
This report was prepared by Stephen Brown, Julie Voce and Endrit Kromidha (University of London CDE Fellows) as part of the project to review e-Learning Developments across the Careers Group. The project was commissioned from the Centre for Distance Education (CDE), University of London, by the Careers Group in January 2018.

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The brief

1. To enable the Careers group (TCG) to develop effective e-learning for students.
2. To ascertain the potential for use of shared student e-learning resources among members of the TCG.

Definitions

As TCG colleagues come from a variety of professional backgrounds and have widely varying experience and knowledge of e-learning, we have provided a glossary of key terms used in this document, for the avoidance of any misunderstanding.

**e-learning**: Learning activities that students access via digital networks.

**Learning activities**: Exercises, quizzes, discussions etc. that students work through to achieve defined learning outcomes. Learning activities can be face-to-face or delivered via e-learning.

**Learning outcomes**: What a student should be able to do after working through specified learning activities. Not to be confused with lesson aims, which are what the teacher wishes to achieve.

**e-learning activity design**: e-learning activity design is about the creation of structure and flow of content but not about developing a final technical product to work on a specific platform such as Moodle or a smartphone. So an e-learning activity design comprises component parts, with a scheme for how they fit together so that an e-learning developer can translate them into a technical product that will work online. At the design stage components can be simple every day files such as Word documents and PowerPoint slides.

**e-learning champion**: this is someone with sufficient experience and knowledge of e-learning to be able to create e-learning activity designs. Not to be confused with an e-learning developer who can convert e-learning activity designs into fully working online products, for example by converting Word documents into Web pages by adding html markup to the text.

**e-learning developer**: this is someone with technical development skills.
**e-learning adviser:** this is a specialist who combines learning design skills with technical development skills so that they can provide sound advice on what works well pedagogically, what is technically possible and can provide technical support and training.

**Core curriculum topics:** Topics that most or all TCG sites need to teach. Not to be confused with products that run on specific technical platforms.

**Background**

The Careers Group (TCG) is a department of the University of London which operates as a not-for-profit, mutually-beneficial membership organisation for 16 institutionally-based careers services, with a small central support team. The majority of member services are within the University of London federation, but TCG also provides some services to a limited number of non-member institutions. The purpose of The Careers Group is supporting the Learning and Teaching and Student Experience. It aims to achieve this by enabling member institutions to provide high-quality careers and employability services to their students and graduates. The Careers Group strategy is embedded within the overall strategy for the University of London, focussing on “Aim 2: Provide innovative high-quality academic support and professional services” and “Objective 8: Enable organisations to educate and develop individuals to achieve career success” However, this strategy also informs and supports the strategies of each member careers service within its institutional setting. The Careers Group strategy sets out the common priorities of member services and identifies goals for providing mutual benefits. The individual careers service strategies are developed to align with the overarching Careers Group strategy and the strategic aims of the institution in which the service is embedded. **Aim 4 of the TCG strategy 2017-2020 is: Work in partnership to achieve valued, mutually-beneficial outcomes which enhance the competitive advantage of member institutions and make the best use of our resources.**

This e-learning developments study was commissioned in the aftermath of a six month internal review of e-learning initiated by individual staff members of TCG which looked into the extent and nature of e-learning and the kinds of e-learning delivery platforms used across TCG and among AGCAS members more widely. It identified pockets of good practice and expertise, it recommended the creation of a central repository of shareable e-learning resources and went so far as to obtain tenders from potential suppliers for such a repository. These proposals were not implemented due to concerns about costs and the risk of becoming over-reliant on a single supplier. Nevertheless, there remains within TCG a widespread belief that e-learning has potential to play a significant role in future and that opportunities for sharing learning resources are under-exploited.

This study has been carried out by three CDE Fellows: Prof Stephen Brown, Dr Endrit Kromidha and Julie Voce employing a combination of interviews, focus groups, desktop research and Delphi-style co-development of the findings in partnership with TCG colleagues. Heads of Service at King’s, UCL, Goldsmiths, Queen Mary University, SOAS, City, Royal Holloway and the head of Educational Consultancy have been interviewed. Additionally TCG staff (mainly Careers Consultants) from King’s, UCL, Goldsmiths, SOAS, City, Royal Holloway, St George’s, Queen Mary University, St Mary’s University, London School of Hygiene and Tropical Medicine, Royal Veterinary College and the Courtauld Institute have been consulted.
Findings

Goals
Despite some local differences due to their specialist nature, TCG sites are broadly similar in terms of their goals and motivations. All wish to:

- Maximise student career and employability outcomes.
- Enhance relationships with academics, increasing understanding of careers and employability, to make careers and employability more central and integral within courses.
- Reach hard to engage students.

Challenges
Different Careers Group sites face similar challenges:

- Lack of time to deal with large numbers of students and broad ranging professional roles.
- Growing demands placed on the service as a result of increases in student numbers, more distance e-learning students and increased institutional accountability (e.g. TEF).
- Inadequate metrics to convincingly demonstrate the value of careers services to faculty staff and students at the point of use.
- Unsatisfactory staff engagement. While this is not universal, many academic staff do not understand the value of the careers service or seek to work with TCG colleagues to embed careers and employability in the curriculum.
- Insufficient student engagement. Students often do not appreciate the value of the careers service, regardless of whether they do or do not know what they want to do for their career. Additional barriers are limited campus access (e.g. distance learning and commuter students and alumni), insufficient time (part-time students and heavy course loads) and lack of confidence (not wishing to appear unknowledgeable). Low levels of engagement are reported among widening participation students at City and QMUL.

Additionally, smaller specialist colleges face challenges of:

- Extremely limited resources.
- Specific niche demands on the career service
- Low levels of administrative and technical support

Resource sharing and e-learning are generally seen as having potential to be helpful:

- E-learning could help to reach hard to engage students and alumni.
- Resource sharing could help to reduce duplication of effort and free staff to engage in more valuable face-to-face interactions.

Barriers
But there are significant barriers to the introduction of resource sharing and e-learning:

- Technology – too many different platforms across TCG and insufficient cross-platform compatibility. Need an easier way to share resources.
- Within individual colleges, many colleagues lack competence and confidence with technology.
• Access to e-learning for alumni is potentially problematic because of the need to have a university login to access university systems.
• Concerns that investment of effort in e-learning will be wasted if students do not engage with it.
• Concerns that e-learning lacks the social dimension essential for effective learning.
• Pedagogy – mixed levels of awareness of e-learning design principles and media affordances.
• Shortages of time and people to meet current demands let alone take on new roles and skills.

**Current use of e-learning**

• Very mixed, ranging from full blown 8 week MOOC (discontinued) and extensive SQL based interactive suite of learning activities (also discontinued) through to presentation of purely information resources in an online content management system such as Moodle, with some negotiated interactivity or use of other technologies such as webinars.
• Majority of TCG student-facing activity is not e-learning currently.

**Relevant themes**

• Lack of awareness: Different types and levels of learning technology support are available on larger sites, but not always well understood or even known about.
• Inefficiency: Considerable duplication of effort across sites as TCG teams create similar resources for their own target groups.
• Isolation: Although assigned to teams, TCG staff tend to work primarily as individuals to develop and deliver resources and student experiences.
• Academic credibility: Although TCG see themselves as professional equals with faculty academics and seek collaborative partnerships, perceptions of the academic benefits of careers and employability are not universally high among faculty academics.

**Discussion**

Growing demands on TCG (eg. TEF, student irregular attendance patterns, growing student numbers, changing student expectations with respect to technology use, particularly mobile) plus a need to reach off-campus groups such as alumni and distance learners, are driving the need to change the way that careers and employability services are provided.

*Recommendation 1. More careers and employability guidance needs to be available on demand at any time and accessible by students, careers staff and faculty academics online and via mobile platforms.*

However, just providing more information resources online is unlikely to address the key issue of engagement. Resources have to be seen to be beneficial, at the point of use, and they have to be actively promoted to students to ensure students are aware of them and are motivated to use them. Engagement of faculty academic colleagues is therefore crucial. Ideally faculty academics will want to work with TCG colleagues to embed careers and employability in the curriculum. While this is happening in some places (eg. City University and King’s) it is not universal. Such a shift represents a major culture change and culture change in universities is often a difficult and lengthy process due to their devolved nature. A possible barrier to academic staff engagement is the way TCG think about student learning resources. Currently there is considerable emphasis on design and
presentation of high quality information resources and on negotiated real-time interactions with students, either face-to-face or online. There is less consideration of student learning outcomes and measurement of those outcomes. Measurement of learning outcomes goes beyond the various feedback systems presently employed to gauge reactions to TCG events by assessing what students have actually learned from a specific learning activity. If TCG staff could converse with academic colleagues in these terms and devise learning activities with built-in assessment that demonstrates specific learning gains, collaboration between faculty academics and TCG colleagues would be easier. Demonstrable learning gains would also help to engage students.

Recommendation 2. TCG staff need to design e-learning activities with specified measurable learning outcomes and built-in assessments that enable learners to measure their own learning gains.

TCG staff have mixed levels of understanding of e-learning activity design principles and how to translate these into effective e-learning using different media.

Recommendation 3. Provide any student-facing staff who deliver workshops and e-learning courses with training in e-learning activity design and assessment, and on the relationship between learning activity types and media characteristics.

Resourcing any new activity is likely to be a challenge to TCG teams that are already working under considerable pressure. This problem will be particularly acute in the smaller specialist colleges. The ratio of preparation time to student study time for distance learning materials typically ranges between 10:1 and 100:1 depending on the complexity of the material and the experience of the developers. However, if it is accepted that demand will continue to grow then some way of creating additional capacity has to be found. There is potential for reduction in duplication of effort across the sites that could free up capacity for other types of activity. For example, there is widespread agreement among TCG student-facing staff that the current practice of independently developing broadly similar resources on different sites is inefficient and that sharing learning activities based on an agreed set of core curriculum topics is a realistic and desirable possibility. Collaboration between colleges to jointly design e-learning activities could create the capacity required to engage with e-learning. Collaboration with larger, better resourced institutions within TCG will be essential if the smaller specialist colleges are to engage.

Recommendation 4. Create cross-College teams to share the task of e-learning course design for specific agreed topics.

Sharing e-learning activities between different sites is problematic for several reasons. Different sites employ different platforms, target student groups at different sites have niche requirements and there is a need to associate resources with specific college brand identities. It will be necessary therefore to share in a way that allows technical adaptation for local delivery platforms, localisation to meet specific target group requirements and branding. At the lowest possible level learning resources are likely to comprise some combination of text, images, moving images and sound. More sophisticated learning objects such as multiple choice quizzes, case studies, field trips, simulations, etc. can all be broken down into these simple forms and their component parts stored as easily accessible familiar file types (e.g. jpeg, .doc) in a common shared directory.
Recommendation 5. Components of collaboratively developed e-learning course designs should be created as “lowest common denominator” file types such as .doc, ppt, jpeg etc. that can be easily stored in and downloaded from a shared directory to allow for localisation and technical adaptation by different colleges.

Embedding learning design skills and technological competence across the whole of TCG is a major undertaking. Unless new skills are immediately applied and repeatedly rehearsed they tend to decay, resulting in erosion of confidence and commitment. However, the need to be able to converse with faculty colleagues as equal partners in the field of learning design makes it imperative that all relevant TCG colleagues have a basic grounding in learning design principles and concepts. These can be taught/learned independently from specific delivery platforms, do not require specialist technology skills and can therefore be applied immediately and frequently to the design of careers and employability learning resources.

Recommendation 6. Provide introductory learning design training courses for all relevant TCG staff covering basic principles and concepts in a way which does not require technical skills beyond routine office tools such as Word, Excel and PowerPoint.

While there are pockets of e-learning expertise across TCG, these tend to be individuals working in isolation. The majority of TCG colleagues have low levels of confidence in their ability to use technology effectively. This limits the scale of their impact and threatens the long-term sustainability of e-learning. There are instances where high quality e-learning resources that took significant effort to produce have been abandoned because of insufficient technical resource required to keep them up to date (i.e. the TCG Coursera MOOC and the SQL based SortIt suite). It will be important to ensure that future investment in e-learning represents value for money and results in a sustainable return on investment.

Recommendation 7. Create a critical mass of e-learning champions by bringing together recognised TCG colleagues with expertise and enthusiasm into a team with an explicit remit to produce shareable e-learning activity designs for TCG, with measurable annual targets and a level of resourcing commensurate with the planned level of activity. In addition to e-learning activity design, e-learning champions will be expected to share and enhance their own technical capabilities and to assist less technically minded colleagues to deploy learning technologies effectively.

TCG staff with e-learning expertise come mostly from non-pedagogical backgrounds and are mostly self-taught. Consequently their knowledge of e-learning possibilities, their technical development skills and their links with e-learning developer communities are less advanced than normally found among e-learning specialists. Providing the e-learning champions with professional e-learning developer support would extend their capabilities and effectiveness. While some e-learning developer support is available at some colleges, in particular at King’s, this is by no means universal.

Recommendation 8. Appoint a qualified e-learning adviser to the central Careers Group team to provide the e-learning champions team with their own permanent full time leadership and support.

Moving forward

1. Establish a central e-learning adviser post to support e-learning developments across TCG. This role will lead in the development, support and promotion of e-learning in TCG, and drive
forward enhancements to the student learning experience, the staff teaching experience and contribute to the promotion of efficiency and effectiveness of careers and employability support services. The leadership element would encompass close liaison with college e-learning and technical support units to ensure complementary and collaborative outcomes; planning and coordinating a college embedding strategy with measurable targets for student usage and appreciation; planning and coordinating an annual e-learning design production plan. The support element would include advising on e-learning pedagogy best practice and guidance on the integration of technology into the curriculum; advising on appropriate e-learning design and development tools; contributing to the design and development of learning materials and activities on the learning technology platforms used by TCG, in conjunction with academic, technical and support staff; sourcing externally and/or designing and potentially delivering e-learning design and development learning opportunities for student-facing TCG colleagues in an appropriate accessible format.

2. Establish a cross-College team of e-learning champions to work with the TCG e-learning adviser to create e-learning designs, drawing on pockets of existing expertise and enthusiasm. This group will become the core of all future e-learning development within TCG.

3. Establish formal liaison with College-specific learning technology support units where this does not already exist. This should take the form of a named individual within each TCG College and a corresponding individual from that College’s learning technology group. In the case of smaller specialist colleges this function may be replaced by liaison between TCG staff at those Colleges and the TCG e-learning adviser, who will advise on appropriate sources of support for those Colleges. The aim of formal liaison is to ensure TCG staff are fully aware of the range of learning support available to them locally and how to obtain it, and to provide a foundation for building agreed joint activities between TCG and the learning support units such as staff development, technical adaptation of e-learning designs to the local VLE and arrangements for access to e-learning by alumni.

4. Agree a set of core curriculum topics for careers that all sites need. This is essential preparation for creating shareable e-learning designs.

5. Identify any relevant e-learning packages that already exist and decide whether these will be used in future and what modifications are required, if any.

6. Prioritise the remaining core curriculum topics in terms of which need to be developed first. This will create a schedule of development work that can be agreed with SMT to create a core suite of in-house e-learning designs for embedding across colleges.

7. Recognise e-learning design, development and delivery as formal elements of staff roles and allocate dedicated time for these tasks. Well-designed e-learning can save staff time but in the initial stages it will require staff to devote significant amounts of time to it. To maximise the chances of successfully embedding e-learning across TCG it will be essential to ensure sufficient time is allocated to facilitate the creation of a critical mass of material.

8. Provide a tiered series of e-learning training workshops in collaboration with the PDU, the central e-learning adviser and e-learning champions. In the immediate term these workshops will be for e-learning champions only. The longer term aim will be to work towards a situation where the top tier on e-learning design principles will be mandatory for all TCG colleagues who do any kind of teaching to ensure a common understanding and vocabulary is established. Subsequent tiers to provide more detailed instruction on e-learning design, development and delivery for the e-learning champions group.

9. Use the workshops as a vehicle to develop priority e-learning activities and to build cross-College teams as well as for skill development.
10. Agree a lowest common denominator set of file formats for e-learning activity components, eg. .docx, .pptx, .jpg, mpeg, avi.
11. Agree a simple folder structure for storing e-learning designs and component files on the TCG SharePoint site.