Audio Feedback for Maths Tests: Part 2

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OVERVIEW

- Method
- Group 1
- Feedback
- Group 2
- Feedback
- Conclusions

METHOD

- Write text summarising each student's performance

Percentage Range	Opening sentence
0 - 14	An extremely poor piece of work
15 - 29	A very poor piece of work
30 - 39	A poor piece of work
40 - 49	A fair piece of work
50 - 57	A reasonable piece of work
58 - 64	A good piece of work - well done
65 - 79	A very good piece of work - well done
80 - 99	An excellent piece of work - well done
100	A perfect piece of work - well done

METHOD

- Record digital MP3 file using Sony^{R} MP3 IC recorder (ICD-UX200)
- Upload files to PC via USB connection
- Check and re-label
- Upload to VLE
- Selectively release each file

METHOD: Timings

ACTIVITY	TIME REQUIRED
Writing time per student	3 mins
Recording time per student	3 mins
Uploading to PC per file	1 mins
Uploading to VLE per 10 files	5 mins
Setting viewing privileges per file	1 mins
Total Time for 60 students	510 mins
Total Time for 54 students	460 mins

Group 1

- 60 first year students studying Foundation Mathematics
- About 30 words per file
- Audio files available before tests returned
- Test scripts returned
- Audio feedback provided for 3 tests

Example Feedback

A good piece of work – well done! The Cartesian arithmetic was good. When converting to polar form you MUST sketch the Cartesian number. The angle must be in radians for exponential form. Transposition needs some revision.

A very good piece of work and nicely presented – well done! One or two silly mistakes in places. You need to revise classifying stationary points and integration by parts and by substitution. Question 3 was perfect and Question 4 was mostly correct – well done!

A reasonable piece of work overall. You plotted the graph the wrong way round – y is the vertical axis and x is the horizontal axis. You made a few silly mistakes in the vectors questions and you need to revise the scalar product. The vector product was perfect. Your overall mark for the test was 50%

Group 1: Student feedback

- It was quite good because she explains where you went wrong and where you've done well
- It's good because it's private
- Sometimes you just kind of want to know your mark
- It was comprehensive and clear

Group 2:Test 1

- 54 second year students studying Intermediate Mathematics
- About 30 words per file
- Audio files available before tests returned
- Test scripts returned to the students
- Audio feedback provided for 3 tests

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Example Feedback

An excellent piece of work – well done! You made a couple of silly mistakes, including changing 42 to 44 in the final question which meant that the quadratic didn't factorise and had complex roots! The transpose of a matrix is the first column written as the first row and the second column written as the second row and so on. Questions 2, 3 and 4 were perfect.

A very poor piece of work. you need to revise the differentiation rules and writing hyperbolic functions in exponential form. The small changes question was mostly ok but you dropped a minus sign. I think you need to revise solving simultaneous equations which you need for maxima and minima of surfaces. Please do not leave tutorials early.

A reasonable piece of work. Graphs need scales and axis labels! If the question asks for 3 decimal places then that is what you MUST give in your answer. In question 4 and question 5 you must have made errors entering the original equation.

Group 2: Student feedback

- Gives information on how to improve, and encouragement
- It may only be 30 seconds long but that can make a massive difference
- You can listen more than once, ideally with your script in front of you
- It’s more personal and it means more

CONCLUSIONS

- Audio feedback has a powerful impact
- Audio feedback more useful if the script is returned as well
- It is more personal and means more to the students
- I will “keep doing it!”