

## **Evaluating the Use of Audio Smartphone Apps for Higher Education**

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# Evaluating the Use of Audio Smartphone Apps for Higher Education

### Anne Nortcliffe, Andrew Middleton and Ben Woodcock

Abstract

Smartphones with audio apps are able to support recording and distribution/sharing of learning conversations more effectively as customisable and have integrated functionality.

Student Reflections of an Academic using Smartphone for Feedback

In response, "Is the feedback of good quality?" 80% students agreed or strongly agreed.

In response to the timeliness of the feedback, "Was the feedback provided quickly enough to be useful?", 93% students agreed or

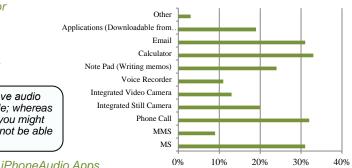
strongly agreed

"It is a very interactive way of getting feedback, nice and quick, you can play it again and again"



"It's easier to save audio feedback in a file; whereas a bit of paper - you might file it away and not be able to find it again." Students using Audio Apps

The majority of student survey respondents students own an *iPhone*. However only a small percentage, considered or are using audio apps for learning.



|                         |   |   | IP.   | PhoneAudio App  | 5 0%   | 10% 20%   | 30% 40%   |
|-------------------------|---|---|---|---|--|---|---|
| Audio app               | Usability                               | Quality   | Interoperability  | Functionality   | File Management  | Distribution  | Conclusion Application Suitability  |
| Temo                    | Easy to use:                            | Indicates the level of sound.   | QuickTime /iTunes/ iPhone.  | Record, MMS, and<br>email small files   | File naming: Pre-defined labels Produces large m4a files.  | Share via email/<br>MMS, but 5min audio<br>are too large to email.  | Quick audio memory notes to oneself.  |
| Smart Recorder          | Fairly easy to use                      | No sound level indicator.   | QuickTime/ RealPlayer/<br>Media Player/Other<br>Smartphones   | Append to recording.<br>Variety of distribution<br>methods. Add tags<br>and photos along the<br>recording timeline.             | Audio: Wav file, Images:<br>JPEGs. Can amend Tags<br>and filenames.Aif file<br>format on the iPhone.<br>Exports as Wav file and<br>JPEGs       | Export the finished file via wifi sync, SyncDocs, email, upload to Box.net, Facebook or Twitter account.      | Adding a narrative to images, i.e. storyboard for assessment brief, or feedback on a visual medium student submission.  |
| Audio Boo               | Simple to use                           | No sound level indicator  |   | Record Podcast and<br>broadcast to public via<br>audioboo.fm.   | Can upload Podcast to audioboo.fm.   | Audioboo fm.  | Audio record and broadcast public lectures.   |
| iSaidWhat?!             | Simple, record, and intuitive.          | Mic sensitivity. Can<br>share files in low or<br>high quality. 1 min<br>low quality file is<br>1Mb. | QuickTime/ RealPlayer/<br>Media Player/Other<br>Smartphones   | Records and append<br>to recordings. Few<br>seconds of audio<br>snippets can be<br>selected and cut from<br>audio files         | Large Wav files. Upon saving the user is prompted to name the file.  | Files and snippets<br>can be shared by<br>email, wifi sync,<br>Facebook and Twitter<br>accounts.              | Sample and share key<br>messages with students, for<br>example assessment brief<br>instructions. or Key generic<br>feedback. Also for students<br>to record lectures. |
| AudioMemos<br>Free      | Easy to use and intuitive               | Mic sensitivity.<br>Highest quality<br>1min is 3MB.   | QuickTime/ RealPlayer/<br>Media Player/Other<br>Smartphones   | Can add bookmarks<br>whilst making a<br>recording. Can<br>overwrite audio files<br>or append recording<br>to file               | Auto Name for file is<br>default as date and time,<br>just need to append<br>subject. Large Wav file.  | Send via email or to a server cloud.  | Audio record student<br>questions and answers<br>whenever they occur in<br>tutorial or lecture. Share via<br>server with students                                     |
| iProRecorder<br>on sale | Tactile controls mimic's iPod controls. | Can vary the quality of file. ½ hr low quality audio is 38 Mb.                                      | QuickTime/ RealPlayer/<br>Media Player/Other<br>Smartphones   | Can easily add book marks.  | Name files.<br>Large Wav file.   | Share via email, wifi sync. Can only share short files.   | Ideal app for students to record entire lecture.  |
| Audio Notes             | Recorder intuitive, but settings not.   | Can vary quality<br>f1min files is 520Kb  | iPhone 4 or iPhone with OS<br>4. Format CAF requires on<br>PC/Mac to use QuickTime.<br>Will not play on Android<br>Phone. | Can append written<br>notes and information<br>to file The<br>recordings are geo-<br>tagged. You can<br>password protect files. | It supports file naming. Colour coding helps you to organize the recordings. Uses m4a or CAF file format.                                      | to PC or Mac using iPhone explorer  | Recording narratives especially where it is useful to identify locations. E.g. Inductory tour of campus.  |
| Recorder Pro            | Easy to use,<br>and record.             | Audio quality<br>8KHz, 22kHz, or<br>44.1kHz. ½ hr low<br>quality AIFF file<br>can be emailed.       | Playable on QuickTime and<br>RealPlayer 8 Plus. iPhone<br>3 and 4. Will not play on all<br>Android Phones.                | Append to recording<br>new recording. Re-<br>write file and bin file.   | Good file management<br>features, i.e. name<br>/rename files and folders<br>possible to name and<br>rename files. Audio<br>format Aiff or CAF. | Share by Email, fully integrated to email set up in the phone and users contact details.                      | Audio record project<br>supervision formal, informal<br>and semi-formal, email to<br>the student.   |
| VR+                     | Easy to use.                            | Audio quality<br>32kbps,<br>64kbps,128kbps,<br>or 192kbps, small<br>file size.                      | Playable on QuickTime,<br>RealPlayer and Media<br>Player. In principle most<br>Phones and MP3 players.                    | Auto voice activation facility.   | Files can be categories by icon, but limited in number of icons provided. Audio format MP3.  | File can be shared by<br>email, Facebook,<br>twitter, MySpace and<br>podcast using the<br>VR+ Online service. | Ideal for academic to<br>podcast reflection of sample<br>of class assessment 24hrs<br>after assessment<br>submission.   |

