NCFE Level 1 Technical Award in Music Technology (601/6777/4)
NCFE Level 2 Technical Award in Music Technology (601/6774/9)

Assessment window: 9 March 2020–13 March 2020

Assessment: Practical

Paper Number: P000947

This report contains information from the Chief Examiner in relation to the external assessment, with an emphasis on the standard of learner work within this assessment window.

The aim is to highlight where learners generally perform well, as well as any areas where further development may be required.

Key points:

- grade boundary information
- administering the external assessment
- standard of learner work
- Regulations for the Conduct of External Assessment
- referencing of external assessment tasks
- evidence creation
- interpretation of the tasks and associated assessment criteria

It is important to note that learners should not sit the external assessment until they have taken part in the relevant teaching of the full qualification content.

Grade boundary information

Each learner's external assessment paper is marked by an Examiner and awarded a raw mark. During the awarding process, a combination of statistical analysis and professional judgement is used to establish the raw marks that represent the minimum required standard to achieve each grade. These raw marks are outlined in the table below.

Max Mark	Level 2 Distinction	Level 2 Merit	Level 2 Pass	Level 1 Distinction	Level 1 Merit	Level 1 Pass	NYA
36	27	21	15	12	10	8	0

Grade boundaries represent the minimum raw mark required to achieve a certain grade. For example, if the grade boundary for the Pass grade is 25, a minimum raw mark of 25 is required to achieve a Pass.

Max UMS Score	Level 2 Distinction	Level 2 Merit	Level 2 Pass	Level 1 Distinction	Level 1 Merit	Level 1 Pass	NYA
400	320	280	240	160	120	80	0

* In order to ensure that levels of achievement remain comparable for the same assessment across different assessment windows, all raw marks are converted to a points score based on a uniform mark scale (UMS). For more information about UMS and how it is used to determine overall qualification grades, please refer to the qualification specification.

Administering the external assessment

The external assessment is invigilated and must be conducted in line with our Regulations for the Conduct of External Assessments. Learners may require additional pre-release material in order to complete the tasks within the paper. These must be provided to learners in line with our Regulations. Learners must be given the resources to carry out the Tasks and these are highlighted within the Qualification Specific Instructions Document (QSID).

Centres must ensure that access to DAW software and associated hardware is made available to learners during the external assessment.

Standard of learner work

This was the fifth external assessment window for the qualification. Learner submissions covered the full range of available grades. In general the overall standard of learner work continues to increase with each assessment session. The Chief Examiner suggests that this improvement may be a result of learners becoming more familiar with the demands of the assessment over time.

The majority of learners had attempted all sections of the assessment and in most cases produced creditable responses. However, in some cases learners had not attempted all tasks within sections or had not completed the paper in its entirety.

As in submissions in previous windows the most common missing responses were in section 4 of the assessment. The Chief Examiner suspects that some learners did not complete all tasks due to running out of time. Learners should therefore consider the time requirements against indicated suggestions in each section and apply these to their work.

Learners should build confidence in preparing for the external assessment by sitting the available practice papers in appropriate conditions, in order to become familiar with the structure and time demands of the assessment. A very small minority of learners failed to undertake any meaningful response to the tasks, which suggests that they may have been unprepared for the nature and scope of the assessment.

Learners who achieved well overall in the assessment tended to have responded to all tasks in each section and demonstrated relevant knowledge and creative application of skills throughout. Some learners had provided detailed explanative and evaluative work, which typically indicated confidence in using the DAW and was often backed up by convincing and creative audio work.

Learners who achieved less well tended not to have completed all sections, or missed significant numbers of tasks within sections. As in previous sessions some submissions suffered from issues with regards to audio files, indicating that learners are still not fully engaging with the process of checking the final audio prior to submission.

Regulations for the Conduct of External Assessment

Malpractice

There have been some issues of malpractice raised in this assessment window. The Chief Examiner would like to take this opportunity to advise learners that instances of malpractice will affect the outcome on the assessment. It is imperative that centres and learners adhere to the Regulations for the Conduct of External Assessment to ensure the integrity of the qualification and that malpractice does not take place.

Maladministration

There were instances of maladministration reported in this assessment window. The Chief Examiner would like to highlight the importance of adhering to the Regulations for the Conduct of External Assessment and the Qualification Specific Instructions for Delivery documents in this respect.

Referencing of external assessment tasks

As in previous assessments, learners tended to have produced a mixture of hard copy and electronic submissions. The majority of learners had chosen to create word-processed evidence rather than make use of the supplied paper log, which is completely acceptable.

Referencing of evidence was generally acceptable in this session, but some notable instances of poor referencing were observed. Word-processed documents, screenshots and audio files for example, were not always labeled in line with instructions, which potentially presented some difficulty in terms of crediting the evidence.

All evidence should be referenced to the specific task that it seeks to address, in accordance with the instructions given in the paper. The Chief Examiner would like to take this opportunity to remind learners of the importance of correctly labeling files, both in terms of undertaking an external assessment and more generally as a music technologist.

Examples of good practice in electronic submissions included clearly named folders for each section of the assessment. However, multiple sub folders within submissions should be avoided and are unlikely to be necessary for this assessment

If hard copy is produced from electronic submissions (e.g. word-processed work is printed for submission) it should be checked prior to submission to ensure that the content is as intended.

Learners should submit only definitive versions of evidence. Multiple versions of electronic or hard copy evidence are not useful in providing accurate assessment. It is strongly suggested that learners make use of the supplied checklist within the assessment to ensure that all required evidence is in place and that duplicate files or otherwise unacceptable materials are removed from the submission.

Evidence creation

Many learners had presented word-processed responses to document their work. It is advised that best practice would be to save word-processed documents as PDFs to ensure that formatting (and any embedded graphics) are displayed as intended.

If document types other than PDF are used, learners should be aware software versions and compatibility may potentially affect the file opened by the Examiner. As in previous sessions, there was an increase in the number of PDF documents submitted and consequently fewer evidence issues.

Learners must ensure that submitted files are in format listed as acceptable within the assessment. If files are saved in a format which is not accepted then work may not be accessible to examiners and therefore may not be marked.

The screenshots required within tasks are intended to provide evidence of task completion, so that the learners' work can be credited appropriately. Screenshots should be regarded as complementary to the written evidence to enhance meaning and it is therefore suggested that the requested screenshots should be created to show details of tasks undertaken in each section (e.g. in section 1 it would be beneficial for screenshots to show alignment of imported files, tracks types and tempo setting).

As in the previous session, the Chief Examiner was pleased to note that many learners had incorporated additional screenshots into their work (e.g. showing detail of software instrument or effects editing) which very often allowed examiners to find creditable evidence. The Chief Examiner advises learners to consider what each screenshot is intended to show in terms of evidence, and present accordingly.

In written responses it is recommended that learners should seek to evidence what skills were employed, how tools were used and what their intention was in using specific processes. Learners who achieved well tended to write concisely, using appropriate technical language to demonstrate knowledge and intent. Learners who achieved less well tended to provide limited explanations, or simply identified activities using wording given in the task.

Examiners were pleased to note the continued reduction in the number of learners submitting DAW files (for example, Logic / Cubase / Reason project folders). However, some learners had submitted files of this type in place of, or in addition to, the required evidence.

As per assessment instructions, DAW files are not accepted and will therefore not form creditable evidence under any circumstance. DAW files should therefore not be included within the submission.

Audio files were generally saved in appropriate formats as listed in the paper (.wav, .aiff, .mp3). Fewer learners in this session submitted inappropriate file types with regards to audio, although it was noted that not all learners submitted the required number of audio files. Learners should be aware that audio files which are not saved in accepted formats may be disregarded as evidence.

Production of stereo mix downs in this session was generally well handled. Learners who achieved well in these task elements followed instructions and exported the full length of the song for all three mixes.

As in previous sessions some common technical and musical errors continued to be evident in some stereo mix downs, which potentially limited learner achievement. This included: export of individual regions only (e.g. a copied drum part only), inappropriately applied muting and soloing (e.g. instruments not muted as required by the task or only one instrument audible), truncated start or end (e.g. material cut from start of the song or reverb / delay tails cut off), inaccurately set locators (resulting in only a portion of the song being exported), export of mono audio files (or split channels) and noticeable distortion.

Learners should consider that as music technologists the practical audio outcome is extremely important. Learners should therefore take the time to listen back to their mixes and check that the outcome is as intended at every step.

Responses of the tasks within the sections of the external assessment paper

Section 1

In this section learners were asked to configure the DAW project, including the import of the supplied audio and MIDI files.

Learners who achieved well in this section were able to complete practical work effectively and provide commentary for each element of the tasks. Learners who achieved less well tended to not fully complete configuration tasks and / or provide limited evidence of process.

Q1a. Detailed description of DAW hardware and software was included in high achieving submissions, with some learners able to relate the features of their equipment to the task and therefore consider the DAW contextually. Learners who achieved less well tended to provide limited description of equipment, or approach the task from a hypothetical viewpoint (e.g. by describing the purpose of a DAW, but not referencing the specific equipment that they were using).

Learners were typically able to identify some relevant software features (e.g. track types, editing tools or processing) but appeared less confident in regards to hardware.

Q1b. The majority of learners were able to create the correct number of audio and MIDI tracks and correctly set the tempo. Learners did not always describe setup of the audio output, which tended to suggest limited knowledge of hardware configuration.

Q1c. Import of audio and MIDI files was generally improved in this session, with the majority of learners importing the given material and aligning correctly at bar 1 as instructed. A minority of learners, as per previous sessions, failed to align imported material correctly leading to timing issues. A small number of learners continued to (presumably) misread instructions and attempted to align files incorrectly. Learners should be aware that it is standard practice for files supplied to be aligned from bar 1 for a mixing project, so it is unlikely that more complex alignment will be required.

A very small number of learners had imported audio and (presumably unintentionally) applied tempo / time processing, which led to some issues in regards to playback and edit point references.

Learners generally selected an appropriate software instrument patch (in this case a piano). Learners

who achieved well tended to be able to consider the part in context, apply knowledge of software instruments and using aural skills to make a musically pleasing selection. Some learners had not selected patches, or had not routed the audio output of the software instrument to the mix, which meant that the part was inaudible.

Screenshots showing the entire DAW arrangement page, tempo settings, tracks and clear file alignment, were helpful to examiners in crediting learner work in this section.

Section 2

In this section, learners were asked to edit the supplied audio and MIDI material using DAW tools.

Learners who achieved well in this section tended to have completed editing tasks successfully and logically. Learners who achieved less well tended not to have completed all tasks accurately.

Learners achieving higher outcomes tended to have explained the editing processes undertaken in detail and with reference to specific tools, often with illustrative annotated screenshots. Learners who achieved less well generally provided limited description of activities or merely affirmed that the task was undertaken by repeating the wording of the activity given in the assessment.

An issue which continues to affect outcomes for learners in this element of the assessment is a lack of understanding of basic musical terms (bars and beats). Learners who do not understand how musical time is represented within the DAW are unlikely to be able to apply editing correctly, and therefore be substantially disadvantaged.

Q2a. Many learners were able to accurately identify and rectify the timing error in the guitar and keys audio. Learners who achieved well tended to apply aural skills to identify the issue and describe how appropriate audio tools were used.

Learners who achieved less well tended to not be able to identify the timing error, or did not make use of appropriate tools to correct the part. A minority of learners removed a segment of audio and moved all subsequent audio to meet the edit, which resulted in substantial timing errors within the part.

Q2b. The majority of learners were able to attempt to use basic MIDI tools to remap the note to an appropriate drum sound. Learners who achieved less well tended to either pick a drum sound which was not appropriate or misunderstand the instruction and applied inappropriate MIDI tools (for example, application of Quantisation).

Q2c. The majority of learners were able to make use of audio editing to remove the unwanted audio. Many learners applied simple cut/delete tools to the task, although some learners were able to make use of more advanced tools (for example, application of crossfades to the edit). Learners who achieved less well in this task tended to have cut the audio at an incorrect point, or attempted to apply processing which did not entirely achieve the required result (for example, application of a noise gate across the track).

Q2d. Learners had generally submitted a stereo audio file in response to this task as required. Learners who achieved well correctly exported the entirety of the song with parts muted as detailed in the task, showing the process undertaken to do this.

A minority of learners produced inappropriately long or short audio files (cutting material off, or with long

periods of silence at the end of the track).

As elsewhere in this report the Chief Examiner strongly advises learners to check mix downs for audio issues, as would be expected when working as a music technologist.

Section 3

In this section learners were asked to develop the supplied material by adding a musical part and editing a software instrument to create a new sound.

Learners who achieved well in this section were able to undertake creative editing and musical development, and document evidence of intent and process. Learners who achieved less well tended not to have undertaken software instrument editing or created an appropriate musical part.

Q3a. Learners who achieved well in this task tended to be able to undertake and explain editing of instruments at sound generation level (e.g. by editing of filters to shape timbre and ADSR to shape the envelope).

Learners who achieved less well tended to attempt to process the previously selected sound, often via the application of EQ or Effects plug- ins. This approach was creditable, but often limited in outcome.

Some learners made no attempt create a new sound, and in some cases did not appear to understand the concept of editing, with some learners simply selecting a new preset patch in response to the task.

Sound creation continues to be an area of weakness for many learners. The Chief Examiner would like to restate the importance of learners being aware of the range of creative options given by software instrument editing within a DAW.

Q3b. Learners were asked to add a chord to match an existing part. Learners who achieved well were able to apply aural, musical and technical knowledge to insert the correct chord. Learners who achieved less well tended to exhibit limited understanding of chord spelling or be able to add the chords in the correct rhythm.

Q3c. Learners who achieved well in this task tended to have created a rhythmically and dynamically interesting snare pattern based on planning and application of editing tools (e.g. consideration of velocity, careful rhythmic placement of notes). Learners who achieved less well tended to be able to demonstrate limited thought given to planning, which often impacted on the musicality of the outcome.

Q3d. Some learners did not appear confident in applying muting to tracks, leaving all parts playing. Similar issues were apparent in some submissions as described in commentary regarding task 2d. However, a number of learners had pleasingly refined audio at this stage showing musical and technical consideration.

A minority of learners did not submit an audio file in response to this task, which tended to limited available credit substantially.

Section 4

In this section learners were asked to produce a final mix by use of corrective and creative balancing and processing.

Learners who achieved well in this section submitted well considered and balanced audio, often showing creative application of processing, along with clear documentation of intention and application. Learners who achieved less well tended to produce inconsistent audio results with limited evidence of process.

Examiners noted that not all learners had attempted this section and suggested that this may be due to time management issues on the part of learners. Lack of evidence showing tasks being attempted may have impacted upon available marks.

Q4a. In general learners appeared comfortable in applying volume automation, but were not always so confident in applying panning automation.

Some learners had mistakenly applied volume rather than panning automation, or had drawn in data but had bypassed automation. In some cases learners had panned the part to the incorrect side of the stereo field (which suggested that the audio output or headphones were not correctly set on the learners workstations).

Learners were not always accurate in applying editing at given points. As noted elsewhere there appeared to be misunderstanding of bar and beat references, which sometimes led to less creditable results.

Some learners did not attempt to apply EQ, and some learners applied EQ for the duration of the track, which tended to have unwanted results in terms of balance. However, some learners were able to apply automation to EQ or undertake other editing to create the same result.

Q4b. Many learners were able to apply reverb successfully to create ambience, with some learners intelligently using bussing from channels.

A minority of learners had applied settings which were detrimental to the outcome (e.g. 100% met settings on inserts so only reverb could be heard, or insertion of a reverb plugin across the main mix outputs).

Q4c. Learners who achieved well in this task were able to consider and apply mixing techniques to their work. Some learners were able to show clear intent and document technical decisions in creating their mix down, in some cases extending commentary to further creative application of effects, dynamics processing and EQ.

Learners who achieved less well tended to apply minimal mixing (for example, application of static balance) at this stage.

Q4d. Not all learners submitted an audio file for this section, which as in other tasks concerned with audio file submissions, impacted on available marks.

As in other sections, the Chief Examiner would like to advise learners to listen back to the audio outcome in line with standard practice as a working music technologist.

Report by: Graham Lees
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