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Authentic summative assessments with real clients

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Abstract

This literature review explores the current research around client-based assessment, focussing on blended and online HE programmes. After defining key terms and parameters, we will look closely at why educators have chosen to use client-based assessments and scrutinise their research results across the literature. Our findings offer some significant insights into how assessments of this type are currently employed, as well as recommendations for future research.

Introduction

Involving real clients in students' learning experiences is not a new idea in many fields, and is common in practice-based courses such as medicine and education. When we begin to ask how these experiences are conducted, however, the answers differ greatly across instructors, contexts, institutions and fields. This literature review hones in on one specific type of client involvement which is more emergent, particularly in higher education: client-based assessment in blended and online environments. The central question in this review is:

Do client-based summative assessments significantly improve students' learning in blended and online HE programmes?

Because of the potential breadth of this topic, we begin by **defining key terms as well as parameters** for the review. Through this exercise, important issues emerge that inform the subsequent section on the **advantages of client-based assessment**. Broken down into learning outcomes that appear throughout the literature, these anticipated advantages are scrutinised based on the results of the research considered in the review. Finally, **recommendations for**

implementation are made in the form of questions for prospective client-based learning practitioners.

Definitions and parameters

Many of the terms used in this review are interpreted in a multitude of ways in the literature, and thus are used to describe a large variety of learning experiences. We therefore begin by defining some specific terms as they will be used here, as well as a rationale for the parameters that focus this review.

Definitions

Authentic assessment

This phrase has been used with a plethora of intentions and meanings. Herrington et al (2006) offer a particularly aspirational explanation: 'In authentic learning settings, real-life authentic tasks are used to create the core of the learning environment, and the completion of the tasks effectively occupies the entire student commitment for the course' (p. 235). They also specify that these tasks are 'seamlessly integrated with assessment' (p. 237). While the argument in this review will not extend to dictating the percentage of a course that should be given over to authentic tasks, the emphasis on immersion in authentic environments, and on real-life tasks as the primary student focus within the authentic setting, is crucial. Likewise, Olfos and Zulantay (2007) argue that 'authentic assessment of educational achievement directly measures actual performance in the subject area' (p. 157). The tension in such accounts of authentic assessment between words like 'educational' and 'performance' are not always obvious; the traditional definition of 'achievement in a subject area' could be 'doing well on exams'. But here 'directly' and 'actual' try to close the gaps that often exist between 'education' and 'subject area' by applying the first to the latter (if not by immersing themselves completely as suggested above). Ashford-Rowe et al (2014) concur in listing their critical elements for authentic assessment, emphasising that the outcome must be a performance or product and that the assessment should 'simulate and measure a real-world test of ability' (p. 209).

It is notable, however, that in the examples above (as well as in most of the other definitions found in the literature reviewed) similitude with real-life situations is considered as authentic (e.g. Birenbaum et al, 2006; Cheaney and Ingebritsen, 2005). This is sometimes hard to reconcile with the call for intrinsically valuable assessment tasks (e.g. Higher Education Academy, 2012), and such assessments are even labelled 'low-level' by Liu and Olson (2011, p. 15). On the other hand, there are numerous examples of 'authentic' assessments that lie in the spectrum between similitude and reality.

For the purposes of this review, insights from assessments along this spectrum will be garnered but we will define a phrase that incorporates 'authentic assessment' with the specific focus here:

Client-based assessment
A client-commissioned task or project the performance and/or product of which has direct value to the real client, and the experience, performance and/or product of which addresses the outcomes of the formal learning to which it is attached.

Real clients

The above definition might pose more questions than it answers, two of which may be 'how is "client" defined?' and 'shouldn't "working with the client" be included?' The latter would be answered 'usually', as the types of projects that are evidenced in the literature almost always involve working closely with clients; as this would unduly rule out perfectly viable exceptions, however, especially in online contexts, this has been omitted.

The usage of 'real clients' here is more nuanced. While some definitions are fairly straight-forward, for example '[client-based assignments are] specifically designed to interact with business professionals' (Addams et al, 2010, p. 283), the word 'client' is purposefully open in order to encompass non-profit organisations, internal teams, individuals, students' own employers and even other students. Parsons and Lepkowska-White (2009) find that client-based learning can include organisations of different sizes and statuses, and different levels of student involvement, although they also assume that it 'involves students working on a problem for a business client' (p. 154). For this review, 'business' clients may be necessary for certain learning outcomes, but not always. Moreover, the definition above purposefully avoids problem/solution language (as there are many examples of legitimate client-based learning that does not need 'problems' to get it started) and the transactional nuances of 'for' (rather than 'with'). Fitch (2011) prefers the term 'work-integrated learning', which includes many different types of clients; but this phrase may also refer to learning experiences like internships, which are outside the scope of this review as they are not necessarily assessed or project-based.

The word 'client' works particularly well in cases of service learning; it is important that students see not-for-profit projects as just as valid and useful (and thus high-stakes) as any other project. This would be especially true in international service learning where students may let cultural stereotypes persuade them that they are offering charity rather than engaging in a

mutually beneficial relationship (see Jabbar and Hardaker's, 2012, 'Pillar 2', pp. 6-7). When done well, however, service learning has been shown to increase students' 'intercultural and ethnic sensitivity' (Larson and Drexler, 2010, p. 554).

Formal learning

It is worth clarifying that the last clause of the definition above is simply to specify that we are looking at accredited education where the client-commissioned work is directly related to the core content of a module/programme. The literature review showed that there are many examples of robust experiential or work-based learning that is nonetheless not recognised by means of assessment or formal reward (e.g. Billett, 2009).

Parameters

Blended and online programmes

The reasons for focussing on a mix of blended and online programmes were twofold. First, the nature of assessment involving real clients blurs the lines between on- and offline. For example, clients and students could potentially come into personal contact even if the rest of the learning experience was online; likewise an in-class or blended module could involve client-based assessment conducted wholly online. Secondly, this model is reflected in several of the cases reviewed here (e.g. Crisp, 2007; Good et al, 2008) and thus it will be advantageous to purposefully look at client-based assessment from the perspective of both blended and online learning, and learning that could potentially be blended by introducing real clients.

Summative assessment

This focus was designed to both limit the scope of the review for practical purposes and to test the hypothesis that summative authentic assessment would be more valuable and motivational to students. It was also anticipated that assessment methods would be more thoroughly described and analysed for summative projects than for formative.

Direct involvement of clients

As discussed above, many authentic tasks involve 'real-world' experiences in the form of case studies, simulations and no-stakes interactions with organisations. While the argument here does not presume that these types of activity are not worthwhile, it is the *live, transformational* interactions with clients that will be addressed, testing the hypothesis that ‘real’ tasks can increase motivation and learning.

Advantages of client-based assessment

The research in this area is replete with literature reviews that point to the many benefits of client-based assessment and its various cousins (service learning, problem-based learning, project-based learning, experiential learning, work-based learning, etc.). The categories below are the most commonly referenced benefits of client-based assessment (and of all the practices listed above, as far as they overlap with our definition). The findings of the primary research in the literature will be paired with each benefit to tease out whether they are backed up by results.

Improve understanding and deepen learning

(Aurand et al, 2012; Grant et al, 2010; Liu and Olson, 2011)

The assumption in this review was that the primary benefit to client-based assessment would be a better and deeper understanding of the concepts outlined in the learning outcomes of a module or programme. Many of the articles that this review draws on seem to agree. However, perhaps because this is implicit in all pedagogical practice, the benefits of client-based assessment to students' knowledge and cognition are not always explicitly explained.

When we look at the results of the research, there is even less said about student understanding or cognitive processes. This is perhaps confused by the focus on other benefits of authentic assessment or project-based learning (as discussed below). But a major issue seems to be the difficulty in comparing these types of assessment with more traditional assessment—the nature of authentic assessment does not allow for a simple control group. The comparison would either be between traditional and client-based assessments (where many other factors could obscure the results), or traditional assessment of traditional learning versus traditional assessment of client-based learning, which would not be client-based *assessment*.

Aurand et al (2012), for example, used traditional assessment identical to that used with a non-project cohort to test whether student learning had improved for the project cohort (which it had). Of course this rather undermines the purpose of authentic assessment as such.

Those researchers who did employ authentic assessments often used more qualitative methods of gauging success, such as student, staff and/or client surveys (e.g. Parsons and Lepkowska-White, 2009; Liu and Olson, 2011) or simply the instructors' own reflections (e.g. Addams et al, 2010). Govekar and Rishi (2007) do evidence students' reported improved understanding of concepts by looking at their ability to connect theory and practice in their

reflective journals; likewise Seyed-Abbassi et al (2007) compare their impressions with those of students surveyed to find that theoretical understanding had improved. Carless (2007) and Larson and Drexler (2010) base their favourable evaluations of their respective assessments on evidence from the assignments, although not in a systematic way.

Surveys and reflections are valuable, particularly where it would be difficult to design a robust quantitative analysis of the effectiveness of authentic assessment of this type versus traditional assessment. But most of the qualitative evidence reviewed here, particularly regarding assessments that must be quantified in some degree (marked) and which require significantly more effort on the part of instructors, suffers from a lack of conclusiveness as far as bottom-line learning outcomes are concerned.

Learning to learn in authentic situations

(Boud, 1995; Boud and Falchikov, 2006; Carless, 2007; Good et al, 2008)

At first glance, the rest of these benefits would seem secondary to the first—as we assumed at the beginning of this review, the primary goal of client-based assessment is to achieve learning outcomes. But this is not so easily divorced from the other benefits of authentic assessment. Learning how to learn, for example, has both immediate effects for assessment and long-term benefits to the student in academia and the workplace. Several researchers found evidence of students succeeding in 'ill-defined' and 'complex' situations (Herrington et al, 2006, p. 242), but this was not directly related to students learning how to learn. Again, this is difficult to measure even with traditional methods of assessment.

Motivation, engagement and challenge

(Addams et al, 2010; Grant et al, 2010; Knight, 2002; Rust, 2007)

Addams et al (2010) cite other sources that advocate client-based assessment in terms of challenge and engagement and also find that their students were more motivated by realistic assignments. In their review of the literature surrounding project-based learning, however, Helle et al (2006) found that lack of student motivation was an issue in several of the studies they considered.

Neither of these examples focussed on the types of client-based assessment we are looking at here (although the latter included some similar instances), and this raises two important points about motivation and the focus of this review.

First, an underlying assumption here is that 'real' projects are more motivational to students because they involve both the situations/experiences that are typical of the workplace for which the programme is supposed to be preparing them, and also because the performance/product has intrinsic value (see below for more on this). However, it is entirely possible that some students could be more motivated by traditional assessment marks than by participating in what might appear to be a more work- or time-intensive assignment. This might be heightened by other factors; students in part-time, blended and/or online programmes, for example, may have had at least some work experience and the opportunity to do 'real' work (perhaps even for a competitor) may have the opposite effect to that intended (c.f. Grossman, 2002).

On the other hand, this may be a case of looking more critically at design rather than concept. Where *generalisable* quantitative evidence may be lacking in some of the literature reviewed here, there is a plethora of qualitative design and implementation advice for motivating, engaging and challenging students in *particular* situations. It is clear that each client-based assessment needs to be tailored for the students, the learning outcomes and (in the case of blended or online learning) technology (see Helle et al, 2006; Herrington et al, 2006; Lopez and Lee, 2005).

Key skills and business and/or industry-related skills

(Addams et al, 2010; Fitch, 2011; Govekar and Rishi, 2007; Grant et al, 2010; Wilson, 2012; Young and Hawes, 2013)

Proponents of situated and constructivist learning would argue that the skills gained in authentic learning and assessment are part and parcel of the learning itself, rather than something that can be tacked onto 'pure theory' arbitrarily (e.g. Good et al, 2008). Moreover, if the learning is situated in an authentic context that relates to the student's present or future career, related skills will naturally arise out of the experience. Fitch (2011) found this to be the case in a 'real-client' project, reporting that students had exhibited a plethora of new skills both general and specific to the industry in which they were working. Seyed-Abbassi et al (2007) also reported positive results for key skills in a 'real-world business project'. Of course, as Helle et al (2006) point out, these skills are also very difficult to quantify.

Value outside of academia: intrinsic value and usable output

(Addams et al, 2010; Boud, 1995; Good et al, 2008)

Several studies in this review strongly advocate assessment products that have value beyond a mark. Addams et al (2010), for example, conclude that 'students were motivated to perform well because they were given realistic assignments that made a difference both to them and to the organizations they were serving' (p. 285). But it is surprising how many examples reviewed here stop short of usable output. Good et al (2008) are eager to point this out in describing another client-based assessment. Interestingly, several projects erred on the other side--the product/service had complete 'real-world' value, but was not considered in the assessment. And there is a spectrum of examples in between, from complex distributions of marking percentages across a project (e.g. Govekar and Rishi, 2007; Robinson et al, 2010) to no marking information at all (e.g. Addams et al, 2010).

Likewise, there is also a spectrum of 'usability'. Herrington et al (2006), for example, describe a task where students take turns acting as editors for and contributors to an online journal that would not exist without the module; but it is still a publicly published ('usable') output. Meanwhile, Carless (2007) evaluates assessments where the outputs could be used by the students in their future careers, but the opportunity for immediate use does not exist. Larson and Drexler (2010) blur the boundaries even further in a service learning project where students managed elaborate fundraisers for charities, but without the charities' participation as clients per se.

Only one of the studies in this review specifically controlled for intrinsic value or useful outputs. Naturally, this would be problematic both in theoretical terms (as shown above, where is the line between 'useful' and 'not useful'?) and in practical terms (designing and running assessments identical except in their output value). The research that did manage to compare the two (Parsons and Lepkowska-White, 2009) was focused on a small cohort of undergraduates, used student surveys as its main metric, and asked the same cohort of students to compare a client-based group project with a non-client-based group project. In this case, the latter was mildly favoured over the former, but (as the authors acknowledge) this could be attributed to issues such as student subjectivity or the design of the two different projects.

The question here is also whether intrinsic value is meant to motivate the students and/or improve their learning and/or develop their key skills…and/or something else. If motivation is the goal, then a student survey is a fairly reliable measure; but as far as measuring knowledge, critical thinking, cognition or skills, it is limited.

Recommendations for implementation

Our review of primary research into client-based assessment has found limited quantitative evidence of its proposed benefits, whether in online or blended environments. The qualitative evidence across these types of environment is broadly supportive, and definitely warrants further implementation and evaluation. There is some general (although in some cases anecdotal) guidance that can be garnered from this review for those considering client-based assessment. As each context will be different, this is presented in the form of questions that may or may not be applicable to specific situations.

Scaffolding and preparation

Manage student expectations…

…about interaction:

- What affective issues may exist or arise?
  These could include issues like lack of group cohesion and trust; Crisp suggests a group formative assignment to help iron out some of these problems before summative work starts (Crisp, 2007).
- Will inter-cultural ways of working need to be taught or scaffolded?
  While the answer here is largely dependent upon the context, type of assessment and the students themselves, Tian and Lowe (2012) found that addressing points of difficulty early on, in a culturally informed way, improved student assessment. Durkin (2008) advocates scaffolding to allow students to work in an inter-cultural way, rather than assimilating students from one culture into another's way of working.
- Is explicit guidance needed as to how the group is expected to work together?
  This may include assigning roles, logs and group marking schemes, but also opportunities to develop team-working skills outside of the assessment (Good et al, 2008) and to discuss the value of working in groups (Weldy & Turnipseed, 2010).
- Can students benefit from using each other as resources?
  In addition to working in teams, this could also involve students sharing their project development spaces as they worked (Good et al, 2008) and would be especially valuable to all students working inter-culturally (Jabbar & Hardaker, 2012).

…about project structure:

- Will there be a social space?
  Welikala and Watkins (2008) argue that this is especially important for

inter-cultural learning, but of course is very valuable to any group of students working on an extended project together.

- Will the requirements/rules be fluid to reflect a 'real' experience?
  While this would be valuable to the students (and in some types of client-based projects would be necessary), a good deal of scaffolding to prepare students for uncertainty and ambiguity would still be necessary (Govekar & Rishi, 2007; Seyed-Abbassi et al, 2007).
- …or will details like specific project milestones be prepared in advance?
  Both Liu and Olson (2011) and Lopez and Lee (2005) advocate rather tightly controlled schedules and deliverables (e.g. weekly assignments, templates to complete, mid-term exams). An instructor would need to consider whether these kinds of constraints would be appropriate for the project and the students.

…about their role

- How will roles and responsibilities be communicated and understood?
  Fitch (2011) found that many students did not understand their role in relation to the client, and thus did not take responsibility for their projects; she suggests that deliberate reflexive practice would help students to better understand the relationship.
- How will you ensure that individuals are accountable to their teams?
  Good et al (2008) recommend that accountability be built into the project itself rather than, for example, group members marking each other at the end.
- How will you clearly communicate the aims and application of the project?
  Students need to understand how the project will help them gain both traditional 'academic' knowledge and valuable transferrable skills (Leedham, 2009).
- How will you prepare students for the challenging nature of the project?
  While Lopez and Lee (2005) kept students to a stricter schedule than some, they still found that students needed to be carefully prepared for the various challenges that their projects presented.

Prepare students for the task

- What knowledge will students need before they begin?
  Depending on the students' previous knowledge and experience, it may not be possible to take a pure problem-based learning approach. Good et al (2008) and Liu and Olson (2011) covered theory—and its application to case studies—before and during students' projects.
- Would your students benefit from critiquing and discussing examples of previous student work?

Larson and Drexler (2010) found this approach beneficial. Students gain a better understanding of what is expected in the project and begin to think more critically about the purpose of the project and their role in it (Carless, 2007).

Communication among students, instructors and clients

…for best practice

- How will all parties share their expectations?
  Addams, et al (2010), for example, found that discussing expectations before the project was crucial to its success. In particular, clients need to be willing to supply real (i.e. meaningful and/or useful) projects (Kock et al, 2003).
- What kind of online/offline communications will best suit your particular context?
  Again, this needs to be explicitly discussed before the project begins; reflecting the communications that are used in 'real' projects of this kind is, of course, preferable (Good et al, 2008).
- Would built-in social interaction among students, instructors and clients be beneficial?
  Several projects benefitted from scheduled social events (e.g. Welikala & Watkins, 2008), especially where all three parties did not see each other (online or in person) regularly.

…for formative feedback

- How will you design in feedback from instructors and within teams?
  Again, this will depend on the students and the project. Lopez and Lee (2005) took a very structured approach, feeding back on weekly assignments. Good et al (2008) allowed all students to see and comment on each other's work throughout the process.
- How will you design in feedback from clients?
  While this seems to be crucial, some of the assessments in this review did not consider client feedback at all. Liu and Olson (2011), however, brought clients in for the students' final presentations; the clients then offered immediate feedback (although at a point that the student would not be able to act on it).
- Will you adopt a 'just-in-time' approach?
  Robinson et al (2010) advocate a loose structure in which students are only offered input ('knowledge') when they ask for it, arguing that this gives them more confidence in acting strategically in unstructured situations (p. 108). This more closely mirrors the problem-based learning approach, but of course would only be appropriate in certain situations and with careful scaffolding.

Communication within teams

- Especially if collaboration is the norm in the field, how will this be part of the learning experience?
  Much of the advice above has assumed that students will be working in teams; if this is the case, these teams will need to reflect authentic teamwork and structure in the client's context (Crisp, 2007).
- Would regular individual and/or group reflection on the project be beneficial?
  Many of the examples in this review strongly encourage reflective practice. An instructor would need to consider where this would appear (public/private blog? wiki in a VLE?), whether it would form part of the mark, whether other students would see it, whether it would be completed by individuals or teams.
- How should instructors facilitate group communication?
  While instructors may purposefully avoid dictating to students how they communicate, some types of project will require the instructor to design in communication tools and schedules (e.g. Good et al, 2008).

Integration of assessment and learning

- How is the assessment integrated into the project?
  While quite a few of the examples reviewed here stop short of directly assessing project outcomes or processes, most advocate assessment that is embedded throughout the course (e.g. Birenbaum et al, 2006).
- Is the proposed assessment directly beneficial to learning?
  Boud (1995) emphasises the need for assessment to be part of the learning process. In client-based assessment, this usually takes the form of reports, reflections and critical analysis of the project—if not assessment of the project itself.
- Will students connect theory learning with practice?
  A pitfall that recurs several times is a disconnect between classroom learning and the client-based project (e.g. Fitch, 2011). How will you ensure that students make these connections?
- Will students be continuously engaged?
  One solution to the above issue is to start projects straight away, and involve students in every stage of their progress; this helps to keep them engaged and to join up theory and practice (Seyed-Abbassi et al, 2007).

Who assesses?

- Instructor, students and/or client?
  The answer to this will vary from one situation to another, but needs to be carefully considered and communicated well in advance of assessment (Helle et al, 2006).
- Instructor, with input from client?
  Kock et al (2003) and Kreth (2005) both describe client-based assignments in which instructors considered reports from clients when determining the final mark.

- Students assess self and team members?
  Kreth's (2005) model also involves extensive group-, peer- and self-assessment. Again, this will depend on the assessment design.

What is assessed?

- Meta-processes?
  Many of the examples in this review opted to assess processes and products 'about' the client-based project rather than the project itself. Types of assessment included:
    - Contracts and project logs (Govekar & Rishi, 2007)
    - Clients' reports (Kock et al, 2003)
    - Attendance and soft skills (Kreth, 2005)
    - Exams (Larson & Drexler, 2010; Liu & Olson, 2011)
    - Recorded reflection (Clements & Cord, 2013; Govekar & Rishi, 2007; Jabbar & Hardaker, 2012; McCrea, 2010; Robinson et al, 2010; Welikala & Watkins, 2008; Young & Hawes, 2013)

- Processes?
  Good et al (2008) and Birenbaum et al (2006) advocate focussing assessment on processes as well as (or instead of) outcomes. These include:
    - Ongoing journals & logs (Govekar & Rishi, 2007)
    - Social media project workspaces (Good et al, 2008)

- Product and performance?
  The types of 'product' found in this review reveal how diverse client-based assessments can be, and the opportunities for direct assessment of project outputs. Some examples are:
    - Assessment of communications plan, presentation and writing samples in a service learning project with social media (Crews & Stitt-Gohdes, 2012)
    - Half of module mark given for the 'accessibility, readability, suitability, and usability' of actual product (Kreth, 2005, p. 56)
    - Proportion of module mark based on project outputs; another proportion based on project's financial success (Larson & Dexler, 2010)
    - Assessment of students' presentations to clients (Liu & Olson, 2011; Robinson et al, 2010)
    - Analysis papers, reports and presentations, all part of project, assessed by the instructors (Weldy & Turnipseed, 2010)

Conclusion

While the lack of quantitative evidence and the idiosyncratic nature of qualitative evidence make it difficult to critique good practice in a formal way, or to treat the examples and advice from the literature as authoritative, this

review has highlighted some significant points that should be useful to those implementing client-based assessments.

It is clear that more work needs to be done to investigate client-based assessment in practice. As shown here, quantitative studies looking at learning outcomes in particular would be valuable. More qualitative evidence consistently collected over time and across student cohorts would also help to make analysis of client-based assessment more conclusive.

References

Addams, H. L., Woodbury, D., Allred, T., and Addams, J. (2010) 'Developing student communication skills while assisting nonprofit organizations', Business Communication Quarterly, 73(3) pp. 282-90.

Aurand, T. W., St. Clair, J. and Sullivan, U. (2012) 'Analyzing the Impact of the 2012 Ford Focus Target Hunt: Can Student Managed Projects Accomplish Both Academic and Corporate Objectives?', Journal of International Education Research, 8(3) pp. 233-44.

Billett, S. (2009) 'Realising the educational worth of integrating work experiences in higher education', Studies in Higher Education, 34(7) pp. 827–43.

Birenbaum, M., Breuer, K., Cascallar, E., Dochy, F., Dorie, Y., Ridgway, J., Wiesemes, R., and Nickmans, G. (2006) 'A Learning Integrated Assessment System' Educational Research Review 1(1), pp. 61-7.

Boud, D. (1995) 'Assessment and learning: contradictory or complementary'. In: Knight, P. ed. Assessment for Learning in Higher Education, London: Kogan Page/SEDA. pp. 35-48.

Boud, D. and Falchikov, N. (2006) 'Aligning assessment with long term learning', Assessment and Evaluation in Higher Education, 31(4) pp. 399–413.

Carless, D. (2007) 'Learning-oriented assessment: conceptual bases and practical implications.' Innovations in Education and Teaching International, 44(1) pp. 57–66.

Clements, M.D. and Cord, B.A. (2013) 'Assessment guiding learning: developing graduate qualities in an experiential learning programme',Assessment & Evaluation in Higher Education, 38(1) pp. 114-24.

Crews, T. B. and Stitt-Gohdes, W. L. (2012) 'Incorporating Facebook and Twitter in a Service-Learning Project in a Business Communication Course', Business Communication Quarterly, 75(1) pp. 76-9.

Crisp, G. (2007) 'Assessing discussion groups and collaborative tasks.' In The e-Assessment Handbook, London: Continuum, pp. 179-97.

Durkin, K. (2008) ‘The Middle Way: East Asian masters students’ perceptions of critical argumentation in U.K. universities’, Journal of Studies in International Education, 12(1), pp. 38-55.

Fitch, K. (2011) ‘Developing professionals: student experiences of a real-client project’, Higher Education Research & Development, 30(4) pp. 491-503.

Good, J, Howland, K, and Thackray, L. (2008) 'Problem-Based Learning Spanning Real and Virtual Words: A Case Study in Second Life', Research In Learning Technology, 16(3) pp. 163-72.

Govekar, M. A. and Rishi, M. (2007) 'Service Learning: Bringing Real-World Education into the B-School Classroom', Journal of Education for Business, 83(1) pp. 3-10.

Grant, D. M., Malloy, A. D., Murphy, M. C., Foreman, J. and Robinson, R. A. (2010) 'Real World Project: Integrating the Classroom, External Business Partnerships and Professional Organizations', Journal of Information Technology Education: Innovations in Practice, 9 pp. IIP167-96.

Grossman Jr., T. A. (2002) ‘Student consulting projects benefit faculty and industry’, Interfaces, 32(2) pp. 42-8.

Helle, L., Tynjälä, P. and Olkinuora, E. (2006) ‘Project-based learning in post-secondary education: Theory, practice and rubber sling shots’, Higher Education, 51(2) pp. 287–314.

Herrington, J., Reeves, T.C. and Oliver, R. (2006) ‘Authentic Tasks Online: A synergy among learner, task, and technology’, Distance Education, 27(2) pp. 233-47.

Higher Education Academy (2012) A Marked Improvement: Transforming Assessment in Higher Education, York: HEA.

Jabbar, A. and Hardaker, G. (2012) ‘The role of culturally responsive teaching for supporting ethnic diversity in British University Business Schools’, Teaching in Higher Education, 18(3) pp. 272-84.

Kock, N., Auspitz, C., and King, B. (2003) ‘Web-supported course partnerships: Bringing industry and academia together’, Communications of the ACM, 46(9) pp. 179-83.

Knight, P. (2002) 'Summative assessment in higher education: practices in disarray', Studies in Higher Education, 27(3) pp. 275-86.

Kreth, M. L. (2005) ‘A small-scale client project for business writing students’, Business Communication Quarterly, 68(1), pp. 52-9.

Larson, E. and Drexler, J. A., Jr. (2010) ‘Project Management in Real Time: A Service-Learning Project', Journal of Management Education, 34(4) pp. 551-73.

Leedham, M. (2009) ‘From traditional essay to “Ready Steady Cook” presentation: Reasons for innovative changes in assignments’, Active Learning in Higher Education, 10(3), pp. 191-206.

Liu, J. and Olson, D. (2011) 'Putting Business Students in the Shoes of an Executive: An Applied Learning Approach to Developing Decision Making Skills', InSight: A Journal of Scholarly Teaching, 6 pp. 14-27.

Lopez, T.B. and Lee, R.G. (2005) ‘Five Principles for Workable Client-Based Projects: Lessons from the Trenches’, Journal of Marketing Education, 27(2) pp. 172-88.

McCrea, E. A. (2010) 'Integrating Service-Learning into an Introduction to Entrepreneurship Course', Journal of Management Education, 34(1) pp. 39-61.

Olfos, R. and Zulantay, H. (2007) 'Reliability and Validity of Authentic Assessment in a Web Based Course', Journal Of Educational Technology & Society, 10(4) pp. 156-73.

Parsons, A. L. and Lepkowska-White, E. (2009) ‘Group projects using clients versus not using clients: Do students perceive any differences?’, Journal of Marketing Education, 31(2) pp. 154-9.

Robinson, D. F., Sherwood, A.L. and DePaolo, C. A. (2010) 'Service-Learning by Doing: How a Student-Run Consulting Company Finds Relevance and Purpose

in a Business Strategy Capstone Course', Journal of Management Education, 34(1) pp. 88-112.

Rust, C. (2007) 'Towards a scholarship of assessment', Assessment & Evaluation in Higher Education, 32(2) pp. 229-33.

Seyed-Abbassi, B., King, R. and Wiseman, E. (2007) 'The Development of a Teaching Strategy for Implementing a Real-World Business Project into Database Courses', Journal of Information Systems Education, 18(3) pp. 337-43.

Tian, M. and Lowe, J. (2012) ‘The role of feedback in cross-cultural learning: a case study of Chinese taught postgraduate students in a UK university’, Assessment & Evaluation in Higher Education, 38(5) pp. 580-98.

Weldy, T.G. and Turnipseed, D.L. (2010) 'Assessing and Improving Learning in Business Schools: Direct and Indirect Measures of Learning', Journal of Education for Business, 85(5) pp. 268-73.

Welikala, T. and Watkins, C. (2008) Improving Intercultural Learning Experiences in Higher Education: responding to cultural scripts, Institute of Education, University of London.

Wilson, T. (2012) ‘A Review of Business-University Collaboration’, Department for Business Innovation and Skills, London.

Young, J. A. and Hawes, J. M. (2013) 'Using Sales Management Students to Manage Professional Selling Students in an Innovative Active Learning Project', Marketing Education Review, 23(1) pp. 37-42.

Works consulted

Abrahams, A.S. and Singh, T. (2010) 'An Active, Reflective Learning Cycle for E-Commerce Classes: Learning about E-Commerce by Doing and Teaching', Journal of Information Systems Education, 21(4) pp. 383-90.

Arbaugh, J., Godfrey, M., Johnson, M., Pollack, B., Niendorf, B. and Wresch, W. (2009) 'Research in Online and Blended Learning in the Business Disciplines: Key Findings and Possible Future Directions', Internet And Higher Education 12(2) pp. 71-87.

Bohemia, E. and Ghassan, A. (2012) ‘Globally Networked Collaborative Learning in Industrial Design’, American Journal of Distance Education, 26(2) pp. 110-25.

Cheaney, J. and Ingebritsen, T. (2005) 'Problem-Based Learning in an Online Course: A Case Study', International Review Of Research In Open And Distance Learning, 6(3).

Gijbels, D., Dochy, F., Van den Bossche, P., and Segers, M. (2005) ‘Effects of Problem-Based Learning: A meta-analysis from the angle of assessment’, Review of Educational Research, 75(1), pp. 27–61.

Lizzio, A. and Wilson, K. (2004) 'Action Learning in Higher Education: an investigation of its potential to develop professional capability', Studies In Higher Education, 29(4) pp. 469-88.

McAlpine, L., Maguire, S. and Lee, M. (2005) 'The Pedagogy Excellence Project: a professor–student team approach to authentic inquiry', Teaching In Higher Education, 10(3) pp. 355-70.

Wing, L., Williams, J. and Chua, A. (2007) 'E-xams: harnessing the power of ICTs to enhance authenticity', Journal Of Educational Technology & Society, 10(3) pp. 209-21.

Zualkernan, I.A. (2006) 'A framework and a methodology for developing authentic constructivist e- Learning environments', Journal Of Educational Technology & Society, 9(2) pp. 198-212.