



Google Drive – The free all-in-one platform for teaching and learning

Case Study of Innovative
Practices for Teaching
and Assessment in NI FE

Google Drive – The FREE all-in-one platform for teaching and learning



Google Drive provides a free platform for lecturers to deliver content to students and for students to produce, store and submit their work for assessment with minimum fuss.

In many cases it can remove the need for:

- Blackboard virtual learning environment (VLE) because it allows access to all notes from the student drive;
- students to bring USB storage devices to college; and
- Microsoft Office software to be installed on college PCs.



Google Drive has many advantages, some of which are:

- Free browser-based word processor, spreadsheet, presentation and drawing applications.
- Free storage of files and folders just like a USB drive, except there is no need to save.
- Everything is saved continually so no more lost pen drives. When students are finished working they can simply close the browser and walk away.
- A file sharing facility allows students to share assessment work with lecturers; no more paper submissions necessary.
- Marked work is instantly returned to students, giving much more time for rework.
- File sharing allows lecturers to share content with whole groups of students using a single click.
- Student work is available for lecturers to see at any time, they can watch progress as students type and this means no more missed submissions.
- Lecturer's notes, handouts, web links, YouTube videos etc. can be built into the coursework templates, making storage platforms such as Blackboard unnecessary.
- Google Drive can be accessed from almost any web connected device including most smartphones, making bring your own device (BYOD) a reality. Colleges only have to provide connectivity.

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Background

Google Drive allows users to create, store and share files on devices with an internet connection. This system was trialled and shown to be hugely successful within the Electronics and Computing Technology Department at Belfast Metropolitan College (BMet).

It was launched on 24 April 2012 and Joe Anderson, Power Engineering lecturer at BMet, learned about it soon afterwards. He was intrigued about the possibility of being able to create and store content from anywhere, on almost any device, then share it with students over that same system. As coursework volume increases, the need to be able to access all student work has become more important. This means the traditional paper-based system of student submission begins to look and feel dated and inefficient. Both students and lecturers much prefer this approach to using pen drives and paper copies.

Developing the innovation

Academic year 2012/13

- Google Drive was trialled on a single unit within part-time HNC Electrical Engineering. Students made Google accounts for BMet and received assignments via cloud. Assessment was still in the print and submit format with written feedback.

Academic year 2013/14

- After Joe mentored colleagues who shared delivery, the system was trialled on all four units across the first year part-time HNC programme.
- A grading and feedback front page was introduced for assessment documents. This enabled a whole screen view of class progress.

Academic year 2014/15

- As a full time lecturer, Joe decided to deliver his entire timetable of classes using the system. This meant using Google Drive to send coursework to students, issue formative and summative feedback and deliver all teaching materials.
- Electronic notebooks were also created; students could load any learning material into these. The e-notebooks contained links to learning resources – this effectively removed the need for Blackboard.
- The learning resource links point to a folder on the lecturer's drive that students can access. This meant that lecturers could photograph student practical work, whiteboard images and excerpts from books etc. The photograph could then be sent to the folder with a few clicks of their smartphone or device. Students then had instant access to the material.

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Evaluation

Feedback from students on their experience with this paper free approach is **close to 100%**. From the lecturer's perspective, Joe stated he would never go back to the paper-based system and neither would his colleagues who trialled this system. He said the flexibility, convenience and efficiency improvements offered by Google Drive more than make up for the time it takes to familiarise yourself with it.

System overview

All student work can be stored within the lecturer's Google Drive in a Windows-like folder and file structure. Lecturers can review work at any time and add comments to files. After work is assessed it can be easily sorted by editing file names. Work that needs attention is automatically sorted to the top.

The first page of each document is shown as an icon within Google Drive. This allows an easy overview of whole class progress, co-ordinators can also see this.

Advantages to college

- Once lecturers are familiar with the system they find delivery and assessment much more efficient.
- Google Drive is paperless and everything is easily accessible and organised.
- It costs nothing to install, and accounts for both staff and students are free.
- A single click will download an entire class's work into a zip file, for emailing to external verifiers.
- Students are happier and more productive, as previously mentioned student preference for this system is close to 100%.

