Introduction

As the global information landscape increasingly facilitates the sharing, re-purposing and dissemination of information, the ways in which students are accustomed to interacting with information resources are also changing. Re-Tweeting, posting edited videos onto YouTube or sending targeted information through social networks often relies on blending original content with existing information for a range of purposes - in short, not procedurally different to the preparation of formal assessment. Tertiary education, however, requires adherence to academic standards, including formalised referencing systems, to which students must become acculturated. The conceptual and educational frameworks surrounding referencing have been interpreted in increasingly different ways by universities and it can be reasonably argued that institutional policies have not kept abreast of this mutable external and online environment (Atkinson and Yeoh, 2008). Almost ubiquitous student access to the Internet has been an oft-cited catalyst for increased scrutiny of assessment (Walker, 2010; Colvin, 2007; Selwyn, 2008; Perry, 2010). To this end, plagiarism-detection software has experienced a sharp increase in adoption across the higher education sector (Dale, 2007; Atkinson and Yeoh, 2008), not only in Australia but across the world.

However, it could conversely be argued that students are immersed in an information-rich, format-agnostic environment which is innately founded on cooperation, collaboration and sharing of information (Wheeler and Anderson, 2010) which inherently challenges the expectations of tertiary academic integrity.

Referencing, like research and other academic learning skills, has often not been taught explicitly, or within a discipline context prior to tertiary education. First-year university students arrive at university from diverse educational, geographic and cultural backgrounds and perceive referencing primarily as an issue of compliance (Perry, 2010). The acknowledgement of why students plagiarise varies and these schools of thought informed the approach used by this project.

How is referencing framed?

For some new students to universities, their understanding of referencing is based solely on fear (McGowan, 2005) and many are familiar with the basic concept of plagiarism. Some students bring with them the academic processes that served them well at school—however these are not suitable at universities (Chanock, 2008). Students understand they should not copy words without referencing but fail to grasp the reasons why; the reasons are not explicit and often cloaked in unfamiliar and impenetrable academic language.

Much has been written about plagiarism in various periodicals and with the recent development of plagiarism detection software (eg. Turnitin, SafeAssign), there has been renewed vigour in examining it. Park’s 2003 review of the literature provides a handy summation of the investigations, research and thinking about plagiarism prior to the implementation of these software products and the subsequent discussions about them. There are three main schools of thought in referencing and plagiarism discourse:
1. A punitive approach which focuses on the idea that students often deliberately engage in plagiarism and that the appropriate response is one of punishment (Blum, 2009; Sutherland-Smith, 2010; Bilic-Zulle et al., 2008);
2. A restorative justice approach. This is a small field which suggests that plagiarism is in fact an act against a community (in this case, a community of students), and that steps need to be taken to restore a level of balance (Wenzel et al., 2010; Karp and Conrad, 2005; Karp, 2009; Dickson et al., 2009);
3. An educational approach which espouses that the best method for reducing plagiarism is to educate and support students. Marking criteria and assessment tasks should be linked to building referencing skills (especially in the first year) and ensure that students learn these skills in a discipline-related context (Jaschik, 2008).

The approach of both the University of Southern Queensland (USQ) and Swinburne University of Technology (Swinburne) is clearly aligned with the third school of thought. The collaborative referencing tutorial that the two institutions have created is built on a foundation from a pre-existing resource that has been repurposed with broader educational aims. It does this by acknowledging that referencing exists as a part of academic writing and should be understood as such. Critical examination of the previous version of the tutorial showed that the examples of referencing in the assignments was decontextualised and focused too heavily on the mechanical aspects of referencing.

Hence the collaboration which occurred between the two libraries also needed to draw upon the experience of academic learning skills staff to ensure that the material was pedagogically sound, focused and relevant. Academic learning skills including referencing skills are best learned in context; that is, the most appropriate way to develop learning skills is within the discipline or faculty in which the student has chosen to study. This way, students learn discipline knowledge and the context in which referencing is situated at the same time. Different discipline areas have different referencing requirements and pay different levels of attention to referencing conventions. Disciplines also insist that students use the system that publications in the discipline generally request. Most lecturers will allocate a percentage of marks to correct use of the citation style in their assignments. It is possible for students to be given a failing grade if referencing is not is incorrectly performed, and so it is not surprising that students surveyed by Brown et al. (2008) reported that they primarily use citation styles so that they don’t fail (in other words, to meet an academic requirement), instead of other reasons such as allowing a reader to locate the same information source.

This underscores one of the fundamental problems: students lack proper understanding of the purposes of referencing. For them, referencing and citing is linked to just words, not ideas (Jackson, 2006), so referencing is regarded as separate to the writing process, instead of an integral part. To help students develop good writing and referencing practices, it is useful if universities help them understand the research culture of tertiary study. Faculties need to make their referencing rules explicit and lecturers should provide useful exemplars within courses. While writing and referencing support is best offered as part of the learning process within a discipline, universities can also create useful generic opportunities for students to actively engage in learning about the writing and referencing process. The online tutorial outlined in this paper provides students with that opportunity.

Referencing and the Academic Library

Librarians have always been involved in some fashion with citation, especially as traditional bibliographic instruction has changed to a greater emphasis on information literacy standards.
These standards, such as those produced by the Australian and New Zealand Institute for Information Literacy (Bundy, 2004), form the foundation for formal library instruction, but also guide the more informal educational opportunities which occur in a reference interview. Students are often directed to the university library for referencing support and in both institutions involved in this project, the responsibility for creating and maintaining university referencing documentation sits with the Library. The view of referencing instruction being the province of the librarian is borne out by Gibson and Chester-Fangman’s 2011 survey of 610 librarians, which found that over 90% reported having directly provided referencing support and that most perceived this support as a natural part of their professional role.

Students will require instruction in referencing due to a number of factors. Some referencing styles, such as APA are discipline-specific and proficiency with the referencing style is seen as a professional skill. Many students bring experience of a prior referencing system from previous study (whether from secondary education, TAFE, or another tertiary institution) which may differ from the local interpretation of the style (Neville, 2009). Making these interpretations explicit to new students is particularly challenging, and interpretation differences were identified between the collaborating institutions in this project. There are also students who may not have been instructed in referencing at all or who feel that the instruction they received before entering higher education was not sufficient to meet their new academic requirements. Whilst these reasons may be true for domestic students, other reasons such as cultural perceptions of referencing need to be acknowledged for international cohorts (Mu, 2007). Domestic students may have encountered limited necessity or support for referencing skills prior to university. Brown et al. (2008) found in their study that 74.5% of new Health Sciences students did not consider their referencing and citing tuition prior to commencing as sufficient - some even said they had never received instruction in these skills. Separate research found that after receiving formal tuition with an academic librarian, faculty instructor or study skills instructor, students reported that they were still uncertain about their proficiency in applying a citation style (Dale, 2007). Therefore, learning how to use a citation style can be seen, as with information literacy, to be a skill requiring lifelong learning. Effectively using a citation style can be further complicated by the introduction of newer information media, such as social networking and Tweeting, and the proliferation of formats such as audio and video (such as those found via iTunes U or YouTube) which can be utilised appropriately for tertiary assessment. Revisions to existing referencing styles occur at a much slower rate than the adoption of new media for study purposes, which can lead to student confusion as to how to correctly cite these sources.

Further contextualised instruction (both formal and informal) is therefore imperative and in the distance education institution, there needs to be accessible, asynchronous, self-paced methods to deliver this instruction. The methods of delivery are diverse across the academic libraries, and should be driven by the needs of the cohorts of individual institutions. The Gibson and Chester-Fangman (2011) survey summarises the methods as

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Classroom instruction was the most common delivery method, as indicated by 466 librarians, followed by 342 mentions of distributing handouts. Others took advantage of online tools, with 279 using web pages, 173 directing students to web-based tutorials, 59 using tools available in their institution’s course management systems, 13 using blogs, and seven using podcasts. A small percentage (3.7 percent) of librarians mentioned other methods such as group learning activities, Powerpoint presentations, videos and YouTube” (p. 143).
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The reasons for the expansion of these instruction methods can be varied but limitations on teaching space and time (Mikkelsen and Davidson, 2011) and student-driven expectations of online support (Xiao, Pietraszewski and Goodwin, 2004) have been two of the most relevant reasons causing this project to be undertaken.

**Project aims**
The aim for both institutions involved in this project was to create a visual, online tutorial which could be used as both an educational tool embedded within a course, and as a publicly accessible ‘stand alone’ learning asset. In doing so, it sought to create a resource which could be flexibly used by any course using the Harvard AGPS Style, and be accessible to all students regardless of their mode of study. USQ had already established the value of screencasting learning resources for both on-campus and external students, and this provided a transferable experience for the design and production of the online Harvard guide.

A screencast makes use of either free software (such as Jing) or licenced counterparts (such as Camtasia Studio) in order to provide a video capture of a computer screen with overlaid audio (Carr & Ly, 2009). In this way, a particular skills or concepts can be visually demonstrated. When designed appropriately, the audio component serves to reinforce the visual element. This approach allows the learner to self-pace their learning, and the dual coding of the screencast enhances the learner’s ability to cognitively process and absorb new information (van Merriënboer and Ayres, 2005). The three possible aims for screencasting have been categorised as “self-paced learning, to supplement classroom instruction, or for troubleshooting” (Xiao, Pietraszewski and Goodwin, 2004, p. 367). Referencing support and education spans all three of these categories, and given the highly visual nature of locating and assembling the information required for constructing a reference, screencasting was identified as an effective medium for meeting this educational need.

Project Background

In mid-2010, reference librarians at Swinburne proposed the creation of a multimedia online resource which could be used by both staff and students as a tutorial about the Harvard AGPS style. Preliminary investigation of the approaches used by other universities identified an existing online presentation by USQ. The design of this tutorial aligned with the expectations and approach of the Swinburne Library and permission was sought to link to the tutorial, rather than begin a process of in-house duplication. However, the Librarian responsible for creating the original tutorial at USQ had already begun to review the necessary changes which had come to light during student and staff interactions about the tutorial and referencing in general, and also those necessitated by newer information formats (such as podcasts).

It was decided that staff at Swinburne and USQ would form a project team to re-script, shoot and edit the new tutorial, with the deliverable being a brand-specific version of the presentation for each institution. The team would also include a copyright officer to seek approval for the replication of materials for examples in the tutorial. As the project progressed, it became apparent that this copyright role was crucial, and the presence of a dedicated staff member dealing with time-consuming copyright enquiries and permissions helped to limit the project running over its deadlines.

The decision was also made that referencing needed to be contextualised as an aspect of academic writing, and belonged as part of a broader dialogue in order to be fully appreciated by the student. Therefore, a member of the USQ Learning Support Unit joined the project team, adding vital expertise in addressing academic learning skills development. This now ensured that all aspects from online pedagogy, referencing skills knowledge, academic writing, technical and audio skills and copyright approvals had been brought together within the team.

Challenges

Interpretive differences in the application of referencing styles is certainly not a new issue (Neville, 2009). While both institutions created referencing guides from the Style manual for authors, editors and printers, sixth edition (Snooks and Co., 2002), the manual has shortcomings in dealing with newer formats (such as online audio) and is completely silent on the referencing of some formats (such as images). Within these parameters the development of localised versions of the style are thus inevitable (Park, Mardis and Ury, 2011). A cursory examination in the early stages of the project bore out the assumption that differences in interpretation would arise. Cross-
institution mapping exercises gave both universities the chance to re-examine their approach where differences occurred, and in some cases, changes were made. Whilst this was originally a challenge, the chance to reflect on the rationale for referencing decisions and work cooperatively was rewarding for both institutions and the end product has brought the two referencing guides ‘closer to the middle’.

Resourcing issues, especially human resources, were to be a concern from the outset. As there was no additional time allocated exclusively for the project, it was realised very early in the planning phase that this would be reliant on the project team making time around their regular duties in order to complete the project in a timely manner. It would later become apparent that this decision led to delays in project execution, but this project serves as an example for all institutions that similar productions can be achieved for little financial outlay.

The ‘tyranny of distance’ was evident in technical aspects of the collaboration. Camtasia Studio 6 was to be used at both institutions, with each section recorded separately, then edited and spliced together as a single media presentation. The primary challenge lay in transferring the raw files to USQ due to the file sizes (often in excess of 20 MB each). Likewise, scripts, project plans, error logs and permissions forms all needed to be stored in a central location, accessible to all project team members. The cloud-based, file storage facility Dropbox (www.dropbox.com) was used extensively during the project to meet these needs, and despite its’ shortcomings, Dropbox alleviated many of these concerns.

Planning, recording and editing

In a project of this type, the importance of attention to detail in the scripting process cannot be over-emphasised. The design principles of the tutorial meant that each section needed to stand alone as a ‘ready reference’, yet retain cohesion to the greater whole. With the exception of the sections explaining the rationale for referencing and its links to the writing process, each discrete segment centred on referencing a particular type of information source, such as a chapter in an edited book, or an online image. The structure for each segment would remain similar and incorporate scanned images, screen captures, or recordings of live usage of a website to visually illustrate the locations of each element of a reference. The second part of each segment would be a blank screen onto which the elements were brought together in the correct order, with the associated punctuation. In this way students could see firstly how to gather the required elements, and then how to present them in a Reference List. The in-program functions of Camtasia Studio would allow timed zooming, highlighting and emphasis on particular portions of the screen; these would be storyboarded during the scripting process. The major challenge lay in keeping each segment succinct, with clear methods established to explain exceptions to referencing conventions or about particular elements required for an unusual information source.

As each segment was completed in beta format, the script, PowerPoint slides and associated images or links were stored in a Dropbox folder with a defined time limit for all project staff to comment. Once agreement was reached, one staff member would then bring together the parts for the segment and record them using Camtasia. The recorded Camtasia files were then added to Dropbox, and edited at USQ. Within the cycle of quality control, the edited files were opened for the team to view and a log of changes proposed. This would continue until all team members were content with each segment.

Once all segments were complete, they were sequenced as a single tutorial, with a Table of Contents and Closed Captioning added to complete the product. The institution-specific tutorials were then hosted on each university’s website and the link distributed to staff for comment. Whilst most of the comments were extremely positive, some areas for improvement were identified and subsequently actioned. These mostly consisted of small inconsistencies in synchronising the text of the Closed Captioning and the spoken material; some grammatical errors and an error in the presentation of a completed reference. Once these were addressed, a wider dissemination of the link for both universities was undertaken.
The next phase for the project will be a structured approach to gathering student feedback regarding the usability of the presentation and suggestions for improvement.

**Improvement**

Upon reflection, the project team identified three key areas for improvement with the next phase. However, these are broad enough that they could be transferred to any similar, collaborative project. The areas most warranting further discussion and improvement are pedagogy, project management and appropriate use of technology.

**Pedagogical improvement**

Whilst it was agreed from the outset that this tutorial would take an educational stance in its’ approach to referencing instruction; a sound theoretical basis was required for the instructional design. In seeking a multi-modal delivery of the educational experience (as this would be presented as an option with other text-based referencing information) two theories emerged which provided guidance. Cognitive load theory addresses the valid concern that information presented in multiple formats may overload the learners’ working memory and negatively impact on their ability to absorb the information (van Merriënboer and Ayres, 2005). This “split attention effect” (van Merriënboer and Ayres, 2005, p. 7) can be compounded when the amount of information within the learning task exceeds the learners processing capabilities (Mayer and Moreno, 2003). The design implication, drove the modular approach to the presentation of the information – allowing the learner to be more self-directed and specifically target portions of the presentation which addressed their immediate need. During the scripting and content creation phases, consideration was given to dual coding theory, which essentially shows that the learning experience is richer (and information retained more readily) when the audio and visual elements of a multimedia learning object support and reinforce a single message (Friehls and Craig, 2008; Garner, 2008). An approach combining both theories would therefore allow the learners’ working memory to process and absorb the new information (van Merriënboer and Ayres, 2005).

In seeking a technological deliverable to this project, the team was likewise mindful that many students come to university with a set of core skills regarding online environments, with many students still having little to no knowledge or interest in learning technologies (Kennedy et al., 2008). It is also recognised that the technology skills and interests of some students do not travel beyond social media, so that the skills they do have are not being transferred to learning contexts. Research has found that despite this, students have expectations that universities will employ new technologies as part of their courses and programs (Kennedy et al., 2008; Newton and Ellis, 2009). Just as students attending universities today arrive with a range of technology skills, they similarly arrive with diverse academic skills and experiences (Wingate and Dreiss, 2009). This means that students need to learn these skills ‘on the run’ as they study their chosen discipline. Another generally accepted premise is that students learn best when given opportunities to engage with context-based material. This assures that the “integral relationship between writing and knowledge construction” can be facilitated (Somerville and Crème, 2005, in Wingate and Dreiss, 2009, p. 15).

This project accepts these premises and has endeavoured to create an online environment that makes it is easy for students to engage. At the same time, the developers recognise that the resource must be dynamic: that this is but the first iteration of the module. The resource must include provision for the input of new technologies as they are created. The developers also recognise that the module would benefit students more if interactivity was increased. The effectiveness of engagement in learning processes is well documented (Chanock, 2008; Kolb, 1984 in Kolb and Kolb, 2005). Future versions will therefore include interactive activities and other opportunities that encourage students to engage further with the material. Scope also exists to work with individual academic staff to embed this content into courses, particularly first year courses. It has been suggested that our technology skills develop and grow with use (Kerr et al.,
If this is so, students’ skills and interest will continue to grow and the module will likewise need to adapt.

**Project management improvement**

Given the resourcing parameters for this project, there were limitations in terms of having an acting project manager. For a second-phase redevelopment, a dedicated project manager position would be extremely welcome. This was a collegial exercise built on goodwill, especially due to the dedication of time and agreement in the flexibility of time frames but in future the team would benefit from an ‘outside’ position to coordinate. This need was especially evident in the documentation and progress tracking for each role in the scripting and recording process. Due to the distance and time zone differences between the universities, clear and current documentation was not always available which led to a few misunderstandings.

**Technological improvements**

The lack of clear and current documentation was exacerbated by the discovery that Dropbox allowed no scope for synchronous, multi-user editing (like that offered by Google Docs) and had no capacity for version control. This latter shortcoming manifested in the manner in which Dropbox handles changes to documents, viz: if a document is opened by more than one team member and changed simultaneously, the program saves each as a separate document, denoted by time and date. Curation and currency of documents was thus a major concern. For a future project, the team would most likely look to use Google Docs for the scripting process and use Dropbox only for items which remained in a fixed format, such as the beta versions of recordings.

Camtasia Studio was well suited to its task. Its suite of editing tools; ability to enhance end-user understanding through tools such as a Table of Contents and Closed Captioning; the functionality of the zooming and highlighting and the multiple output formats all added value to the final product. In terms of learning curve, Techsmith (the creators of the software) provide a Learning Centre with short screen casts covering all aspects of using Camtasia. This allows a self-directed learner to engage with the content as the need arises, learn focused packets of information and then practice the skills. Scope also exists to explore other avenues for synchronous and asynchronous support (such as forums or chat) which are aligned with each institution's existing reference support. In many ways, the principles evident in the Techsmith Learning Centre provided a catalyst for the teams' own approach to design and implementation of the referencing presentation.

**What does the future hold?**

This project, whilst producing a tangible deliverable, is very much still in an initial phase. Whilst both universities have experienced a high number of hits to the tutorials in the months following the launch (Swinburne has recorded 2,365 unique views between August and December 2011), this is not sufficient data by any measure to discuss possible impact and acceptance. Merely providing open access to the tutorial is insufficient; it must be practically used within context to have any value (Brown *et al.*, 2008), and this will require awareness raising and partnerships with Faculty staff for a successful integration into course materials and assignment documentation. Likewise, it it hypothesised that this will be used primarily as ‘just-in-time’ learning support - but longitudinal usage data will be needed to support this assertion.

Previously, it had been proven that the USQ version of the tutorial was being used by other tertiary institutions and TAFE colleges due to its’ open nature, and those educational institutions will be invited to participate in a formalised feedback process. Likewise qualitative data will be sought from both on- and off-campus students to build a picture of the user experience. Furthermore, strategic alignment between the tutorial and the use of plagiarism detection software will be sought. This last point especially is of interest as other studies (Dale, 2007) have shown that
students exposed to plagiarism detection software then actively sought further assistance and information relevant to their referencing style.

Changes to institutional webpages and database providers will necessitate changes to the tutorial, given the visual nature of the screencasting software, which presents the project team with issues concerning sustainability (Gravatt and Gill, 2010; Mikkelsen and Davidson, 2011). However, the segmented nature of the recording and production process does mitigate some of the workload as individual examples can be re-shot, inserted into the master production file and a new version uploaded without the necessity of revising the entire tutorial. Whilst Gravatt and Gill (2010, p. 70) refer to ensuring a level of “future proofing”, this is simply not an effective design paradigm. Instead, the project team would argue that building sustainable workflows supported by the production design allow an institution to revisit portions of the electronic media, adding or editing as required by the external environment.

The driving forces of this external environment have primarily been changes in information formats and the growing move to the ‘communitisation’ of information resources, which will necessitate the diversity of referencing styles to “be reformed, unified and simplified” (Gill, 2009, p. 24). Notionally, citation styles have a large part to play in this evolving information ecosystem, and users of community and social media already use the basic precepts of referencing – whether they are quoting and attributing a message on an online forum or re-Tweeting a message which includes the previous users hashtag. The challenge for higher education therefore, is to reframe referencing so that it’s relevancy and currency are linked to existing student behaviour – a touchstone which allows lecturers to take students from the known into the unknown; to recognise and validate existing skills whilst simultaneously using this as a platform to apply these skills in novel situations.

In this type of environment, the project team have attempted to produce a sound, openly accessible method of teaching (and providing referencing support) for a diverse cohort of students. Whilst this is the first phase of a continuing project, further data is required to quantify and qualify the student experience. However, the pedagogical and technological design of the tutorial have thus far met the project aims, and given both institutions a tool to frame referencing in a positive educational light.

The rapid uptake and use of the Internet by students, particularly those born after 1985, has some authors noting what seems to be a shift in the concept of authorship as a whole. This shift has repercussions for how students apply (or fail to apply) citation styles. Gail Wood, (Chair, Academic Grievances Tribunal at the State University of New York Cortland campus), comments that:

> Whilst I have seen outright, flaunted dishonesty, more often than not I see a disparity between the values of academic honesty espoused by the institution and its faculty and the student who has committed an act of academic dishonesty. This disparity is not because students are more dishonest or lack a moral center, but that their experiences - particularly with Web-based transfer of information - has led them to form different attitudes towards information, authorship, and intellectual property (2004, p. 237).

How the current generation of students views authorship of information accessed via the Internet is different to other generations. How information is accessed has changed and will continue to change in the future. Any form of instruction in citation styles has to be updated regularly to accommodate change--once every couple of years will not suffice. It is interesting to ponder, when reflecting on insights and arguments from those such as Wood (2004) and Gill (2009), what citation styles may look like if the broader community also changes its understanding of authorship.
Additional Notes
The Swinburne version of the presentation can be viewed at: <http://www.swinburne.edu.au/lib/videos/tutorials/harvardguide/>.

List of references


