



## Using ePortfolios to combat plagiarism

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Plagiarism is a growing issue of concern for the academic and wider community. Much is made of plagiarism detection software but it is widely held that detection software cannot be the only, nor even the principle preventative measure. ePortfolios are growing in popularity in universities and professional organisations where ePortfolio presentations allow users to present collections of evidence that support a particular intent; from job application to professional accreditation. Within well designed assessment, eportfolios can be used to present the outcomes of learning as well as the process by which that learning arose: the plans, draft notes, feedback comments, peer reviews, sketches and research blog. Some systems allow these learning artefacts to be presented as links from a narrative account; an example of meta-reflection, organising the individual items into a story of learning. This paper principally concerns a work in progress where eportfolio developers are working alongside academic colleagues to align plagiarism-suppressing eportfolio approaches with plagiarism detecting services to militate against cheating and improve learning.

### Plagiarism as an issue in higher education

Since computers have been in common use awareness of Plagiarism has begun to dominate thinking in some academic quarters as well as beyond universities. Press coverage of high profile incidents including the British government's inappropriate use of the work of Ibrahim al-Marashi in its Iraq intelligence dossier (BBC, 2003) and the BBC's Dr Raj Persaud plagiarising material for his widely published work (BBC 2008), has led to increased awareness amongst both the academic and wider community.

Harvey and Robson (2006) suggest that a significant percentage of plagiarism is accidental; either because of lack of understanding or lack of preparation. Students simply do not understand they are doing something wrong when they quote or use other work without referencing.

Based on the findings of the final report for the JISC Electronic Plagiarism Detection Project (Chester 2001) JISCPAS (2006) posited a number of reasons why students plagiarise work:

- Ignorance
- Lack of time
- Improving Marks
- 'Irrelevant' courses
- 'Disinterested' lecturers
- Beating the system

If plagiarism occurs as a result of students not fully understanding what constitutes plagiarism, or because students lack appropriate study and time management skills to produce their assessed work, then appropriate opportunities and activities should be provided to develop these skills. Most universities offer a range of support to develop student study or learning skills, including specially designed modules; tipsheets and web based resources. A typical example is the University of Reading's support website which suggests "...accusations of plagiarism may result from carelessness, poor practice, or lack of understanding". It advises students that ... "avoiding unintentional plagiarism means knowing how and when to reference, understanding how to get the balance right between your own arguments and your research, and being meticulous about noting details when you are doing your research" (Reading 2008).

Harvey and Robson (2006, p5) offer

.... the majority of plagiarism is committed by accident and unintentionally. Thus if steps can be taken to support these students (teaching of academic skills, design of assessment and use of JISC) then we can be assured that any remaining plagiarists are 'committed' and

plagiarise in the full knowledge that it is wrong and are fully aware of the consequences of being caught.

This paper offers that the use of ePortfolios within appropriately devised curricula can develop students understanding; provide suitable support and 'surface' the process of learning rendering plagiarism of the product much less likely – or more obvious!

## Essay banks and cheat sites

For those who are committed to the idea of cheating a number of resources are available to support their activities. Essay banks offer vast volumes of material for students to draw upon. Typically sites may offer over 100,000 individual essays for students to purchase for a few dollars. Many claim that the essays they store have been checked by plagiarism software. JISCiPAS[SAMS1] in the UK commissioned an evaluation from NCC Group (NCC Group 2007) to look at services offering plagiarism checked essays. The report lists 45 sites offering essays for sale with details of the type of checks conducted by the suppliers. It is reasonable to suggest that students who purchase essays from sites advertising 'plagiarism check-proof' will be reasonably confident that they will not be detected by institutional plagiarism software.

In addition to the use of essay sites, students may choose to commission someone to write their essay for them using contract cheating sites. There are a number of options for the commissioning process including bidding sites where users post their requirements and potential authors submit proposals. There are also dedicated sites with online quoting systems. UKessays.com provides a simple quote system where users can enter details of the length, level, required grade and when the essay is required to receive an instant price quote! The UK's Guardian newspaper (Guardian, 2008) highlights what it calls an alarming level of contract cheating; though it goes on to suggest that the quality may not always be at the level the buyer expected.

With increasing levels of sophistication and the great lengths to which some students are prepared to go, there is a challenge for institutions to prevent all but the most determined cheat.

In the UK the problem has been taken very seriously with the agency responsible for supporting the adoption of technology within the higher education sector, JISC, developing its own plagiarism advisory service for the sector. The JISC Internet Plagiarism Advisory Service (iPAS) advises and supports a wide range of activity relating to plagiarism prevention.

If assessment processes consider more than the end product, for example a mini-portfolio containing research notes; feedback; draft essay; action plan and the final work, it is more difficult to simply plagiarise.

## Combating the problem with ePortfolio based activity

The iPas service has created guidance for institutions and their staff to reduce the problem of plagiarism and have identified assessment design as an important area to address.

Drawing upon the work of others (Brown & McDowell, revd Duggan 2003) the service has developed a seven point guide for practitioners (Northumbria Learning Ltd, 2007[SAMS2]). Each of the points is extracted and extended below.

These assessment processes are typically well supported within the toolsets of most ePortfolio systems. The following examples will be used to suggest how these 'plagiarism-suppressing' assessment activities can be facilitated within an eportfolio environment where multiple 'presentational eportfolios' can be created.

*Point 1. Assess the process* - Asking students to submit work-in-progress reports, review notes, drafts or revisions are all strategies that will help students to manage their time more effectively and avoid any last minute panics that might lead to plagiarism.

ePortfolio systems generally allow users to submit 'developing' work so tutors can monitor progress and gain insights into how an individual's work is developing. This is done by the student submitting the work to an assessment area early in the assessment process which affords the tutor a window on the submitted work. As the work evolves the tutor can see the progress a student is making and can offer support and guidance. The inclusion of an 'essay action plan', for example, compels students to develop

ideas for their assignment as well as articulating a strategy for how they are going to complete the work. Putting effort into developing an action plan and then developing an essay in line with that plan helps ensure work is done in a timely fashion and helps prevent last minute panics which may lead to plagiarism. Systems that also include a timestamp on every item created also allow a tutor to see when each element used in piece of work was added to an essay 'presentation portfolio'. An essay-focussed eportfolio might contain draft ideas; an action plan; research notes; the completed essay and a reflection on the resultant grade and feedback.

*Point 2. Personalise the assessment* - Adding context to an assignment by inviting students to draw on their own experience or select a personally relevant research topic within a theme, or specific framework will encourage original work.

ePortfolio systems are often designed to be reflective areas where students can record their own experiences. The design of the assessment activity itself needs to encourage this type of reflection as part of the process. Additionally reflections or process descriptions can be added over time. Where ePortfolio systems 'time stamp' entries it becomes impossible to falsify a temporal process.

*Point 3. Harness the research process* – Requiring students to provide written reviews or photocopied extracts of the sources used “is helpful in showing students what plagiarism means and how to use sources properly.” (Brown & McDowell, revd Duggan 2003)

A common element in the final portfolio submission is a research section where students can include details of their planning activity and research or they may choose to include a research blog as well as records of meeting they have attended if group work has been a part of the process. Again 'time stamping' provides an additional level of authenticity.

*Point 4. Emphasise the value of analysis* - Design assessments that move beyond asking students to find the 'right answer' to requiring them to analyse, evaluate and synthesise the work of others.

Again the reflective process is designed into a portfolio system and students should be encouraged to use these processes to support the assignment processes. Some systems may provide you with 'templating' tools. These can be used to guide the student through an analytical process; recording their entries as they go along and submitting this as part of the overall assignment.

*Point 5. Use peer assessment* - “There is no mileage in cheating or plagiarism when it is your peers who are monitoring your performance and you have little chance of pulling the wool over your peers' eyes!” (Brown & McDowell, revd Duggan 2003)

Peer review can be established in a number of ways both formally and informally within eportfolio systems that support sharing; commenting; collaborating and peer review. Students can be encouraged to review each others work through shared permissions on an ad hoc basis or for more structured peer review activities students can submit their work to a peer review area where comments and suggested grades can be posted by others. The templates described above can also be used to help 'scaffold' the kinds of reviews that less experienced learners might need to record.

*Point 6. Create a supportive environment* - Use formative assessment tasks to provide regular feedback and help students understand that learning from their mistakes is a valuable part of their academic experience.

One of the key advantages of web based technology is the speed with which communication can occur. With traditional paper based work it may take a minimum of a week for a student to receive feedback. The speed with which online systems can handle this can make a difference and help the tutor develop a knowledge of the individual students in the process. A JISC InfoNet Good Practice and Innovation case study from the University of Wolverhampton highlights how the use of an eportfolio system helped develop a supportive environment:

The students are highly positive about the use of the e-portfolio to share experiences and gain feedback. Given that none of the use of e-portfolio in these two groups is associated with summative assessment it is significant that all but 3 out of 45 students across the two cohorts are sharing clinical practice blogs or webfolios. Staff comments are that they know

their personal students better as a result of more interaction through the sharing of regular journal entries. (JISCinfontet, 2008)

Finally JISCiPAS recommend changing elements of any assignment brief. Clearly using different criteria year on year is more likely to reduce the ease with which work can be plagiarised.

*Point 7. Discourage the use of pre-written assignments* - Changing elements of the assessment task each year or specifying particular types of resources that must be included in the analysis reduce the possibility of submission of a paper downloaded from an essay bank.

## **A blended solution using ePortfolio with plagiarism detection: Work in progress**

ePortfolio systems typically include options to create and link action plans, research notes and peer review; they provide tools for narrative learning accounts and allow viewing and comments by others. Utilising these tools in well designed assessments potentially presents a more difficult route for cheats. However, no single solution is going to stop all attempts at plagiarism. To give a higher level of confidence in the originality of eportfolio submissions PebblePad has developed a web-service linking it to the TurnItIn plagiarism software tool. This web service allows eportfolio submissions to be submitted directly from PebblePad's gateways (the assessment area in the system). This function means that a tutor can submit every element, in every eportfolio presentation on an assessment gateway as part of a single 'request' for checking. The elements, or assets, can include files; internal assets such as action plans, meeting records and reflections; and comments from other people – these can be linked at any level and all are checked by the service.

Once checked a report is generated listing all items together with their originality rating. Assessors can access a detailed report and view any item of concern by clicking on it in a list. Importantly, permission may be granted to students to allow them to run the same check to allow them to evaluate their own work and help them develop an understanding of the issues surrounding plagiarism.

Currently this integration facility is work in progress and being trialled with students and faculty to ensure that eportfolio processes do not cause issues with the plagiarism detection system – or undermine the inherent value of the eportfolio itself. There is significant interest amongst the eportfolio-using community in this work; it is widely anticipated that using the JISCiPAS recommendations and plagiarism detection software together will help to make it much more difficult to plagiarise and, more importantly, ought to lead to improved learning opportunities.

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