

# Innovation in psychology teaching in Europe: A scoping survey of European Union universities use of technology, aims and status of teaching, drivers of change, and a thematic review of recent publications

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*To investigate innovation in psychology teaching in European Union (EU) higher education, Europlat partners were surveyed and 43 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 publications within the past five years about the learning and teaching of psychology identified 56 articles, mainly from two specialist journals, 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.*

**Key reference terms:** *Psychology learning and teaching; Innovation in learning and teaching; Europlat.*

**S**HUMPETER (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 are transforming our ability to access information and to make teaching and learning resources available to students. 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 the empowerment of consumers, both students as consumers of education

and governments and other stakeholders as paymasters and consumers of graduates and other outputs. 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. As psychology educators our primary concern is with innovation that adds value by improving the quality of student learning in psychology, however, issues of cost and efficiency cannot be dismissed. Innovation is not only in the use of technology.

The genesis of this introductory scoping report is the first research project undertaken by Europlat, (Reddy et al., 2011) the European Psychology Learning and Teaching organisation that began life from 2009–2012 as a European Commission Erasmus Academic Network promoting

quality enhancement in the teaching of psychology. The network was led by the University of York with five core partners from Austria, Portugal, Sweden, Turkey and the UK. Many additional universities subsequently became members. Europlat has not yet achieved funding beyond its initial life as an Erasmus Academic Network but continues to promote the dissemination of research and good practice in psychology learning and teaching, for example, at the 2013 European Congress of Psychology.

The premise of Europlat, drawing on the successful experience of the UK Higher Education Academy (HEA) Psychology Network (HEAPN), is that learning and teaching research in psychology has an important role to play in promoting good practice in psychology learning and teaching. (HEAPN no longer exists but the HEA continues to actively support psychology learning and teaching). It suggests that in researching the problems and issues specific to the learning and teaching of psychology, and translating educational research and educational concepts to local applications, it connects psychology to the specialist world of educational research. This may help to make research and best practice accessible to teachers of psychology whose primary research interests are in their discipline rather than in the teaching of it. Psychology teachers are, therefore, positioned as having disciplinary knowledge and expertise, and practical teaching expertise, but not necessarily academic knowledge and expertise in learning and teaching. The aim is to build a community of shared practice and enquiry in psychology learning and teaching at a European level and raise the level of engagement with good practice and research.

In reviewing innovation in psychology learning and teaching it may be useful to contextualise change in higher education. Traditionally university education was for a small male elite characterised by ability and high socio-economic status and until the 1960s, in the West, 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 & Stedman, 1999). Collini (2012) calls the political ideology behind UK university growth in the 1940s (when less than half UK university funding came from government) 'welfare state cultural diffusion', but more recently it has been thought that the wealth of nations will increasingly depend on knowledge and ideas. The university has come to be viewed as a '*...driver of national economic and social development through the formation of human capital*' (Coaldrake & Stedman 1999, p.3), in some ways a renewal of the founding idea of the modern university, beginning with Humboldt in the Prussian Ministry of Education 200 years ago, that university research and education is an investment in the future economic and cultural vitality for the state (Elton 2008).

Collini (2012) reports that in the UK there were 50,000 university students in 1939, just over twice that in 1961, 300,000 in 1980 and about 2,500,000 now with large increases in women, postgraduate and part-time students. Recent growth has been particularly strong in Psychology. There were 310,000 psychology students in the 32 EFPA (European Federation of Psychology Associations) countries in 2005 (Honkala, 2006). In OECD countries 37 per cent of a cohort entered higher education in 1995 but the proportion is now 57 per cent and in Finland, Iceland, Poland and Sweden as many as three-quarters aim to graduate with a university education. (Trapp & 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 & Upton, 2010). This can be conceived as bringing higher education into line with economic requirements as massification increases overall 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.

It is not only the political economy of higher education that has changed. For a student returning to university after 20 years, the widespread use of technologies such as electronic slide projection would be apparent, as would the explosion of access to on-line academic and social resources of all kinds including e-journals, e-books, virtual learning environments and social networking sites. Laurillard (2007), however, points out that learning cycles are much slower in education than they are in youth culture, employment and science and the personalisation and choice available in retailing and youth culture have not been matched in education. University education is more complex than making more material more flexibly available, however, and 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 claims and applying evidence 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, but it is not necessarily easier or less expensive.

### **Sources and method**

Investigating innovation in psychology across the European Union (EU) is challenging. Universities are many and diverse, the Eumida project (2010) estimates the total number of EU Higher Education Institutions at around 2900. A multi-faceted approach was used to attempt to capture broad indicators of innovation and some specific examples.

1. A questionnaire was designed and sent to all EUROPLAT partners.
2. A literature review of journal articles concerned with innovative learning and teaching in psychology in the EU published between 2006 and 2010 was undertaken.

#### **1. Questionnaire**

Lecturers in psychology have extensive practical experience of teaching whether or not they engage with the psychology learning and teaching research literature. It was thought that EUROPLAT members would be able to discuss 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 impressionistic and qualitative. It was not thought possible to, for example, quantify the use of virtual learning environments in psychology teaching, but it would be possible to obtain Likert-scaled opinions, about innovations and the use of technology in the past five years in the respondent's university and in the country in general.

Question 1 asked about use of specific technologies and sought a four-point Likert-scaled response (SA-SD) to 13 technologies listed after the stem *'In the past five years psychology teaching in my university has used the following technologies...'*

Question 2 asked *'In the past five years psychology teaching in my university has focused on the following...'* and asked respondents to place these seven areas in rank order; 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.

Question 3 sought a four-point Likert-scaled response (SA-SD) to 16 possible sources of change listed after the stem:

*'Psychology teaching in my university has changed in response to...'*

Question 4 sought free response about innovation in psychology teaching.

Questionnaires were sent electronically to all Europlat members. Recipients were asked to complete the questionnaire themselves and to circulate it in the hope that a snowball sample would develop.

## 2. Literature review

Twenty-eight journals were initially identified through consulting HEAPN records, and by tracking references cited in papers identified, as likely to carry research on learning and teaching in psychology. These were the initial focus of the literature review and respondents were asked to add journals that could be searched for appropriate material. Fifty-three journals were eventually identified and these are listed in Appendix 1.

## Results and analysis

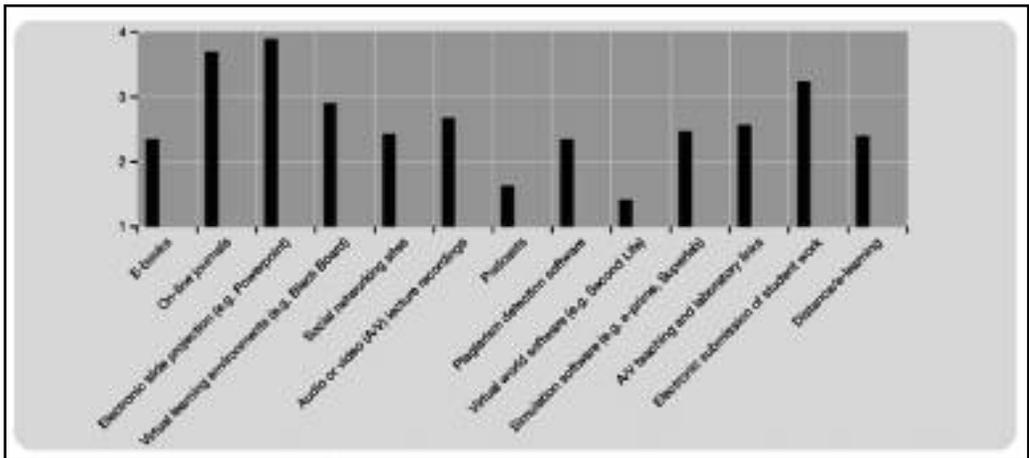
### 1. Questionnaire

Forty-three replies were received representing all EUROPLAT partner countries. Means for Question 1, indicating agreement or disagreement about use of specified technology 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 strong agreement with the use of the technology within the respondent's university, they are electronic slide projection (3.9) with near total agreement and online journals (3.7). One other technology was scored above three, electronic submission of student work (3.2), and 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 use of virtual learning environments (2.9) is ranked fourth.

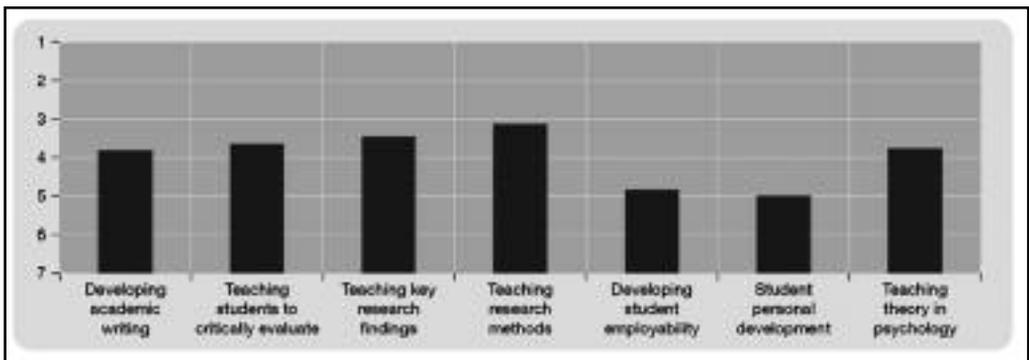
Question 2 asked about the focus of teaching. Responses are on a seven-point scale from most important (1) to least important (7). Data cluster around the mid-point with means for five of the seven areas falling between 3.1 and 3.9. However, two areas are a full point different from the others, student 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).

The focus on the discipline of psychology, through teaching research methods, key research findings and theory, with the academic skills that sit alongside this (critical evaluation, academic writing) contribute to an overall focus on scholarship. The emphasis appears to be on scholarship in the discipline rather than on employability or the development of the individual and needs interpretation in the light of the anomalous situation of psychology. Psychology may be a vocational degree (as with Pharmacy or Optometry in many countries) or a non-vocational degree in the social sciences or in STEM (science, technology, engineering, mathematics) subjects. In some EU countries (the position varies, see Honkala, 2006; Upton & Trapp, 2010) psychology is vocational as the majority of students progress to Master's level and qualify to become professional psychologists. In the UK about 80 per cent of psychology graduates leave higher education with a Bachelor's degree (QAA, 2010) and there is concern to equip them to compete in the general graduate market. In countries where a psychology degree leads to a vocation there may be less need to address employability and personal development; employability as a psychologist depends on psychological knowledge.

**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).**



**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).**

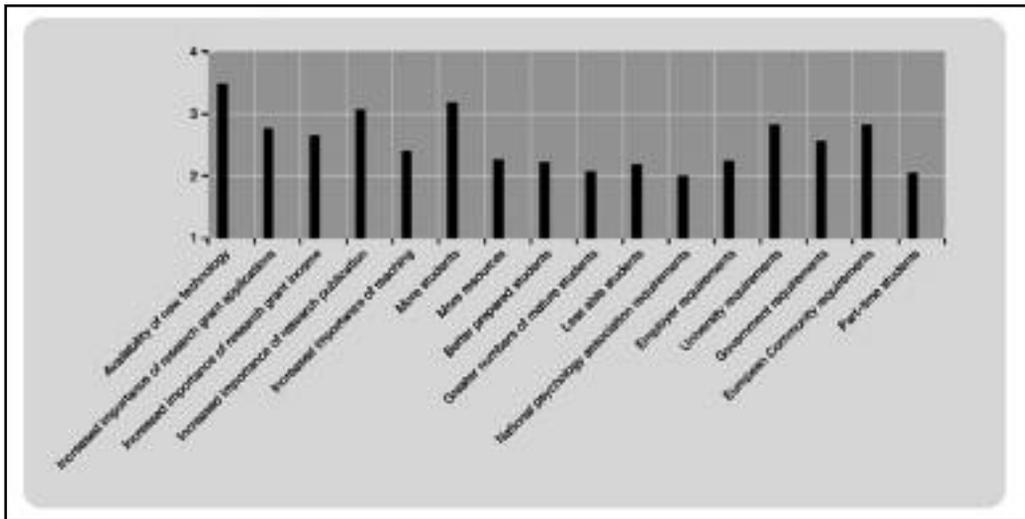


There is unhappiness in some countries with the Bologna agreement that has created a Bachelor's exit point. If university education in psychology is for a selected group for professional entry, increasing numbers at Bachelor's level undermines the selective entry status of the profession and leaves Bachelor's psychology graduates without an obvious career destination. The UK tradition of graduating at Bachelor's level and entering the general graduate job market may look odd and unwelcome. A flavour of this for UK readers may be found by suggesting to

colleagues in the health sciences that undergraduate numbers be greatly increased but that only 20 per cent will be able to enter the profession in question.

Question 3 asks about change in teaching in response to 16 factors. 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).



Response suggests that the availability of new technology and growing student numbers are possible factors driving change. However, the 'increased importance of teaching' is ranked only ninth of 16 factors. It is not the least important factor influencing change, but at 2.4 it is barely above the least factor which is only 0.4 lower. In contrast the 'increased importance of research publication' 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). Together, therefore, this suggests that change in teaching is coming about 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 new technology may equal or exceed time saved.

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 respondents believe that research is increasing in importance more than teaching is, suggests that the culture of psychology in EU higher education may be shifting away from teaching towards research.

Despite concern that teaching is less important, question four, seeking free response about innovation in psychology teaching, produced evidence of interest in teaching. Many respondents offered 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 below in order of coding frequency:

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

The first two themes cover more than half of the innovations mentioned and reveal concern with the development of students as psychologists by supporting them in developing their research skills and in offering them useful experience in relation to future professional practice as these two examples illustrate.

*‘...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...’*

*‘We also started... a... six-week 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.’*

The concern with professional development is also supported by the community engagement and social responsibility category. Response to this question shows participants taking a student-centred approach with interest and pride expressed in what has been developed to help students to learn.

Whereas increased staff involvement in research may detract from teaching, Gibbs (2010) notes that student research involvement can improve learning and it is notable how much independent work undergraduates put into their final year research projects. Student research activity is also in accordance with several of the ‘Seven principles of good practice in undergraduate education’ (Chickering & Gamson, 1987, 1991). Involving students actively in research encourages staff- student contact, co-operation among students and active learning and in encouraging students to emulate staff it also communicates high expectations.

Overall responses show caring, creative and innovative responses to helping students learn. They balance up the increasing focus on research apparent elsewhere. However, the small number of participants and lack of a structured relationship between population and sample make this difficult to interpret or attach much meaning to.

## **2. Literature review**

Searches were carried out by reviewing titles and abstracts in target journals and by using a number of search terms in Science Direct, Web of Science, PubMed, and Google Scholar. 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 only 17 papers, 56 papers were eventually found (see Appendix 2). Two specialist peer-reviewed publications were identified from which the majority of papers were found: *Psychology Learning and Teaching*, published three times a year by Symposium Journals and *Psychology Teaching Review*, published by the British Psychological Society Division of Teachers and Researchers in Psychology biennially. This is a periodical rather than a journal of the British Psychological Society. These are thought to be two of only three with this focus (the other is *Teaching of Psychology*, the longest established with roots going back 60 years and the journal of the US Society for

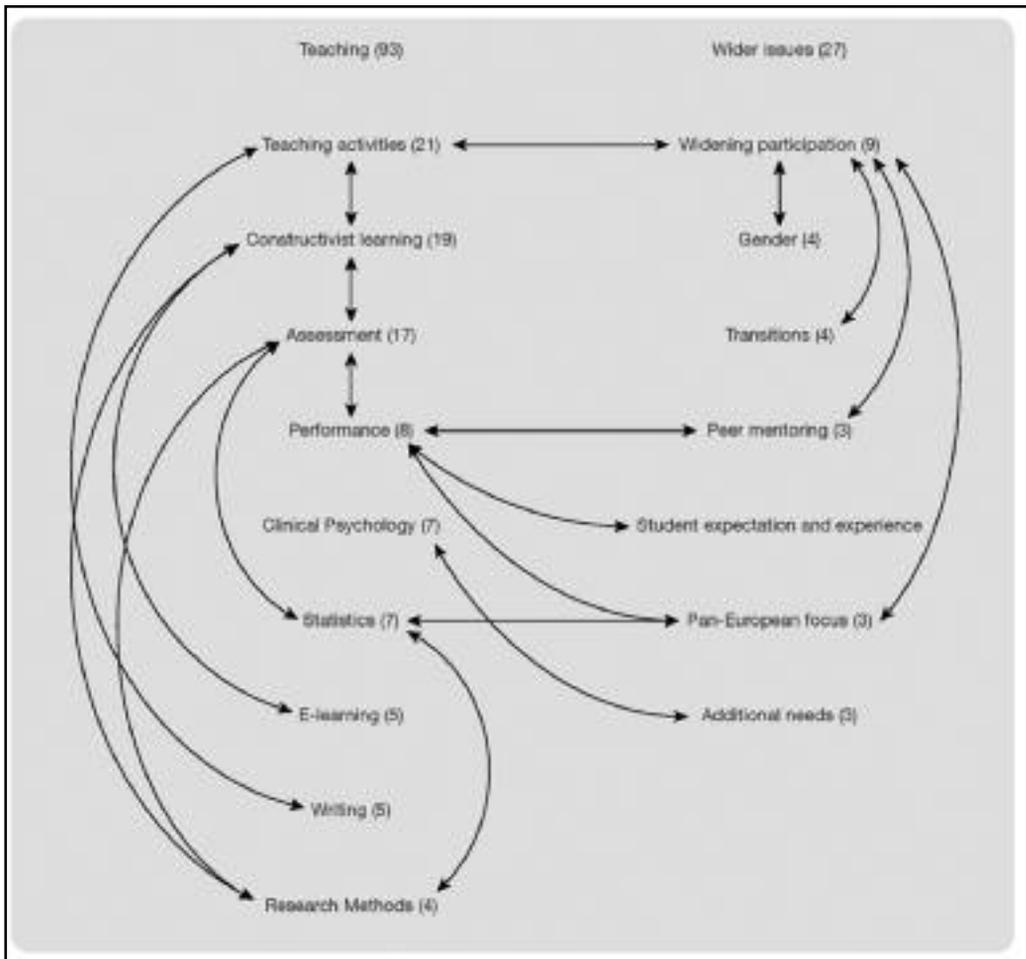
the Teaching of Psychology which also functions as Division Two of the APA). The abstracts of recent studies in teaching and learning, selected and edited by James Hartley in *Psychology Teaching Review*, were particularly helpful in identifying papers for consideration.

**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 (teaching and wider issues) were created to structure the themes as shown in the figure below. The numbers in brackets after each theme show the number of codings to it if more than one. Lines connecting themes indicate that one or more papers have been coded to both themes.

Figure 4: Themes and links showing where papers have been coded to more than one theme.



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 the coding. **Teaching activities** is a broad theme covering a wide range of innovative ideas for teaching including reflection, collaborative and interactive learning, competence-based training, role-plays and simulations, on-line discussion, information leaflets, debating, evaluating research, collaborative learning, interactive visual workspaces, problem-based learning, peer assessment, clinical psychology training, critical thinking, and counselling skills.

The theme **constructivist learning** emerged from alternatives to teaching as information transmission. The only paper to use the term is Ravenscroft (2009) who quotes Burr (1998, p.4) suggesting that it is through interaction that we construct knowledge, however, nine papers offer ways for students to construct knowledge rather than simply receive information. In addition, Banyard (2010) laments the narrow focus of psychology teaching in the UK and offers more creative and exciting alternatives.

**Assessment** is the third large theme and an innovative variety of alternatives and adjustments to traditional essays and unseen examinations are reported and evaluated at postgraduate and undergraduate level including MCQs, competence-based training and trainee assessment, role-play simulations, alternative and formative assessments for research methods and statistics, peer assessment, essay marking criteria and feedback and examination essay writing. Gender and assessment is considered as well as alternatives to assessing narrow cognitive tasks, a tool to predict performance and methods of assessing oral counselling and communication skills in large undergraduate groups.

There is also considerable interest in aspects of student **performance** and how it can be improved, an area that 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. Articles cover the effects of topic choice, ADHD, dyslexia, age, gender and ethnicity on academic performance and also correction for guessing in MCQs, the prediction of university performance.

A special issue of *Psychology Learning and Teaching* devoted to **clinical psychology** swells the number of papers addressing innovation in learning and teaching in this applied area and the importance of the traditional core of the discipline in scientific research and data analysis is demonstrated by the number of papers on learning and teaching innovation in these areas. There are seven concerned with **statistics** covering teaching, assessment and expectations, including a paper by Ruggeri, Díaz et al. (2008) using a survey of statistics anxiety and attitudes with Spanish, German and English speaking students.

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 applications in specific settings. 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. There are also four papers concerned with **research methods** including one concerned specifically with qualitative methods.

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. 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. Two papers are concerned with **transitions** into university, the second one peripherally. Three papers are concerned with **peer mentoring**, and a further paper looks at the potential for peer assessment. **Student expectation 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. Three papers are focused to an extent on student **additional needs**, finally three papers are coded as having a pan-European focus.

## Discussion

This brief study suggests that EUROPLAT members feel that psychology teaching innovation is being driven by rising student numbers, by technical change, and by the need to focus on research. However, the free response section suggests that teaching is also deeply rooted in care for and interest in students, and in their academic, personal and professional development. Impinging on 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 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 debate that it might otherwise be difficult to attend to. It is also seems clear that innovation in psychology learning and teaching in the EU is, if not flourishing, certainly alive and well, and that more opportunities for disseminating such innovation may encourage it flourish more strongly. This may be an important time to develop such opportunities.

The literature, and certainly that identified in this study, seems too UK focused and debates and issues in other EU countries may have been overlooked. Informal debate amongst Europlat members suggests that much scholarship and debate about psychology learning and teaching takes place in, for example, Germany and Italy. Greater breadth and depth in European links would help to improve dissemination of scholarship and practice in psychology learning and teaching.

The key concerns identified are employability and related issues, and the status of teaching relative to research. Employability is of pressing concern in psychology teaching in the UK where selection for professional training is at post-Bachelor, post-experience, 22+ level. This was a major theme in the 2010 review of the future of undergraduate psychology in the UK (Trapp et al., 2011) to the extent that it is asserted *'that a psychology degree should not be solely about the employability of the graduate'* (p.31). Concern with employability perhaps reflects the non-vocational nature of the UK psychology Bachelor's degree, the lack of vocational career outcomes for the majority and the moderate take-up of higher degrees in the UK generally, thought quite likely to decline further as students who have paid full fees reach graduation. It also reflects a shift to a more student-as-customer focus, with the introduction of £9000 fees, and awareness that graduate employment is a key outcome for students and their parents. These issues also inform interest in psychological literacy (Craney & Dunn, 2011) which can be interpreted as pointing up the value to the broader community and to employers of a graduate able to be a critical scientific thinker and an ethically and socially responsible participant in the community.

The problems that this focus on employability attempts to solve may not exist in the same way where psychology education is vocational and the focus of concern may be on recruiting the right number and quality

of entrants to go through to professional qualification. The heart of the issue is the co-existence of psychology education as a subject studied for its own sake by large numbers, and as a specialist vocational subject through to postgraduate level with numbers restricted to the capacity of the psychology professions to absorb them.

Concern with competition for time between teaching and research is neither new nor confined to psychology. 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 develops, and consumerism empowers student and employer, the importance of research output may be challenged by alternative discourses of educational quality, student satisfaction and employability. Universities, certainly at the upper level, are research oriented. Although their income is largely tied to teaching, the interests of their staff, their reward structures, and their recruitment and selection policies are research focussed. Like most academics, Europlat members are interested in both teaching and research, but in the context of this paper it is interesting to consider how a rebalancing of the mission to give greater weight to teaching might come about. A mechanism empowering the twin paymasters of consumer and government is the university league table. Although easy to satirise as devices to sell newspapers, they have grown in influence and both national and international league positions are now important. 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, p.4)

While Pascarella may be correct about rankings based on reputational dimensions, UK newspaper rankings attempt to be empirically based, and despite the irrelevance of some data, they have now begun to influence rather than merely reflect university status. They are key sources of information to applicants and their advisors and the number and academic status of undergraduate, postgraduate and overseas applicants may, therefore, be increasingly influenced by 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. A major contributor to UK league table construction is the National Student Survey (NSS) which is independently administered to all UK final year undergraduates midway through the academic year and achieves a high participation rate. 2014 is the ninth year of use and NSS includes 22 questions about:

- Teaching;
- 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 in NSS about the deep/surface distinction. However, teaching is being judged through measures that bear at least some relationship to quality. If measures relate to what is meaningful for students (a course of study rather than a department or a university) they will inform applicants and oblige universities to pay greater attention to what is truly their core business, learning and teaching.

In summary the aim of this paper was to investigate innovation in psychology teaching across Europe. In the opinion of our respondents, external demands, namely

rising student numbers, technical changes and institutional demands to focus on research may be driving teaching innovation. At the same time, teaching is also deeply rooted in students' development. How we can make these two apparently opposing forces compatible is a challenge for the future of psychology teaching. In this context the aims of Europlat remain important and timely: Stronger European links in Psychology learning and teaching are highly desirable to promote learning and teaching research in the discipline and to strengthen the status and health of the university teaching mission. A developing debate about the focus of psychology learning and teaching in Europe and elsewhere is also touched on and leaves questions rather than a clear way forward. These questions include how should we balance preparing students

for the psychology professions, for wider employability, and developing scholarship and the intellectual (epistemic) virtues that Barnett (2009) writes about? What does 'psychological literacy' mean for the curriculum? And bearing in mind Biesta's (2006) observation that education is changing from 'learning to be' to 'learning to be productive and employable', how should we respond to Barnett's (2009) suggestion that we take into account a third pillar of 'being' as well as 'skills' and 'knowledge' in higher education?

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## Appendix 1: Journals consulted.

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

## **Appendix 2: Coding of articles in literature review.**

Super-ordinate theme: **Teaching**

**Teaching activities** – a broad theme covering a wide range of innovative ideas for teaching

- Fostering reflective thinking (Coulson, Torrance & Nunn, 2007)
- Student collaboration (Barton, van Duuren & Haslam, 2007)
- Competence-based training (Elander, Towell & Fox, 2007)
- Simulated patient role-plays in teaching and assessment (Melluish, Crossley & Tweed, 2007)
- Online discussion groups (Guiller, Durndell, Ross & Thomson, 2007)
- Designing information leaflets (McGann, King & Sillence, 2008)
- Debating (Coogan & Pawson, 2008)
- Student evaluation of research articles (Allbutt, Becker, Tidd & Haigh, 2008)
- Collaborative learning in independent project work (Hugh-Jones & Madill, 2008)
- Using interactive visual workspaces (Stephens & Nte, 2009)
- Problem-based learning (Swingler, Bishop & Swingler, 2009)
- Peer assessment (Kingsley, 2010)
- Collaborative e-learning (Hulbert-Williams, 2010)
- Creative approaches to training budding clinical psychologists (May, 2010)
- Simulation training (Nel, 2010)
- Constructing knowledge through interaction (Ravenscroft, 2009)
- Active learning for critical thinking (Pawson & Cherniavsky, 2009)
- Assessing oral counselling and communication skills (Kuntze, van der Molen & Born, 2007, 2009)

### **Constructivist learning**

- Fostering reflective thinking (Coulson et al., 2007)
- Student collaboration (Barton et al., 2007)
- Designing information leaflets (McGann et al., 2008)
- Debating (Coogan & Pawson, 2008)
- Student evaluation of research articles (Allbutt et al., 2008)
- Collaborative learning in independent project work (Hugh-Jones & Madill, 2008)
- Using interactive visual workspaces (Stephens & Nte, 2009)
- Using screen recorders for assessment and learning (Abdel Nabi & Rogers, 2009)
- Developing problem-based learning materials for teaching qualitative research (Wiggins & Burns, 2009)
- Collaborative e-learning; online wikis (Hulbert-Williams, 2010)
- Simulation training (Nel, 2010)
- Peer supervision (Akhurst & Kelly, 2006)
- Understanding essay marking criteria and feedback (Defeyter & McPartlin, 2007)
- Active learning for critical thinking (Pawson & Cherniavsky, 2009)

In addition to these papers offering a constructivist alternative, Banyard (2010), laments the narrow focus of psychology teaching in the UK and offers more creative and exciting alternatives.

### **Assessment**

- MCQs and assessment modality (Hewson & Charlton, 2007)
- Competence-base training and portfolio assessment (Elander et al., 2007)
- Simulated patient role-plays in teaching and assessment (Melluish et al., 2007)
- Assessing statistics; the PG chapter assignment (Bourne, 2008)
- Using screen recorders for assessment and learning of data analysis (Abdel Nabi & Rogers, 2009)

- High level MCQ assessments (Wilkie, Harley & Morrison, 2009)
- Peer assessment (Kingsley, 2010)
- Assessing trainee clinical competence (Tweed, Graber & Wang, 2010)
- Improving exam essay writing (Connelly, Dockrell & Barnett, 2006)
- Understanding essay marking criteria and feedback (Defeyter & McPartlin, 2007)
- Gender and assessment (Hartley, Betts & Murray, 2007)
- Formative assessment in teaching psychological research methods (Jones, 2009)
- Alternatives to assessing narrow cognitive tasks (Banyard, 2010)
- Correction for guessing in MCQs (Betts, Elder & Hartley, 2008)
- Assessment tool to predict performance (Lowis & Castley, 2008)
- Assessing oral counselling and communication skills (Kuntze et al., 2007, 2009)

### **Student performance**

- Effects of Topic Choice on Performance Outcomes (Crookes, 2007)
- ADHD, dyslexia and academic performance (Pope, Whiteley, Smith, Lever, Wakelin, Dudiak & Dewart, 2007)
- Mature and traditional age student performance (Larkin & Hartley, 2008)
- Academic performance and approach in male students (Sanders, Sander & Mercer, 2009)
- Ethnicity and an academic attainment gap (Richardson, 2010)
- Correction for guessing in MCQs (Betts, Elder & Hartley, 2008)
- Predicting university performance (Betts, Elder, Hartley & Blurton, 2008)
- Assessment tool to predict performance (Lowis & Castley, 2008)

### **Clinical psychology**

- Simulated patient role-plays in teaching and assessment (Melluish et al., 2007)
- Creative approaches to training budding clinical psychologists (May, 2010)
- Assessing trainee clinical competence (Tweed et al., 2010)
- Simulation training (Nel, 2010)
- Peer supervision (Akhurst & Kelly, 2006)
- Assessing oral counselling and communication skills (Kuntze et al., 2007, 2009)

### **Statistics**

- Assessing statistics; the PG chapter assignment (Bourne, 2008)
- Using screen recorders for assessment and learning of data analysis (Abdel Nabi & Rogers, 2009)
- SUMS: a flexible approach to teaching and learning statistics (Swingler et al 2009)
- Anxiety, negative attitudes and attrition in statistics teaching internationally (Ruggeri, Díaz et al., 2008)
- Experiences and expectations, the real reason nobody likes statistics (Ruggeri, Dempster et al., 2008)
- Mathematical abilities and personality (Bhakta, Wood & Lawson, 2010)
- Expectations and experiences of first-year students... difficulties with statistics (Rowley, Hartley & Larkin, 2008)

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 (Hewson & Charlton, 2007)
- Online discussion groups (Guiller et al., 2007)
- Using interactive visual workspaces (Stephens & Nte, 2009)
- Using screen recorders for assessment and learning of data analysis (Abdel Nabi & Rogers, 2009)
- Collaborative e-learning; online wikis (Hulbert-Williams, 2010)

### **Improving student writing**

- Experiences of academic peer mentoring (Bakhshi, Harrington & O'Neill, 2009)
- Improving exam essay writing (Connelly et al., 2006)
- Understanding essay marking criteria and feedback (Defeyter & McPartlin, 2007)
- Peer writing tutorials (Bakhshi, Harrington & O'Neill, 2008)
- Avoiding unintentional plagiarism by improving authorial identity (Elander, Pittam, Lusher, Fox & Payne, 2010)

### **Research methods**

- Teaching research methods: A survey of provision (Lewis, Oates, Martin & Duffy, 2007)
- Formative assessment in teaching psychological research methods (Jones, 2009)
- Expectations... and difficulties with research methods, statistics and science (Rowley, Hartley & Larkin, 2008)
- Developing problem-based learning materials for teaching qualitative research (Wiggins & Burns, 2009)

Super-ordinate theme: **Wider issues**

### **Widening participation**

- Debating as an aid to widening participation (Coogan & Pawson, 2008)
- Part-time degree study and support for the provision of a foundation year (Harrop, Tattersall & Cairns, 2006)
- Widening access, a foundation year alternative (Reddy & Moores, 2008)
- Mature and traditional age student performance (Larkin & Hartley, 2008)
- Widening participation and the curriculum: The case for culture (Hylton, 2010)
- Widening participation in relation to mental health issues (Craig, 2010)
- Self-development and adult returners to higher education (Mercer, 2010)
- Ethnicity and an academic attainment gap (Richardson, 2010)
- Predicting university performance (Betts, Elder, Hartley & Blurton, 2008)

### **Gender**

- Gender, psychology students and higher education (Sander & Sanders, 2007)
- Gender and assessment (Hartley et al., 2007)
- Academic performance and approach in male students (Sanders et al., 2009)
- Correction for guessing in MCQs (Betts, Elder & Hartley, 2008)

### **Transitions**

- Integrating study skills and integrating students (Reddy, Greasley, Parson, Talcott, Harrington & Elander, 2008)
- Academic performance and approach in male students... and transition to university (Sanders, Sander & Mercer, 2009)

**Peer mentoring**

- Undergraduate peer mentoring (Hill & Reddy, 2007)
- Experiences of academic peer mentoring (Bakhshi et al., 2009)
- Peer writing tutorials (Bakhshi et al., 2008)

**Student expectation and experience**

- Experiences and expectations, the real reason nobody likes statistics (Ruggeri, Dempster et al., 2008)
- Expectations and experiences in the second year (Rowley, Larkin & Hartley, 2009)
- Expectations... and difficulties with research methods, statistics and science (Rowley, Hartley & Larkin, 2008)

**Student additional needs**

- ADHD, dyslexia and academic performance (Pope et al., 2007)
- Experiences and expectations, the real reason nobody likes statistics (Ruggeri, Dempster et al., 2008)
- Widening participation in relation to mental health issues (Craig, 2010)

**Pan-European**

- Anxiety, negative attitudes and attrition in statistics teaching internationally (Ruggeri, Díaz et al., 2008)
- Teaching and assessing oral counselling and communication skills (Kuntze et al., 2007, 2009)