on more than one occasion allows for this assessment to be built into an on-going appraisal. This will not only allow formative assessment but will encourage students to be reflective about the placement learning experience.

Conclusion

Although the research has been successful in identifying appropriate learning outcomes for psychology undergraduates taking a placement year, it is clear that not all outcomes are applicable to all placements. There must be recognition that not all students will have the opportunity to demonstrate competence in all areas. We do not think that it is going to be possible to be prescriptive in identifying specific skills for specific placements. Rather, items will need to be identified and negotiated by the placement triad (student, employer, tutor) within an expectation that the majority of items will be covered. One option would be to identify a core set of compulsory skills and also a minimum number of skills to be assessed from a range. The exact mechanism needs to enhance student learning and minimise inconvenience to employers, especially bearing in mind the strictures against NVQ above. However, from the results of this study it seems possible to refine the skills items so that it is applicable to the majority of placements.

Other assessment issues identified are standardisation, reliability, grading, and moderation. To address standardisation, reliability and fairness, the use of simple assessment grids with level descriptors at three levels is suggested for exploration along the lines described by James (2000). Moderation could be in the hands of placement tutors, who each supervise several placements. Ideally psychometric analysis needs to be undertaken to refine and develop the questionnaire in the light of reliability and validity data derived from a standardisation sample and including item analysis. We also need to consider how it may link into employers' appraisal systems and to develop level descriptors. This seems to suggest that the final product should be a flexible, broadly applicable and university moderated placement student appraisal system.

More importantly, we have not directed our attention to the issue of helping placement students become reflective, autonomous learners. Arguably the success of an assessment strategy lies not only in its fairness, consistency and comprehensiveness but also in its ability to promote student learning and awareness of own learning. This research has focussed on fairness, consistency and comprehensiveness only and further work is needed to see how the aims of promoting learning and awareness of own learning can best be served, perhaps involving an examination of the role of the student's placement log. A further cycle of research to address these issues is now being planned.

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Appendix 1: Items in both student and employer questionnaires

- **Communication and teamwork**

1. Able to work well in a team.
2. Able to form and maintain good working relationships with team members.
3. Appropriate interpersonal behaviour in general at work.
4. Sensitive to the confidentiality of information.

5. Behaves appropriately and sensitively with others in relation to issues of 'difference' such as age, culture, gender, etc.
6. Able to take a leadership role.
7. Contributes own idea.
8. Participates and communicates appropriately in committees and meetings.
9. Able to negotiate effectively.
10. Able to talk and present ideas informally.
11. Listens to others.
12. Able to accept others' views at the expense of own.
13. Communicates appropriately with staff more senior than self.
14. Communicates appropriately with staff in general.
15. Communicates appropriately with members of the public.
16. Communicates appropriately with professionals from other organisations.
17. Produces professionally constructed and punctuated written work.
18. Able to make an effective formal presentation to a group.
19. Able to use visual aids in a presentation.

- **Initiative and effectiveness**

20. Works effectively independently.
21. Can recognise limits to own competence and seek help.
22. Able to manage own workload.
23. Able to manage a project.
24. Able to work without supervision.
25. Able to respond appropriately in a crisis.
26. Can exercise initiative and own judgement.
27. Able to work flexibly and take on a range of tasks.
28. Able to respond flexibly to changes in workload.
29. Able to be creative.
30. Able to be enterprising and resourceful.
31. Can produce work on schedule to a given time scale.
32. Able to complete a task and achieve closure.
33. Able to manage own time effectively.
34. Able to respond effectively to change.
35. Able to initiate change.
36. Can manage and be responsible for own professional growth and development.
37. Reliability in carrying out tasks.
38. Punctuality.
39. Interest in and enthusiasm for placement work.
40. Willing to seek out and engage in supervision and support.
41. Participates appropriately in supervision and appraisal.
42. Responds appropriately to supervision, appraisal and direction.
43. Understanding of organisational structure.
44. Understanding of commercial, theoretical, political, economic and social factors underpinning organisation.
45. Understanding of organisations core mission.
46. Commitment to organisational aims and objectives.

- **Information technology**

47. Ability to use word processing software.
48. Ability to use database software.
49. Ability to use spreadsheet software.
50. Ability to use data analysis software.
51. Ability to use software to produce charts and visual aids.

Correspondence

Peter Reddy
Neuroscience Research Institute
Psychology, Life & Health Sciences
Aston University
Birmingham B4 7ET.
Tel: 0121 359 3611
E-mail: p.a.reddy@aston.ac.uk