Examiners' Report/
Principal Examiner Feedback

January 2018

Pearson Edexcel GCE
Producing and analysing (8MT0) Paper 04

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Summer 2018
Publications Code 8MT0_04_1806_ER

General Introduction

Producing and Analysing

This is the first year of this paper. It is similar in design to the legacy A2 paper 6MT04, but without the formal music theory questions that are no longer part of the specification. The range and level of knowledge and skills assessed in the tasks and questions is lower than the legacy A2 paper.

There are 6 questions. Q5 is a mix task in 6 sections. Q6 is an evaluation of a recording or producing scenario. The other questions contain a mix of questions and audio or midi production tasks. There are three audio or midi production tasks in addition to the final mix.

The paper total is 84 marks. It was rare to see papers with total marks less than 20 or more than low 60s.

In particular, the essay question was rarely into double figures. Centres will note that the marks are split between AO3 and AO4. Only four marks of the 16 are awarded for AO3 answers, the rest are for the evaluative AO4 answers.

Many of the audio and midi production tasks were handled well by a good number of students. The drum timing question and cleaning up the noise of the vocal track were least successful.

Where parts are not soloed, metronome left on or additional effects/processing added to that required in the question, the work cannot be assessed fully. The mark scheme shows approaches for each task.

Another common audio/MIDI problem was not lining up the part to start in the correct place. This is always a clear instruction in the exam paper. In some cases where students had used time-stretch or changed the tempo, this created additional sync problems. If a process such as this is not required, it should be avoided.

Where additional audio files are received or files are placed in the incorrect order on the CD, it can be difficult for the examiner to determine which task is which. It is recommended that all CDs are checked after burning and before submitting to make sure they contain what is intended. As this is the responsibility of the teacher or technician, it is hoped that there would be fewer errors.

This report should be used in conjunction with the published mark scheme.

Q1. 10 marks. Drum edits 3 marks.

(a)(i) Nearly all students got 2 marks.

(a)(ii) Full range of marks reflecting student ability.
No spill, Quantise, Pitch of samples and no mics etc. were the most common responses. Few students considered the producing possibilities of creating rhythmically complex parts, control over timbre.

(a)(iii) Not many scored 3 marks. Often 1 or 2 marks and some confusion evident. This seemed to suggest that not many student have spent time learning to set up sampler instruments or studying how samplers work.
Volume and note range were the most common answers, with many students putting simply velocity which did not get a mark. Velocity layering/switching would have. A number of students put responses related to sequencing e.g. tempo, BPM; or synthesis e.g. filter, envelope settings.

(b) Full range of marks. Many students were able to correct the timing by slicing the part in the correct places and moving the sliced section in time. The better students did a faultless edit with no glitch at the join, and correct timing in bar 31.

Common problem was getting the timing correct of the moved audio, or not realising that the drums were back in time after bar 30 beat 1 and the part need to be sliced after the cymbal / before the roll to preserve the timing for the rest of the song.
Some students used time-stretch which is an unnecessary and complex approach.

Q2. 14 marks. Bass MIDI edits 9 marks.

(a) Quite often answered well. Incorrect pitch/octave was the most common problem. Some students used synth bass sounds which were inappropriate. It has to be a bass guitar patch with decent low end content and some string sound evident.

(b) Pitch errors were very common, often stemming from the student copying from Bar 20 and not changing the pitches.

(c)(i) The majority of students stated that the velocities were different. Fewer identified the on beat / off beat pattern of accents.

(c)(ii) Less than half the students answered correctly. Of those who did, the majority related to quantizing rather than note length.
(d) Mostly handled well. Sometimes the pattern of velocities was incorrect, though altered. No change was made in a few cases.
(e) A few students wrote about band pass filters or similar rather than identifying the specific bands from the picture. Not many got two marks for this even though the band either side of 2kHz was credited in the mark scheme.
Q3. 17 marks. Vocal edits 7 marks.

(a) Students clearly found this challenging, few getting a good edit. Cutting the D of mind was a common problem. It is a tight edit. Students need to expand the screen and use short fades to get a clean and complete edit. Inaccurate edits leaving noise or glitches at the end of the paper rustle and the start of the cough were also common, and need the same approach.
(b) Often good. Some students just made it louder, or applied incorrect EQ. In some cases EQ was applied to other parts of the vocal as well.
(c)(i) Most knew it was a jack. Additional mark for noticing it was TRS, stereo or balanced only achieved by a few.
(c)(ii) Headphones was the most common correct answer. Many thought this lead could be used to plug a guitar or instrument into amp/desk. None said insert cable. A few recognised it can be used for many balanced lead applications.
(d)(i) Many students correctly identified this as XLR. Cannon is also acceptable but not seen. Common errors were MIDI cable, or simply 'female'.
(d)(ii) The most common mark was gained for referring to ground. Not many students knew about two cables carrying identical signals, one being phase inverted, then phase reversed at the end of the run.
(d)(iii) Faulty connection or damaged cable was the usual answer. Some got interference from other devices, and some students recognised the very common equipment issue of ground loops causing hum. 2 marks was uncommon in this question.

Q4. 9 marks.

(a)(i) Nearly all got 2 marks.
(a)(ii) Less than half correct. Pitch or some reference to frequency was a common error.
(b)(i) Many did not succeed in identifying the correct bars. Sometimes students were out by one bar indicating they had the part in wrong position in the song. Often if they got one right they got the other. Some students gave a range or bar numbers, or a bar/beat combination. This is not asked for in the question.
(b)(ii) Many students gave generic recording noise problems which did not gain credit. This question requires students to apply knowledge to an unfamiliar situation. Where students did get marks, motor noise was a common response. Fewer managed to state that wind or turbulence from the moving air could be an issue.
(b)(iii) Few students got two marks. 'Turn the gain up' was a common response but his is too vague as it does not refer to a specific stage in the gain structure or signal path. Using a pedal was one of the most common successful answers. A surprising number of students thought damaging amps / speakers was a suitable method.
In a few cases this included some alarmingly dangerous suggestions such as cutting wires or damaging components inside an amp.

Q5. 18 marks. Final mix in six sections, 3 marks each.

(a) Around a quarter achieved three marks on this question. Many achieved some gain reduction but still had uneven dynamics. Quite a lot of students

achieved no gain reduction at all. Some clumsy automation examples were seen but these were few.

(b) About 1/3rd managed this successfully. The delay time was usually correct. The level of the delayed signal was often too loud on the first repeat, or the repeats continued into bar 30. In some cases this was not attempted.

(c) A good proportion of students managed to choose a suitable reverb length. The amount was the common problem, vocals being too wet or even completely swamped. Short reverbs occurred but only occasionally. No reverb at all was rare.

(d) Tremolo speed was often correct. Not all managed to achieve a mono tremolo. It was very common that tremolo was only during bar 30, not 30 and 31 as the question required. Sometimes tremolo was applied to other sections of the keyboards or throughout the track.

(e) Mix level of drums was the most common problem, being too quiet. Vocal or keyboard often dominant.

(f) Reverb tail chopped or long lead in were common. Out of sync parts also occurred fairly frequently and is assessed here. Distortion was rare. Output level usually suitable.

Q6. 16 marks.

As mentioned, marks in double figures were rare. Marks higher than 12 or 13 were very uncommon. At the other end, most students managed to gain 4 or 5 marks even with basic responses.

12 marks are for AO4. This means students need to be offering explanations of why a technique or process is successful or not to gain these marks.

Most students identified condenser microphone, pop shield, guitar/drums in the room, acoustic absorption on the walls. Many related these respectively to evaluative AO4 points of wide frequency range, plosives, unwanted noise/resonance, reduction in room ambience. Other fairly common points were the XLR cable hanging loose, and no shock mount being used, but without accurate discussion of the implications on sound quality.

The mark scheme outlines other points that could have been made. In most cases, more could have been said about diaphragm size, frequency response of the microphone, suitability for the performer, dynamic sensitivity and SPL, as well as the common misunderstandings outlined below.

There were some recurring incorrect answers.

There was a lot of confusion around mic position and angle. Many identified the correct distance but thought the singer was too far away, which is incorrect. Many answers suggested that the microphone angle was a good idea to avoid plosives, or to create a bassier recording. It is not a suitable angle in any circumstances and frequency response will be adversely affected.

Few students seemed to have a real depth of knowledge about room acoustics and how they affect a recording. Many referred to the acoustic treatment as 'sound proofing' which is a completely different thing. It was uncommon to see any discussion of what frequency ranges are affected by the type of absorption seen in the picture, or any recognition that a certain amount of room reverb is not necessarily a bad thing. Many students also thought that there should be more dampening on the wall, completely covered, or use of a reflexion filter or small vocal booth. These are solutions for imperfect recording spaces and are compromises, not ideal situations. This may indicate that students would do well to study the layout of professional studios instead of looking at what they have in their centres.

Occasionally students noticed that music stand was very low and this would affect the singer's posture.

Students also often referred to aspects that are not clear from the picture, such as polar response, use of headphones or the size of the room – some thought too large, some thought too small. It is not possible to tell from the photo. The singer can be seen to be close to the wall but few noted this. No marks are awarded for referring to aspects of the recording that are not included in the picture.

SUMMARY

It was pleasing to see audio tasks being attempted by most students, and many with a good degree of success. As it's the first year, centres may have struggled to cover the range of knowledge in the new spec in particular the additional technical knowledge. Students clearly struggle to apply knowledge to unfamiliar situations, and explain technical processes.

ADMINISTRATION

1. CDs
Only the four student tasks are to be included on the CD. The instructions on the paper are clear and also in the published administrative support guide for centres. In quite a lot of cases, project files and many unnecessary audio files are included. Even audio files belonging to other students were mixed up on the same CDs in some cases.
Any of these errors could lead to the wrong work being assessed which is a breach of the exam conditions.

2. Use of incorrect MIDI files
In some cases, the wrong MIDI file was used for the bass part. This is a concern because students should not be able to access any additional files during the exam other than those required to complete the tasks. This represents a serious breach of exam conditions.

3. Arrival of work
Some centres took a long time to send the work. The work should be sent as soon as possible after the conclusion of the exam.

4. Missing work
There were very few instances of missing CDs or papers from a submission. These were resolved quickly which is always appreciated. When student has been withdrawn from the exam, or completed the written parts of the paper but not completed any audio tasks, it is important that this is made clear in the submission so unnecessary time is not spent chasing.

Grade Boundaries

In line with the ResultsPlus Examiners' Reports which are produced on ERA, grade boundaries are no longer included at the end of the report. Instead, the below generic paragraph must be inserted at the end of your reports:

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