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Letters to Editor

Making Small Talk – Audio MP3 Files Made More Portable

Stephen McClean

School of Biomedical Sciences, University of Ulster, Coleraine, Co Londonderry, BT52 1SA.

A recent article by Merry and Orsmond (2008) in this journal has highlighted the provision of student feedback as audio MP3 files. The authors report positive student engagement with this mode of feedback delivery, but highlight one drawback as being large file sizes (up to 11Mb) that under certain circumstances prohibit sending by email. In some cases feedback had to be sent to students on CD. The authors speculate that adjusting recording parameters may be one way of overcoming this problem but were wary to do should the lower quality detract from the student listening experience.

The authors used Audacity software (audacity.sourceforge.net) to record the files and Switch (nch.com.au/switch) to convert the recorded files to MP3. We have used the most recent version of Audacity (version 1.2.6) to perform both tasks and produce MP3 feedback files of around 1.5Mb and 3.5 minutes duration that are ideal for emailing. Merry and Orsmond did not specify the exact time duration of the audio feedback they used, but in our experience, 3-5 minutes allows for adequate verbal feedback on an essay or literature survey. To output MP3 files the user must download the LAME MP3 encoder for Audacity; freely available from the Audacity download page (audacity.sourceforge.net/download/windows). Installation is a one-off operation which may be easily achieved using the clear instructions on the website.

Once the audio has been recorded using the default settings in Audacity, MP3 files may be exported without having to resort to an external programme such as Switch. Under the “Edit” menu of Audacity, it is possible to access the “Preferences” area and change the “MP3 Export Setup”. Here, the bit rate may be changed so that a lower bit rate lowers the final output quality thus producing an overall smaller file size. We have used bit rates ranging from 32 to 56 Kbps with acceptable audio quality results. In our experience 3.5 minutes of audio feedback exported at 56Kbps results in a file size of around 1.5Mb. For longer duration feedback, 32Kbps is still acceptable. In fact, if the user saves the Audacity project file with the original high quality audio, it is possible to return at a later date to output MP3 files of varying quality by changing the bit rate settings. For consideration, CD audio quality is around 128Kbps and such a high bit rate is excessive when speech-only audio is used. Once the preferences have been set the user simply selects “Export as MP3…” from the file menu.

We evaluated students’ opinions of MP3 feedback, paying particular attention to their views on the MP3 file quality. One cohort of MSc students was given audio feedback output at 32Kbps. The files ranged from 2 – 4 minutes in duration equating to 690 – 930Kb in size; therefore very portable by email. In the evaluation students rated audio quality from 8 to 10/10 with no adverse comments on the technical aspects of providing feedback as MP3 files.

One cohort of final year undergraduate Biology students were offered formative feedback by MP3 files output at 56Kbps. The files ranged from 2 – 3.5 minutes in duration equating to 840Kb – 1.4Mb in size; therefore still sufficiently compact for emailing purposes. There were 20 students in the cohort overall; 10 availed of formative feedback and 7 responded via questionnaire with their evaluation of the process. Audio quality was given a score of 10/10 (n=6) and 9/10 (n=1), again with no adverse comments on the technical aspects of this form of feedback.

In both cases above MP3 audio quality was not considered to be an issue. By considering the output quality the issue of large file sizes is therefore overcome.

One other solution to large audio file sizes is the use of packages such as Wimba Voice Tools (www.wimba.com/products/wimbavoice/) which may be incorporated into WebCT or other VLEs. One notable feature of Wimba is the "Voice Email" tool; installed on the author's VLE but not evaluated as yet. In the WebCT environment this tool allows the academic to choose from the class list the student to whom the audio file should be sent. The academic then records audio feedback using the Wimba recorder and once complete an email is sent to the student containing a link to the recorded file. This circumvents the emailing of an attachment and the student may download the file to their computer for listening.

Both of the workarounds mentioned above may be used to overcome the problem of emailing large files. It is hoped that these solutions will augment the existing excellent work in the area of audio feedback and make the process more accessible.

Corresponding Author
Stephen McClean, School of Biomedical Sciences, University of Ulster, Coleraine, Co Londonderry, BT52 1SA. Tel: 028 7032 4406 Fax: 028 7032 4965 Email: s.mcclean@ulster.ac.uk

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