

EuroPLAT

European Psychology Learning and Teaching



Innovation in the teaching of psychology in higher education in the EU

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Preface

The Europlat project is an academic network project involving 32 partners from psychology departments in universities across Europe. The main objective of the network is to enhance the quality of teaching and student learning in psychology by sharing good practices, working together to develop research projects and providing a forum for discussion through conferences and newsletters.

To reach these objectives, Europlat is undertaking a number of activities over the lifetime of the project (September 2009 – September 2012) including an annual conference, a website and three research projects.

This report is the output of the first research project exploring the level of innovation in psychology teaching in European universities. It provides an indication of the use of e-learning and other technologies including e-books and journals, virtual learning environments, lecture recording, plagiarism detection, laboratory simulation and virtual world software. A thematic review of recent publications about the learning and teaching of psychology identified 56 articles, mainly from two specialist journals. Results are discussed in relation to the changing higher education context and implications for the future importance of quality in learning and teaching are considered.

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Abstract / Executive summary

To capture innovation in psychology teaching in European (EU) higher education, partners in the Europlat project were surveyed and 40 replies were received from 30 countries. Estimated use of e-learning and other technologies including e-books and journals, virtual learning environments, lecture recording, plagiarism detection, laboratory simulation and virtual world software is reported. A focus on the teaching of theory, key findings and research methods, and on academic skills such as critical evaluation and academic writing emerged. Innovation is driven by rising numbers, technical change, and the need to find research time, but is also rooted in care for students' academic, personal and professional development. A thematic review of recent publications about the learning and teaching of psychology was also carried out and 56 articles, mainly from two specialist journals, were identified generating 120 codings to 16 themes. Results are discussed in relation to the changing higher education context and implications for the future importance of quality in learning and teaching are considered.

Introduction

Shumpeter (1934) distinguished between invention; an idea made manifest, and innovation; an idea successfully applied in practice. Innovation occurs in relation to technical or contextual change. In higher education there are major technical changes in information technology that have and are transforming our ability to access information and to make teaching and learning resources available to students. However the changes to the context of higher education in Europe are perhaps even greater in terms of the growth in student numbers, the Bologna agreement, changes to student and university funding, debates about the relative status and importance of teaching and research, national and international league tables and consumerism. From an economic or business point of view the goal of innovation is to produce value for the producer and the consumer by improving quality or reducing cost. From the Europlat point of view our primary concern is with innovation that adds value by improving the quality of student learning in psychology, although issues of cost and efficiency cannot be dismissed. The tutorial teaching system used at Oxford University may be widely admired in the UK but its prohibitive expense means that it is little imitated. A focus on improving the quality of student learning in psychology means that innovation for this report is conceived of more broadly than technology alone.

Sources and method

Capturing innovation in psychology across the EU is a formidable challenge. The 32 member countries, including the 27 EU member states together with Iceland, Liechtenstein, Norway and Turkey, include many universities. The final report of the EUMIDA project which aims to build a complete census of European universities, estimates the total number of HEIs at around 2,900. (Bonaccorsi, Brandt, De Filippo et al, 2010). Contacting such a large number of institutions individually with a request for information was beyond the scope of the project and not enough was known about institutions and patterns of provision in each country to inform the creation of a structured sample. A two-part approach was therefore used to capture broad indicators of innovation and to identify specific examples.

- i) A questionnaire was designed and sent to all Europlat partners.
- ii) A literature review of journal articles concerned with innovative learning and teaching in psychology in the EU published in the previous five years was undertaken. The journal list was added to with suggestions made in response to the questionnaire.

1. Questionnaire

Few psychologists see themselves as having specialist academic expertise, as distinct from practical experience, in psychology learning and teaching in higher education. To do so means drawing on literature from both psychology and education. Psychology has much to say about individual growth and development in childhood, but learning and development in university age young people is not a notably strong area of psychological research. This is a little surprising as up to half the age cohort now passes through university in the EU, psychology is one of the larger disciplines and psychologists make extensive use of undergraduates as participants in psychological research. Nonetheless it was thought that Europlat members would be able to articulate a general discourse about learning and teaching practice in psychology in their own university, and might also be able to do so in relation to their country as a whole. Europlat members are, by virtue of their membership, interested in learning and teaching in psychology and therefore amongst the most likely to be able to comment. The data sought was therefore impressionistic and qualitative. It was not thought possible to, for example, describe or quantify the use of virtual learning environments in psychology teaching in a particular university or country, but it would be possible to obtain Likert-scaled agreement or disagreement to general statements about the use of certain technologies, about the focus of teaching and about innovations in focus and the use of technology.

A questionnaire was designed with these aims in mind and sent to all Europlat partners with a request to make it available to others in their country.

Question 1 asked about use of specified technology (E-books; On-line journals; Electronic slide projection (e.g. PowerPoint); Virtual learning environments (e.g. BlackBoard, Moodle); Social networking sites; Audio or video (A/V) lecture recordings; Podcasts (e.g. A/V material other than lecture recordings); Plagiarism detection software; Virtual world software (e.g. Second Life); Simulation software (e.g. E-Prime, Superlab); A/V teaching and laboratory links; Electronic submission of student work; Distance / e-learning) in the past five years in the respondent's university and in the respondent's country in general.

Question 2 asked about the focus of teaching (on developing academic writing; teaching students to critically evaluate; teaching key research findings; teaching research methods; developing student employability; student personal development; teaching theory in psychology) in the past five years in the respondent's university and in the respondent's country in general.

Question 3 asked about change in teaching in response to the following factors in the respondent's university and in the respondent's country in general: Availability of new technology; Increased importance of research grant applications; of research grant income; of research publication; of teaching; More students; More resources; Better prepared students; Greater numbers of mature students; Less able students; National psychology association requirements; Employer requirements; University requirements; Government requirements; European Community requirements; Part-time students.

Question 4 was a free response section and asked respondents to describe innovations in psychology teaching in their university or country.

2. Literature review

The final questionnaire item listed 28 journals that were the initial focus of the literature review and asked respondents to add journals that could be searched for appropriate material. This expanded to 53 journals and these are listed in Appendix one.

Results and analysis

1. Questionnaire

40 replies were received representing all Europlat partners. Not enough data was received to allow comparison between different countries and data for the two sub-questions relating to the respondent's university and country were almost identical. Only data for the respondent's own university is therefore reported here. Means for question one, indicating agreement or disagreement about use of specified technology (E-books; On-line journals; Electronic slide projection; Virtual learning environments [VLEs, e.g. BlackBoard, Moodle]; Social networking sites; Audio or video [A/V] lecture recordings; Podcasts [e.g. A/V material other than lecture recordings]; Plagiarism detection software; Virtual world software [e.g. Second Life]; Simulation software [e.g. e-prime, Superlab]; A/V teaching and laboratory links; Electronic submission of student work; Distance / e-learning) in the past five years in the respondent's university were calculated and are shown in figure 1. Data is reported in four categories from strongly agree (4) to strongly disagree (1). Two items received mean agreement scores close to four indicating very strong agreement with the use of the technology within the respondent's university, namely electronic slide projection (3.9) with near total agreement and on-line journals (3.7). One other technology was scored above three, electronic submission of student work (3.2). Two items were scored below two; podcasts, defined as A/V material other than lecture recordings (1.6), and virtual world software (1.4). All others were scored between two and three. The results listed above are unlikely to surprise many readers. A larger response would have allowed meaningful calculation of the range of responses which would highlight areas of agreement and disagreement.

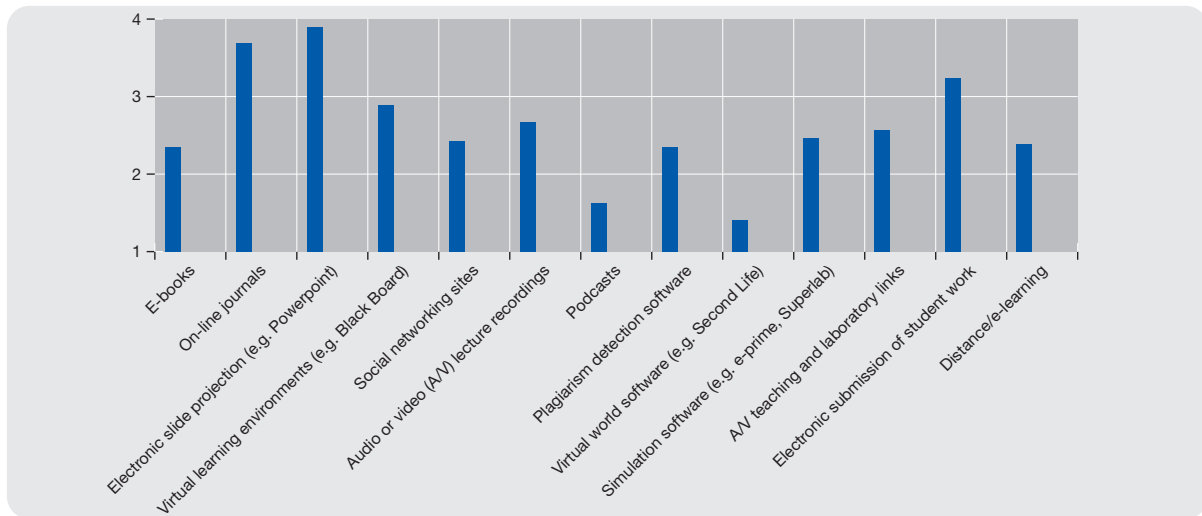


Figure 1: Data in response to the following statement: “In the past five years Psychology teaching in my university has used the following technologies”. Scale from 1 (strongly disagree) to 4 (strongly agree).

Question 2 asked about the focus of teaching (on developing academic writing; teaching students to critically evaluate; teaching key research findings; teaching research methods; developing student employability; student personal development; teaching theory in psychology) in the past five years in the respondent’s university and in the respondent’s country in general. As above, not enough data was received to allow comparison between different countries and data for the two sub-questions relating to the respondent’s university and country were almost identical. Only data for own university is therefore reported here. Responses are on a seven point scale from most important (1) to least important (7). Data cluster around the mid-point with means for five of the seven areas falling between 3.1 and 3.9. However two areas are a full point different from the others, student personal development (5.0) and developing student employability (4.9). Both of these areas are therefore regarded as of less importance in comparison with the core tasks of teaching research methods (3.1), key research findings (3.4), critical evaluation (3.7), theory (3.8) and developing academic writing (3.9).

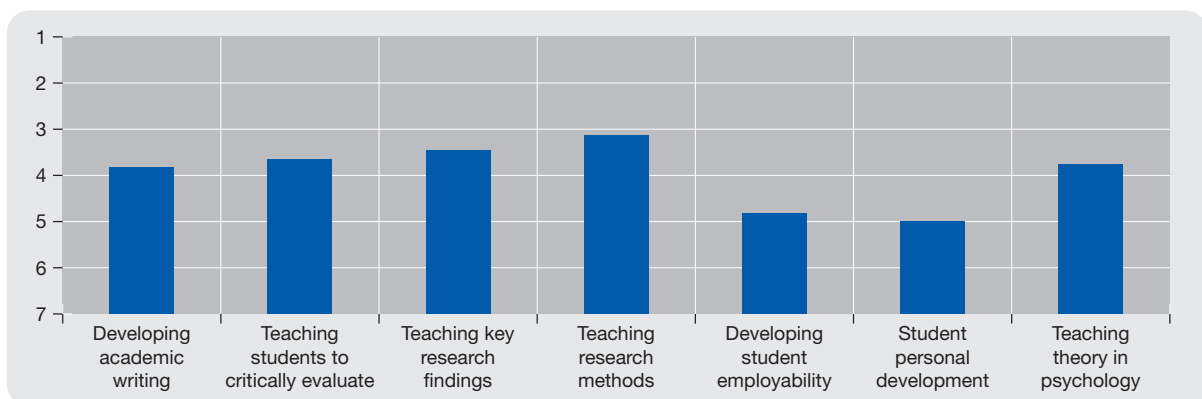


Figure 2: Data in response to the following statement: “In the past five years Psychology teaching in my university has focused on the following”. Scale from 1 (most important) to 7 (least important).

The focus on the discipline of psychology, through teaching research methods, key research findings and theory, emerges here along with the importance of the academic skills that sit alongside this (critical evaluation, academic writing) and contribute to an overall focus on scholarship. The emphasis is on scholarship in the discipline rather than on employability or the development of the individual. This certainly ties in with the tradition of university education dating back to medieval times, but can the more recent focus, by employers, governments, individual students and their families in employability and the vocational relevance of higher education be reconciled with traditional scholarship, or should we be wary of innovation that makes scholarship the servant of commercial or national interests?

The point of studying psychology requires thought about the point of undergraduate education as a whole. Newman (1852) argued that the importance of undergraduate education lay not in providing technical skills for the workforce or in accumulating knowledge for its own sake but in educating the mind and cultivating understanding. For Newman the aim of university education is to develop students' critical faculties so that they can see things as they truly are, get to the point, discard irrelevance and detect sophistry. Armed with these critical faculties a student can then fill any post with credit and approach any subject without fear. There is an interesting point here, perhaps a contradiction, university is not about providing technically skilled workers, but it is about developing the critical faculties to enable incisive critical evaluation. The contradiction is that incisive, scholarly critical evaluation is arguably precisely the quality required in a knowledge economy. Technical skills date and information is devalued in a vastly information rich world, but a mind trained to see things as they are, get to the point, discard irrelevance and detect sophistry is of value to every organisation facing change. Graham (2005) suggests that the point of studying a subject is internally referenced, it is '*...the exercise and the enriching of the life of the mind for its own sake.*' (page 55). But the process of exercising and enriching the life of the mind has the external vocational benefit of future-proofing our graduates, it gives them the intellectual capacity ('*Literacy, numeracy, articulacy and facility with analysis...*' Graham, page 55), to adapt to and explore the potential of change and make a useful contribution to knowledge work.

Employability and personal development as well as scholarship for its own sake are reconciled in nineteenth century thought about the nature of university education as well as in the contemporary commitment to lifelong learning, global citizenship and graduate competencies emerging in university mission statements (Barrie, 2004). This is not contradicted either by the practical value of a medieval university education for the pursuit, via the trivium and quadrivium, of the middle class knowledge-work careers of the day, or by Humboldt's (1810) idea of shared staff and student scholarship. Schools, for Humboldt, offer accepted and established knowledge, but "*the appropriate stance for a university is to treat scholarship in terms of not yet completely solved problems, whether in research or teaching*" (Elton, 2008, page 225).

Of course, encouraging the development of the capacity to critically evaluate should also remind us to examine the new orthodoxy of employability. Brown, Hesketh and Williams, (2003) suggest that the idea of a knowledge driven economy needs treating with caution and that employability is not only about graduate competencies but also about the level of supply and demand in the economy. Consensus theory (Kerr *et al.*, 1973) sees technical innovation as driving social change and knowledge as the key new factor in wealth creation leading to buoyant demand for graduates. A contrasting view sees increasing participation in higher education leading merely to credential inflation.

Question 3 asked about change in teaching in response to the following factors in the respondent’s university and in the respondent’s country in general: Availability of new technology; Increased importance of research grant applications; of research grant income; of research publication; of teaching; More students; More resources; Better prepared students; Greater numbers of mature students; Less able students; National psychology association requirements; Employer requirements; University requirements; Government requirements; European Commission requirements; Part-time students. As above, not enough data was received to allow comparison between different countries and data for the two sub-questions relating to the respondent’s university and country were almost identical. Only data for own university is therefore reported here. Data is reported in four categories from most important (4) to least important (1). All factors have mean scores between two and three except for three factors that score higher; availability of new technology (3.5), more students (3.2) and increased importance of research publication (3.1).

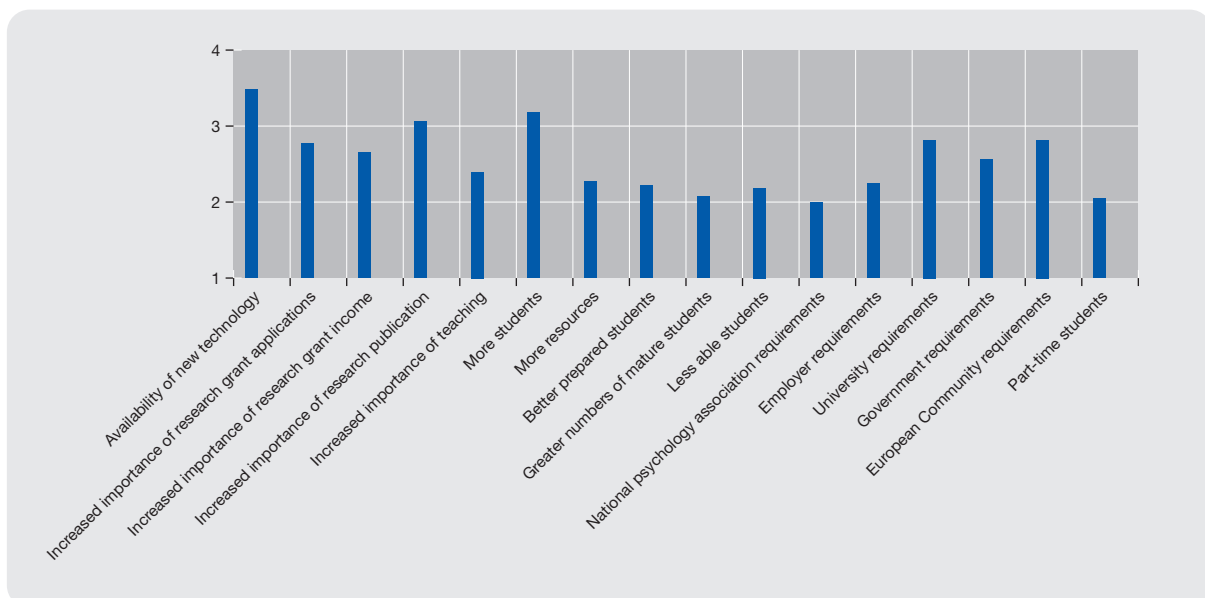


Figure 3: Data in response to the following statement: “Psychology teaching in my university has changed in response to...” Scale from 4 (strongly agree) to 1 (strongly disagree).

Again the message is a familiar one, the availability of new technology is driving change in teaching and so is growth in student numbers. There is a more challenging message about the importance of teaching per se. The increased importance of teaching itself is ranked ninth of 16 factors. It is not the least important factor influencing change, but at 2.4 it is barely above the least important factor which is only 0.4 lower. In contrast the increased importance of research publication is driving change in teaching. It is ranked third overall and scores 3.1, and the growing importance of research is supported by agreement that research grant applications are increasingly important (2.8) as is research grant income (2.7). Few will be surprised at the priority given to research and it would be interesting to know more about this. Is this a tendency across the EU or do differences across national and regional boundaries or between different types of institution exist? Are some universities addressing clear weakness in research or is pressure to prioritise research present for all? Data here however do not answer these questions. Together therefore, change in teaching is coming about both through increasing pressure to be active in research and through increased student numbers. Although new technology may be improving student learning, it is possible that it is the potential of new technology to save time that is its most attractive feature, although these benefits may be elusive as the time cost of using new technology may equal or exceed time saved. Time saved from teaching can then be spent on research.

This is potentially disturbing news for those interested in the quality of psychology learning and teaching. In a review of 58 studies by Hattie and Marsh (1996), the widespread belief that high quality research and high quality teaching are closely linked received no empirical support. Some excellent researchers are also excellent teachers, some are not and there is no evidence that staff involvement in research improves student learning. In fact Gibbs (2010) suggests that at an institutional level the prioritising of research may marginalise teaching with a negative effect on undergraduate education. The data reported here do not allow judgements to be made about the balance between teaching and research in any particular university. However the finding that research is increasing in importance more than teaching is, suggests that the culture of psychology in EU higher education is shifting away from teaching towards research.

Question 4. Despite concerns that teaching is declining in importance relative to research, the free response section of the questionnaire produced fascinating evidence of deep interest and innovation in teaching. In question 4 respondents are not asked in general terms about university and national use of technology and the focus of teaching, but are asked instead to describe specific innovations in psychology teaching in their university or country and many respondents offered interesting examples of innovation, not always from their own university. Answers were read and re-read and coded thematically into the eight non-mutually exclusive emergent categories listed on the following page in order of coding frequency:

■ Student research activity	12
■ Professional practice and employability	11
■ Assessment	6
■ New technology	5
■ Community engagement and social responsibility	4
■ Personal development	1
■ Transition to university	1
■ Statistics	1

The first two themes cover more than half of the innovations mentioned and reveal an overwhelming concern with the development of students within the discipline of psychology by supporting them in developing their research skills and in offering them useful experience in relation to future professional practice. The concern with professional development is also supported by the community engagement and social responsibility category. The response to this question reveals a student centred approach with interest and pride expressed in what has been developed to help students to learn. A selection of quotations are given below with the full list of themes and quotes shown in Appendix two.

Student research activity (sample quotes)

Students develop their own research as soon as they are in their second year at university (empirical and experimental classes)

....students are familiarized with techniques such as EEG or e-prime

....recently a biology and behavioural observational laboratory has been developed to allow research studies to be conducted as well as to provide students with the opportunity to apply their theoretical knowledge to practice.

Whereas increased staff involvement in research is very likely to detract from teaching, Gibbs (2010) notes that student involvement in research can improve learning and it is noticeable how much independent work undergraduates put into their final year research projects on the basis of very little formal instruction. Student research activity is also in accordance with several of the ‘Seven principles of good practice in undergraduate education’ (Chickering and Gamson, 1987, 1991) which are:

- Good Practice Encourages Student-Faculty Contact
- Good Practice Encourages Cooperation among Students
- Good Practice Encourages Active Learning
- Good Practice Gives Prompt Feedback
- Good Practice Emphasizes Time on Task
- Good Practice Communicates High Expectations
- Good Practice Respects Diverse Talents and Ways of Learning

Involving students actively in research encourages staff- student contact, cooperation among students and active learning and in encouraging students to emulate staff it also communicates high expectations.

Professional practice and employability (sample quotes)

....work with practice in schools and family consulting centres and hospitals,

....working with and training volunteer stepmothers in the state orphanages or working in elderly day care centres, or helping schizophrenic patients and/or with their families...

Educational pathways of applied psychology (for example: addiction psychology, forensic psychology,....)

We also started ...a ...6-weeks long structured summer internship.... Students have a chance to test their skills and knowledge considering her/his summer practice.very beneficial for students regarding their occupational, academic as well as personal development.

Assessment (sample quotes)

It uses problem based learning, has developed its own virtual learning environment 'psyweb'.

....developed computerized instruction programs for teaching skills in Psychology. Also a video test was developed for the assessment of counselling communication skills.

New technology (sample quotes)

Web forum to promote evidence based discussions on a certain topic; student's activity in this discussion was evaluated and credited.

...computerized instruction programs for teaching skills in Psychology (Vips). Also a video test... for the assessment of counselling communication skills

Community engagement and social responsibility (selected quotes)

Developing International Community-based work placements...

Some of the field practice courses can also be considered as social responsibility projects.

Personal development

We also started ...a ...6-weeks long structured summer internship
....very beneficial for students regarding their occupational, academic as well as personal development.

Transition to university

...students' adaptation to the university environment.

Statistics

...quantitative and statistical methods...

In general summary, these examples show caring, creative and wonderfully innovative responses to helping students learn. They balance up the increasing focus on research apparent elsewhere.

2. Literature review

The review was carried out in Summer and Autumn 2010 to identify articles meeting the following search criteria:

- Concerned with learning and teaching in higher education within the European Union,
- Concerned specifically with improvement and innovation in psychology learning and teaching and published from 2006 onwards.

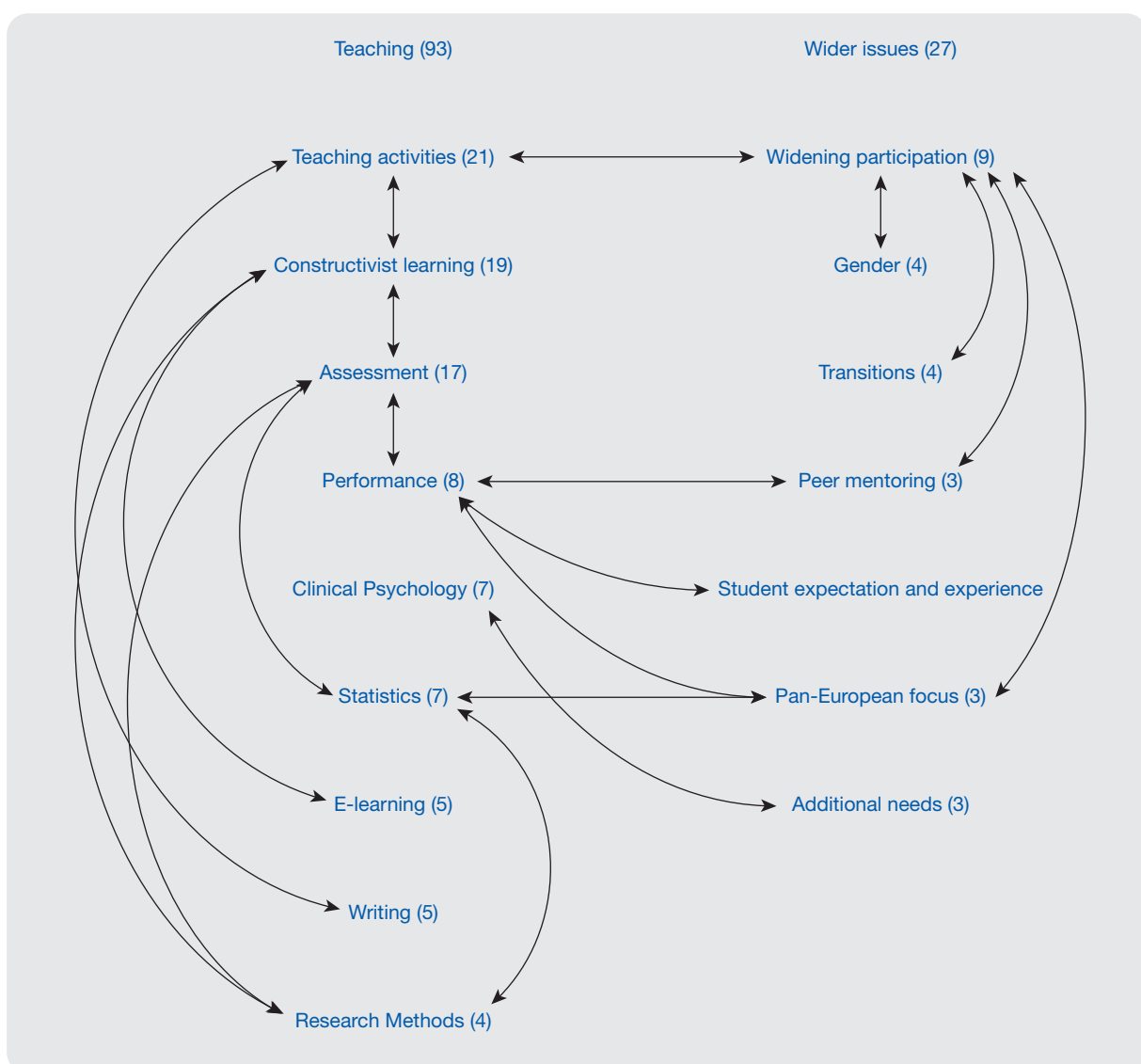
Searches were carried out by reviewing titles and abstracts in target journals and also by using a number of search terms in Science Direct, Web of Science, PubMed, and Google Scholar. The search criteria are restrictive. For example, there is a great deal of excellent research carried out by psychologists on many aspects of higher education, but much less research is directly concerned with learning and teaching in psychology, and it is this specific and precise target that the review is concerned with. For example there is a great deal of highly influential literature, beginning with the work of Marton and Saljö (1976) on the distinction between deep and surface approaches to study. This distinction has helped to frame thought and debate about the nature and quality of student learning in higher education for over 25 years. The weight of evidence endorses the long-term benefits to students of a deep approach and claim that it is widely agreed to be 'one of the major goals in higher education' (p.281). Engaging with this research alone would be a major task (see Beattie, Collins and McInnes, 1997 for a summary) but only a recent article exploring how this distinction might inform practice in an undergraduate psychology programme would be of interest to this review. An example of such a study might be Sanders, Sander and Mercer (2009) 'Rogue males? Approaches to study and academic performance of male psychology students.' On the other hand Valadas, Gonçalves and Faísca (2010) on approaches to study in Portuguese students is of great interest but is not focused on psychology students. Similarly, Davies, Banyard and Underwood (2007) on digital technologies in higher education; Prosser, Martin and Trigwell (2007) on the phenomenographic approach to researching teaching and learning, and Vermunt (2007) on teaching-learning environments, all in the *British Journal of Educational Psychology* Monograph series, are fascinating papers but concerned more broadly than our tight focus on innovation in learning and teaching in psychology.

Carrying out the literature review demonstrated that peer reviewed research literature focusing specifically on innovation in psychology learning and teaching in higher education in the EU is relatively scarce. An initial review identified 22 papers, reduced to 17 on re-reading, all but one from a single publication. A second review added three more papers and some electronically published reports. Suggestions made by questionnaire respondents were also followed up. Two specialist publications were identified from which the majority of papers were found. Both are UK peer-reviewed publications: *Psychology Learning and Teaching* was created by the UK Higher Education Academy Psychology Network, and is now an international journal published by Symposium Journals. *Psychology Teaching Review*, published by the British Psychological Society Division of Teachers and Researchers in Psychology biennially, is a periodical rather than a journal of the British Psychological Society. These journals are thought to be two of only three in the world with such a focus (the other is *Teaching of Psychology*, the longest established with roots going back 60 years and the journal of the US Society for the Teaching of Psychology which also functions as Division two of the APA). A final review identified the following 56 papers, listed and numbered below. The abstracts of recent studies in teaching and learning, selected and edited by James Hartley in *Psychology Teaching Review*, have been found particularly helpful in identifying papers for consideration. While systematic, the review is unable to be comprehensive and may have missed papers of interest, particularly in languages other than English.

It should also be emphasised that the literature survey did not cover ‘the grey literature’. By this we mean material presented at conferences, published in conference proceedings, institutional innovation reports, or reports of funded innovative and developmental projects as found on the Higher Education Academy Psychology Network website.

Analysis

Through reading and re-reading the abstracts and article texts, multiple descriptors were attached to each article and these were then read and re-read to generate thematic categories. Seventeen non-mutually exclusive themes were generated and the 56 articles were coded to them 120 times in total. All articles were coded at least once. Two super-ordinate themes were created to structure the themes as follows:



The closely connected themes of teaching activities and constructivist learning have the largest number of codings with 21 and 19 respectively and, along with the theme of ‘assessment’ (17) account for over half of all codings.

Teaching activities is a broad theme covering a wide range of innovative ideas for teaching as shown in the bulleted list below. The bracketed number indicates which article is being referred to in Appendix two

- Fostering reflective thinking (2)
- Student collaboration (3)
- Competence-based training (6)
- Simulated patient role-plays in teaching and assessment (9)
- On-line discussion groups (11)
- Designing information leaflets (12)
- Debating (13)
- Student evaluation of research articles (14)
- Collaborative learning in independent project work (15)
- Using interactive visual workspaces (19)
- Problem-based learning (21)
- Peer assessment (24)
- Collaborative e-learning (25)
- Creative approaches to training budding clinical psychologists (26)
- Simulation training (28)
- Constructing knowledge through interaction (40)
- Active learning for critical thinking (42)
- Assessing oral counselling and communication skills (55 & 56)

Although **constructivist learning** emerges as a theme in the literature reviewed, the only paper to use the term is Ravenscroft (2009) who quotes Vivian Burr (1998, p.4) suggesting that it is through interaction that we construct knowledge, however the following papers also offer ways for students to construct knowledge rather than simply receive information.

- Fostering reflective thinking (2)
- Student collaboration (3)
- Designing information leaflets (12)
- Debating (13)
- Student evaluation of research articles (14)
- Collaborative learning in independent project work (15)
- Using interactive visual workspaces (19)
- Using screen recorders for assessment and learning (20)
- Developing problem-based learning materials for teaching qualitative research (21)
- Collaborative e-learning – on-line wikis (25)
- Simulation training (28)
- Peer supervision (29)

- Understanding essay marking criteria and feedback (32)
- Active learning for critical thinking (42)

In addition to these papers offering a constructivist alternative, Banyard (2010) in 'Teaching the personal science: From impeccable trivia to the blooming buzzing confusion' (*Psychology Teaching Review* 16, 2) laments the narrow focus of psychology teaching in the UK and offers suggestions for more creative and exciting alternatives (Paper 48).

Assessment is the third major theme with a variety of innovative alternatives to traditional essays and unseen examinations being trialled and evaluated at postgraduate and undergraduate level.

- MCQs and assessment modality (5)
- Competence-based training and portfolio assessment (6)
- Simulated patient role-plays in teaching and assessment (9)
- Assessing statistics – the PG chapter assignment (17)
- Using screen recorders for assessment and learning of data analysis (20)
- High level MCQ assessments (23)
- Peer assessment (24)
- Assessing trainee clinical competence (27)
- Improving exam essay writing (31)
- Understanding essay marking criteria and feedback (32)
- Gender and assessment (33)
- Formative assessment in teaching psychological research methods (43)
- Alternatives to assessing narrow cognitive tasks (48)
- Correction for guessing in MCQs (50)
- Assessment tool to predict performance (52)
- Assessing oral counselling and communication skills (55 & 56)

There is also considerable interest in aspects of **student performance** and how it can be improved. This area links strongly with assessment but also with pastoral care themes such as transition to university, peer mentoring, gender, student experience and expectation, and additional needs.

- Effects of topic choice on performance outcomes (7)
- ADHD, dyslexia and academic performance (10)
- Mature and traditional age student performance (35)
- Academic performance and approach in male students (39)
- Ethnicity and an academic attainment gap (47)
- Correction for guessing in MCQs (50)
- Predicting university performance (51)
- Assessment tool to predict performance (52)

The most recent issue of Psychology Learning and Teaching is a special issue devoted to **clinical psychology** and this swells the number of papers addressing innovation in learning and teaching in this applied area.

- Simulated patient role-plays in teaching and assessment (9)
- Creative approaches to training budding clinical psychologists (26)
- Assessing trainee clinical competence (27)
- Simulation training (28)
- Peer supervision (29)
- Assessing oral counselling and communication skills (55 & 56)

The importance of the traditional core of the discipline in scientific research and statistical analysis of data is demonstrated by the number of innovative papers on learning and teaching in these areas. There are seven concerned with **statistics** covering teaching, assessment and expectations, including a paper by Ruggeri, Díaz, Kelley et al (2008) using a survey of statistics anxiety and attitudes with Spanish, German and English speaking students.

- Assessing statistics – the PG chapter assignment (17)
- Using screen recorders for assessment and learning of data analysis (20)
- SUMS: a flexible approach to teaching and learning statistics (22)
- Anxiety, negative attitudes and attrition in statistics teaching internationally (37)
- Experiences and expectations, the real reason nobody likes statistics (38)
- Mathematical abilities and personality (49)
- Expectations and experiences of first-year students...difficulties with statistics (55)

A first look at innovation in psychology learning and teaching produced mostly papers concerned with e-learning so it is surprising that only five papers are in this review. However while there are many publications exploring the potential of **e-learning** to improve higher education, many of them in specialist journals, most of them are not specific to psychology or are primarily focused on technical feasibility rather than application in a specific setting.

- MCQs and assessment modality (5)
- On-line discussion groups (11)
- Using interactive visual workspaces (19)
- Using screen recorders for assessment and learning of data analysis (20)
- Collaborative e-learning – on-line wikis (25)

There are five papers concerned with innovations to improve **student writing** each covering a different aspect. Papers 18 and 36 are similar and from the same team, both concern the innovative use of students as writing mentors.

- Experiences of academic peer mentoring (18)
- Improving exam essay writing (31)
- Understanding essay marking criteria and feedback (32)
- Peer writing tutorials (36)
- Avoiding unintentional plagiarism by improving authorial identity (54)

There are also four papers concerned with **research methods** including one concerned specifically with qualitative methods.

- Teaching research methods: a survey of provision (1)
- Formative assessment in teaching psychological research methods (43)
- Expectations... and difficulties with research methods, statistics and science (53)
- Developing problem-based learning materials for teaching qualitative research (21)

The second super-ordinate theme created is **wider issues**. All seven themes however link closely with teaching themes. **Widening participation** is a broad theme and nine papers cover teaching and curriculum innovation, ethnicity, part-time study, lifespan development, foundation programmes and issues in academic performance.

- Debating as an aid to widening participation (13)
- Part-time degree study and support for the provision of a foundation year (30)
- Widening access, a foundation year alternative (34)
- Mature and traditional age student performance (35)
- Widening participation and the curriculum: The case for culture (44)
- Widening participation in relation to mental health issues (45)
- Self development and adult returners to higher education (46)
- Ethnicity and an academic attainment gap (47)
- Predicting university performance (51)

Four papers, originating in two research teams, are concerned with **gender** in relation to assessment, performance and approach, perhaps reflecting some concern at the gender imbalance in the student population.

- Gender, psychology students and higher education (4)
- Gender and assessment (33)
- Academic performance and approach in male students (39)
- Correction for guessing in MCQs (50)

Two papers are concerned with **transitions** into university, the second one peripherally.

- Integrating study skills and integrating students (16)
- Academic performance and approach in male students... and transition to university (39)

Three papers are concerned with **peer mentoring**, and a further paper (number 24; Kingsley, 2010) looks at the potential for peer assessment.

- Undergraduate peer mentoring (8)
 - Experiences of academic peer mentoring (18)
 - Peer writing tutorials (36)
-

Student expectations and experience is the focus of three papers, two of them concerned with statistics and students' lack of awareness of the scientific bedrock of the discipline.

- Experiences and expectations, the real reason nobody likes statistics (38)
- Expectations and experiences in the second year (41)
- Expectations... and difficulties with research methods, statistics and science (53)

Three papers are focused to an extent on **student additional needs**.

- ADHD, dyslexia and academic performance (10)
- Experiences and expectations, the real reason nobody likes statistics (38)
- Widening participation in relation to mental health issues (45)

Finally three papers are coded as having a **pan-European** focus.

- Anxiety, negative attitudes and attrition in statistics teaching internationally (37)
- Teaching and assessing oral counselling and communication skills (55 and 56)

The first paper by Ruggeri, Díaz, Kelley *et al* (2008) surveys statistics anxiety and attitudes with Spanish, German and English speaking students and has a clear Europe-wide focus. The two papers by Kuntze, van der Molen, and Born (2007 and 2009) draw attention to mastery of counselling and communication skills as one of the requirements for the award of a diploma as a registered European psychologist and show that microcounselling methods are effective in training these skills. They also show how a new instrument for the assessment of oral counseling communication skills using video clips, the Communication Skills Progress Test, can be a reliable and valid assessment that can be used effectively with undergraduate scale student cohorts.

Discussion

In reviewing innovation in psychology learning and teaching it may be useful to contextualise it within change in higher education. A number of processes are involved. Until the 1960's, at least in the West, certainly in the English speaking West (the former Soviet bloc has its own interesting story to tell) higher education was a fairly stable and elite undertaking with small numbers of students, high levels of academic autonomy and relatively little financial support or interest from government or industry (Coaldrake and Stedman 1999, writing here about Australia).

Subsequently it has come to be viewed as a "...driver of national economic and social development through the formation of human capital" (Coaldrake and Stedman 1999, p. 3). The traditional academic values of critical thinking and disciplinary study, endorsed earlier by Newman (1852) came to be juxtaposed with new expectations for training for professional entry and career credentials. As expenditure rose the pressure from governments also rose for the implementation of reporting processes and for influence over the quality and nature of scholarly output in terms of students and subjects taught. Coaldrake and Stedman suggest that "Government has gradually re-positioned itself from being a patron of universities to a purchaser

of higher education, and expects demonstrated accountability and returns for its investment” (1999, p. 4-5).

The number of students in higher education has risen very substantially across the EU. This growth (“massification”) brings with it greater diversity. Traditionally university education was for an elite minority of young men characterised by ability and high socio-economic status (SES). Psychology has experienced particularly strong growth and there were 310,000 psychology students in the 32 EFPA (European Federation of Psychology Associations) countries in 2005 (Honkala, 2006, cited in Trapp and Upton, 2010). In OECD countries 37% of a cohort entered higher education in 1995 but the proportion is now 57% and in Finland, Iceland, Poland and Sweden as many as three-quarters aim to graduate with a university education (Trapp and Upton, 2010). The Bologna process is bringing about a gradual harmonisation in European higher education and Biesta (2006) suggests that education is gradually changing from *‘learning to be’* to *‘learning to be productive and employable’* (cited in Trapp and Upton, 2010). This can be conceived as bringing higher education into line with economic requirements as massification increases costs, and the importance of ‘knowledge work,’ and the higher education that prepares Europeans to undertake it, increases with economic change. However it can also be seen as the ‘Anglo-Saxonisation’ of European higher education, a take-over by a particular Anglo-American view of the political economy of higher education.

Growth in higher education goes hand-in-hand with economic growth, rising incomes and changing employment patterns. Low value-added manufacturing has tended to move to lower cost economies to be replaced, perhaps, by new ‘knowledge work’. For example in the UK there are now 10,000 people working in computer games development (Jobs 4U careers database). The education level of the European work force has therefore increased for both supply and demand reasons. Political discourse has changed from mid twentieth century debate between producers; the political representatives of land, labour and capital, to a greater emphasis on the individual as a consumer. Consumption defines the age and higher education, like other services, must adapt to consumerism. Consumers of university education are students and increasingly prominently their parents. Consumers at one remove, consumers of graduates if you like, are employers.

It is not only the political economy of higher education that has changed. For a student returning to university after a fifteen year absence, the widespread use of technologies such as electronic slide projection (e.g. PowerPoint) would be apparent, as would the explosion of access to on-line academic and social resources of all kinds including on-line journals, electronic books, virtual learning environments and social networking sites. Despite these changes Laurillard (2007) points out that learning cycles are much slower in education than they are in youth culture, employment and science. Change and innovation in ITC, globalisation, logistics and retailing have driven down costs, opened up choice and increased productivity and in the supermarket sector for example, marketing and stock control have been transformed by loyalty cards and bar code readers. Laurillard points out that the personalisation and choice available in retailing and youth culture has not been matched in education. The retail / education comparison is interesting but university education is more complex than making more material more readily available at a time to suit the student. The explosion of available information brings problems as much as

solutions. Psychology is not simply about the transmission of information, it is also concerned with evaluating and weighing competing evidence and claims and applying them to solve complex problems. Interaction is important for these processes as well as for meeting the motivation, affiliation and development needs of students. Designing programmes and resources for independent study and high quality learning is certainly possible, as the UK Open University has shown for nearly 40 years with a largely paper based system, but it is not necessarily easier or less expensive, even with considerable economies of scale.

There is tension in HE between research and teaching, but the route to status and reward for individual academics, for universities and even for states, has been through high quality research output. However as the notion of the university as an engine of economic regeneration is examined more critically, and the logic of consumerism empowers the student and the employer, the importance of research output is challenged by alternative discourses of educational quality, student satisfaction and employability. Universities, certainly at the upper level, are overwhelmingly research oriented. Although their income is largely tied to teaching, the interests of their staff, their reward structures, recruitment and selection policies are research focussed. Research output has grown but Nobel prize winning research stars are few and much research is little read, rarely cited and has little influence. The monuments for a tiny minority of academics will be academic prizes, discoveries that transform a discipline and a place in history. For most, their real monuments will be a generation of students who take scholarship in their discipline forward and contribute broadly as global citizens.

Behind ground breaking research there is a long tail of research of more marginal value. Good governance in HE therefore seeks to ensure that both teaching and research agendas are fully attended to. A key mechanism empowering the twin paymasters of consumer and government in the UK is the university league table. Although easy to satirise as devices to sell newspapers, they have grown in influence in the UK and both national and international league positions are very important inside and outside the university. Gibbs (2010) argues that they lack validity and cites Pascarella, (2001);

“A ... serious problem with national magazine rankings is that from a research point of view, they are largely invalid. That is, they are based on institutional resources and reputational dimensions which have only minimal relevance to what we know about the impact of college on students ... Within college experiences tend to count substantially more than between college characteristics.” (Gibbs 2010, page 4)

While Pascarella may be correct about rankings based on reputational dimensions, UK newspaper rankings attempt to be sophisticated and empirical, and despite the irrelevance of much of the data used they arguably now have begun to determine as well as to merely reflect status. They are key sources of information to applicants and their advisors and the number and academic status of undergraduate, postgraduate and overseas applicants in the UK therefore depends more and more on league table position. As student fees are likely to increase substantially and imminently in the UK, both the level of fee that a university is able to charge and

the number of applicants will reflect league table position. Nonetheless Gibbs argues that indicators of educational quality in UK HE do not provide a valid basis to distinguish between individual courses either individually or aggregated to provide an overall score.

A major factor in UK league table construction is the National Student Survey (NSS). NSS is independently administered to all final year undergraduates midway through the academic year and achieves a high participation rate. 2011 is the sixth year of use and NSS includes 22 questions about these aspects of the student learning experience:

- Teaching on my Course
- Assessment and Feedback
- Academic Support
- Organisation and Management
- Learning Resources
- Personal Development
- Overall Satisfaction

Dissatisfaction with assessment and feedback has been a consistent theme. However, despite NSS being rooted in the Course Experience Questionnaire (CEQ) and distinctions between courses that foster a deep or a surface approach, Gibbs (2010) laments the lack of items relating to the deep / surface distinction in NSS. The point, however, is that the quality of higher education is being judged, or perhaps misjudged, through league table aggregates of measures that bear some relationship to real quality. If the appropriate measures of educational quality can be taken and related to what is meaningful for an applicant; a course rather than a department or a university, then there is a genuine mechanism allowing for the quality of university education to be compared and allowing students to take much better informed decisions than they do now.

In summary there is, very imperfectly captured here, real innovation in psychology learning and teaching across the EU. The questionnaire reveals that this innovation is being driven by rising student numbers, by technical change, and by the need to find time for research. However the free response section shows that innovation is also deeply rooted in care for and interest in students, and in their academic, personal and professional growth and development. Impinging on this innovation are institutional cultures favouring research, and a changing political economy favouring the consumer and other stakeholders that is potentially able to drive teaching quality forward. The literature review reveals that two of the three journals focusing on learning and teaching in psychology are UK based, as does much of the literature that they contain. More importantly it reveals that there is a wealth of innovation closely engaged with the core of psychology, with improving student learning and the student experience. This literature draws down and translates into our discipline broader currents of educational, philosophical and technical ideas that it would be otherwise hard to attend to. This suggests that disciplinary-based educational research in psychology does a unique and important job. It is also clear that innovation in psychology learning and teaching in the EU is, if not flourishing, certainly at the green shoots stage, and that more opportunities for disseminating such innovation will encourage it to flourish more strongly. This may be an important time to develop such opportunities.

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Appendix one

Journals consulted

Active Learning in Higher Education	Journal of the Icelandic Psychological Society
Assessment and Evaluation in Higher Education	Learning and Instruction
British Journal of Educational Psychology	Mesure et évaluation en education
British Journal of Guidance and Counselling	Orientation scolaire et professionnelle
Computers & Education	Pedagogika
Computers in Human Behavior	Psihološka Obzorja
Contemporary Psychological Education	Psicologia Sociale
Didactica Slovenica Pedagoška Obzorja	Psychology - The Journal of the Hellenic Psychological Society
Educational Studies	Psychologica Belgica
European Journal of Education	Psychology Learning and Teaching
European Journal of Education and Psychology	Psychology Teaching Review
European Journal of Psychology of Education	Quality in Higher Education
European Psychologist	Research in Higher Education
Giornale Italiano di Psicologia dell'Orientamento	Review of Higher Education
Higher Education	Revue Française de pédagogie
Higher Education in Europe	Revue internationale de pédagogie de l'enseignement supérieur
Higher Education Management and Policy	Revista de Psicología General y Aplicada
Higher Education Policy	Revista de Psihologie Scolara
Higher Education Quarterly	Risorsa Uomo Rivista di Psicologia del Lavoro e dell'Organizzazione
Higher Education Research and Development	Scientia Pedagogica Experimentalis
Higher Education Review	Studies in Higher Education
Innovations in Education and Teaching International	Teaching in Higher Education
Instructional Science	Teaching of Psychology
Journal of Educational Psychology	Tertiary Education and Management
Journal of Further and Higher Education	Università e Scuola
Journal of Higher Education	Zeitschrift für Hochschuldidaktik
Journal of Higher Education Policy and Management	

Appendix two

Published papers relating to innovation in psychology teaching within the European Union

i) From Psychology Learning and Teaching

1. Lewis, V., Oates, J., Martin, S. & Duffy, H. (2007). Teaching of Research Methods in Undergraduate Psychology Courses: a survey of provision in HE institutions and colleges in the UK, *Psychology Learning & Teaching*, 6(1), 6-11.
2. Coulson, M., Torrance, S. & Nunn, S. (2007). Fostering Reflective Thinking with the Learning Achievement Self-evaluation Record (LASER), *Psychology Learning & Teaching*, 6(1), 12-19.
3. Barton, A., van Duuren, M. & Haslam, P. (2007) Perceived Social Benefits of Voluntary Student Collaboration, *Psychology Learning & Teaching*, 6(1), 26-32.
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