

# **Level 3 Lead Examiner Report 1906**

Summer 2019

**BTEC Level 3 National in Music  
Technology**

**Unit 5: Music Technology in  
Context (31811H)**

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### What is a grade boundary?

A grade boundary is where we set the level of achievement required to obtain a certain grade for the externally assessed unit. We set grade boundaries for each grade, at Distinction, Merit and Pass.

### Setting grade boundaries

When we set grade boundaries, we look at the performance of every learner who took the external assessment. When we can see the full picture of performance, our experts are then able to decide where best to place the grade boundaries – this means that they decide what the lowest possible mark is for a particular grade.

When our experts set the grade boundaries, they make sure that learners receive grades which reflect their ability. Awarding grade boundaries is conducted to ensure learners achieve the grade they deserve to achieve, irrespective of variation in the external assessment.

### Variations in external assessments

Each external assessment we set asks different questions and may assess different parts of the unit content outlined in the specification. It would be unfair to learners if we set the same grade boundaries for each assessment, because then it would not take accessibility into account.

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### Unit 5: Music Technology in Context (31811H)

Grade	Unclassified	Level 3			
		N	P	M	D
Boundary Mark	0	9	19	33	48

## Introduction

As a mandatory unit for the Pearson Level 3 Foundation Diploma, Diploma and Extended Diploma in Music Technology the external assessment for Unit 5 takes place twice a year in May and January. The May 2019 external assessment series was the fifth for the unit.

Teaching and learning of the unit should allow learners to recognise the changes in and use of technology over time and consider how this has informed the development of music. The external assessment asks learners to apply knowledge to specific material to analyse music technology contextually.

The external assessment is presented in two parts - Part A and Part B. In Part A musical material is identified as part of a brief which contextualises the assessment and set task information. Centres should ensure that learners are able to access the identified audio material during Part A of the assessment.

Learners must undertake Part A over 3 hours. The learners should use this time to conduct research including the application of listening skills to musical material. Learners should make notes which will assist them in producing their response in Part B.

In this preparatory period work must be completed independently by the learner, and learners must be monitored to ensure that this is the case.

Teachers/tutors/invigilators cannot give any support to learners in producing the notes.

Learners may take in up to 2 A4 sides of notes to the supervised assessment period (Part B). The notes must be hard copy and can be either handwritten or word processed. If the notes are word processed, the font size must be 10 point minimum. If handwritten, the words must be visible to the naked eye. Centres and learners should be aware of the conditions placed on the notes as stated in Part A of the assessment.

In Part B learners are presented with a set task which comprises of four sections aligned to the areas of research presented in Part A. Each section asks the learner to respond making use of their research and knowledge. Learners have 3 hours in which to complete the Part B set task under formal supervision.

The notes produced in Part A should not be submitted as part of the external assessment and do not form part of the assessable material. The notes should however be collected and held by the centre until results are released.

Following completion of Part B learners must submit a word-processed response in .PDF format.

When scheduling the external assessment, centres should be aware of the instructions stated in Part A, Part B and the Instructions for Conducting External Assessments (ICEA) document to ensure that the assessment is supervised correctly.

Centres should note particularly that during the supervised assessment period:

- Learners will not be able to research further during the completion of the set task.
- Learners can only access their work under supervision.
- Learners are not permitted to have access to the internet or other resources including audio material.

Failure to observe the task instructions may result in investigation of suspected malpractice /maladministration.

## Introduction to the Overall Performance of the Unit

In this assessment the identified musical material was 'Voodoo Ray (12" Version)' by A Guy Called Gerald as released in 1988. As in previous sessions the set task asked learners to write a detailed word-processed article. The assessment specified that the article should be written in four sections and the majority of learners produced creditable responses for each section. Many learners had apparently applied listening and research skills during Part A to inform their responses, in line with a correct approach to this assessment.

Learners should make focused use of the Part A preparatory period to undertake research and detailed listening which considers the supplied material, available information, wider concepts and examples to provide material for their Part B response. Responses presented by learners which were not supported by research or underpinning knowledge tended to be less successful.

Material found through research should be used to inform a response, rather than be reproduced to make up the body of the submission. If information found through research is simply restated the response is unlikely to be explanative, critical or analytical.

Discernment in research sources should be employed to ensure relevance and validity. If possible, information should be checked to establish reliability. It is important for learners to consider the level and timescale of the assessment and be wary of including material which does not serve a focused purpose. For example (and as in previous sessions) some learners recounted undeveloped biographical information about the featured artist which did not inform their response in a meaningful way. Research sources must be referenced appropriately in Part B as in any other assessment. Unreferenced material included as part of the submission could also potentially be regarded as plagiarism and therefore subject to malpractice investigation.

Learners who made use of supporting examples in this assessment, both in terms of musical and written sources tended to be able to produce a more contextually informed and balanced viewpoint which yielded more credit.

Aural discernment with reference to musical and sonic elements of audio material is a key part of music technology work, and the ability to express conclusions based on what can be heard is an invaluable skill for music technologists at all levels. Learners who relied upon secondary sources of information in regard to these elements tended to produce a less detailed and evaluative approach than those who had applied their own listening skills.

Explicitly sectionalised responses in submissions generally reflected the learner's knowledge of specification content and material found through research. Evaluative written work which remained concise and focused tended to develop from contextual understanding along with careful consideration of audio material and written sources.

As in previous sessions not all learners produced responses in four sections as requested by the task. Whilst responses are marked holistically by examiners, those learners who did not respond section by section tended to produce less coherently structured and often more repetitive work. These submissions were generally not as well focused and often lacked depth and balance, leading to a less creditable outcome.

## Set Task Sections

### Section 1:

### **How developments in sound and sequencing technology influenced the creative production process of 'Voodoo Ray (12" version)' and how it may have been undertaken differently if it was produced today.**

Learners who achieved well in this section tended to have provided a response which focused upon sound and sequencing technology used to create the recording, and possible differences between this and current practice. Detailed responses were often based upon sound consideration of researched information, underpinning knowledge and musical material. In the majority of submissions learners were able to identify some technology used by reference to research sources and knowledge of available equipment within the timeframe.

Learners who developed this response to consider specifically how the technology influenced the production creatively tended to have formed an evaluative response. For example:

*Roland produced some of the worlds best known drum machines and synthesisers. The TR909, 808, 707, 727 and 626 were all machines that allowed musicians to create electronic rhythms with relative ease. The TR808, as used by A Guy Called Gerald, is the one that particularly shines out as it was one of the first drum machines to be fully programmable rather than confining musicians to pre-set rhythms. Breaking away from the simplistic beats of his first piece of tech the DR55 allowed Simpson to be truly creative with his music.*

*The sound palette made available by synthesisers from the same era, achieved by subtractive synthesis with a variety of modulation and filtering options allowed Simpson to explore textures which were completely artificial...the 'squelching' acid bass sound achieved by extreme filter resonance is something that changed pop and dance music at the time...*

*The role played by the emergent digital sampler should not be underestimated, with the Akai S950's seemingly limitless 12 seconds of memory allowing Simpson to incorporate and manipulate audio sources into the recording...the sampler was more up to date than the synths and drum machine, having only been released in 1986. The repitching of samples can be heard throughout Voodoo Ray adding to the hypnotic effect of the track...*

*It is important to note that the equipment itself was not revolutionary. Other artists across the globe used the same machines in the same way, but each machine and its inherent limitations influenced the song and Simpson as an artist. The difficulties provided by each machine made the song what it is, and that is something that we lack today. In an interview with Sound On Sound magazine Simpson summed up the link between technology and creativity :*

*"There were no turntables involved, there was no DJ'ing involved. It was all synthesis and drum machines and no loops. I'm not saying loops are a bad thing. But I think what's kind of happened now is that people are forgetting the actual skills of synthesis and programming, by getting really lazy and just grabbing."*



Learners that achieved less well tended to demonstrate less technical knowledge and understanding of research. Responses that did not score highly in this section often identified a limited range of technology and did not expand this into an explanation which showed understanding of how the equipment was used in the recording. For example:

*The sounds would have been made with synths that were available at the time which included the Yamaha DX7 and Moog. All the sounds would be recorded using MIDI because this came out in 1983.*

Detailed consideration of how process and technology may have differed if the song was recorded today was evident in more focused responses, with learners showing a grasp of current developments in music technology and relating this back to research. For example:

*In 1988 producers were starting to notice Cubase , which Simpson mentions in several interviews. Knowing that their was equipment out there which could have made his job easier, he refused to use it, because it would have curbed his creativity and enjoyment of using hardware equipment. This is something that we see current producers applying – with recreations of hardware (including the 808 and 101) being produced by the original manufacturers to sit alongside the DAW descendants of Cubase.*

*The limitations and problems of outboard gear are not something we have to live with today, other than to impose them on ourselves as an artistic challenge. If Voodoo Ray was recorded today from a production point of view it would take literally minutes to sequence in a modern DAW. Sounds sources could range from recreations of original hardware, to carefully crafted plug ins triggered with no timing issues, and no limitations in terms of pattern variation from within the DAW. Similarly sampling would suffer from no limitations, with software samplers far outstripping the audio performance of the Akai S950 in terms of memory and quality....*

*If I were to recreate Voodoo Ray I would need only to download some samples, throw in some processing and effects, click a button to create a pre-determined drum groove and I'm done. But, being faced with this freedom in a creative setting is daunting...being able to do everything and anything means that musicians struggle to know where to start*

Some submissions showed a more limited understanding of equipment and process in historical context. For example:

*The recording of the track would change in modern times as new techniques could be used to get a more complete and professional sound like mastering techniques which wouldn't have been available at the time or would have costed (sic) far to much...*

Learners should take care to consider the specific focus of this section in terms of music technology so to produce a effective and creditable response.

## Section 2

### **How developments in integrated circuits, and wider technology from 1980 onwards, may have influenced this recording.**

The focus on ICs (integrated circuits) in this section allowed more capable learners to demonstrate knowledge and relate it to research in the context of the supplied material.

Responses that gained higher marks in this section tended to make use of research and underpinning knowledge to relate developments in electronics to music production.

Learners who produced evaluative responses were able to relate accessibility to wider technology in the specific context. For example:

*In considering wider technology we generally focus on three things : affordability, accessibility and usability. In the 1980s this interaction in relation to music technology is obvious. Electronic musical instruments had existed for the majority of the 20<sup>th</sup> century, but their accessibility was restricted by affordability to large institutions or as time progressed artists with the financial backing to purchase and maintain the technology.*

*The development of the integrated circuit however paved the way for mass production of synthesisers and drum machines. The IC contained hundreds (perhaps thousands) of components which previously would have been discreetly and laboriously wired together. The reduced manufacturing costs, coupled with a strong export market from Japanese companies such as Roland allowed people to access the more powerful and user friendly equipment reaching the US and Europe.*

*The IC paved the way for digital electronics, which ironically made devices like the TR808 outdated almost as soon as they were released. The TR808 was to all intents and purposes a commercial failure, despite its use of releases at the time – but the drop in resale value (Simpson notes that he purchased his 808 for £150) brought the equipment into the price range of hobbyists and amateurs.*

*This meant that, in line with the post punk ethic, it was not only professional musicians who make use of this equipment – anybody could...*

Some learners appeared unfamiliar with ICs and submissions, suggesting that learners had confused ICs with a pre-MIDI communication protocol. For example:

*The integrated circuits allowed for more complete systems to be made which could complete more functions than a standalone keyboard or drum machine, as these two separate devices would have cost more than the joined synth...*

A minority of learners repeated information already stated in their response to Section 1. Whilst responses are credited by examiners to the relevant section learners should be aware that simple restatement of information already given is extremely unlikely to receive additional credit.

Some learners choose not to make reference to ICs explicitly in their response, which made crediting the work challenging.

Learners should consider the structure and focus of their writing in relation to each section to maximise their ability to respond in the time given.

### Section 3

#### **How developments in consumer audio formats since 1988 have affected the consumption of music and created new opportunities for artists to build audiences.**

This section allowed learners to explore changing consumer audio formats and how this impacted upon the interaction between artist and audience. Learners who achieved well in this section tended to demonstrate awareness of changes in technology and apply this to contextual understanding of the changing relationship between the artist and the consumer.

Many learners were able to correctly identify consumer audio formats available in 1988 with discussion of the audiences for each. For example:

*Voodoo Ray was pressed onto vinyl, which at the time was the most common commercial format. It is notable that the 12" 'maxi single' was developed specifically to hold extended mixes of songs for club play...in 1988 the DJ as a musical tastemaker was beginning to arise with club nights driving the development of acid house in the UK. Vinyl, and specifically the 45rpm 12" disc was therefore the format of choice for aspiring producers and, by default the clubbing audience...*

*The development of the internet changed the interaction between the artist and audience almost beyond recognition, not least because digital formats such as MP3 allowed an infinite number of copies to be shared...the effects of this in terms of sales within the industry changed the nature of commerce over a very short period to one in which the artist could more easily release material within total independence from a record label, but was guaranteed little in the way of financial return...*

*The internet allowed for artists and audience to interact, sometimes without the layer of promotional control previously employed by record labels...audiences could contact artists (or at least their social media managers) directly.... with such a vast amount of music released everyday interaction with the audience directly provides artists with a voice to promote their latest release...*

Less creditable responses generally listed formats available over time, with little reference to the specific focus of the task For example:

*...when CD came out it was a higher quality so many people brought them. Music could also be brought in shops on records and cassettes. Nowadays most people download music from the internet....*

A minority of learners had misunderstood the focus of the task and provided responses which showed limited technical and historical understanding. For example:

*For Voodoo Ray to be released digitally it had to be converted from vinyl to digital. This is a short process but many things can go wrong..the digitization (sic) process includes a turntable with a USB or AUX out...this can then be burned onto a CD or Cassette or uploaded to a music consumption site...*

## Section 4

**Provide a detailed analysis of the musical style and production techniques used in 'Voodoo Ray (12" version)' to discuss how the recording could be considered as 'the starting point for British Electronic Dance Music'.**

Learners who answered this section effectively were able to apply aural analysis of the given material and relate this to musical style. For example:

Voodoo Ray contains what I consider to be the three staples of EDM : samplers, synths and electronic rhythms (provided by sequencers in this case). The song uses a 4/4 time signature, with a '4 on the floor' bass drum pattern, something we almost consider a necessity at this point for EDM. Alongside this we find use of a 16<sup>th</sup> note hi-hat pattern, with a broken rhythm making use of syncopation – again, another trope we see in almost every modern track. The use of intertwining melodies and layered synthesisers would have been unusual in 1988, but is something that is commonplace today...even something as using female vocals, with heavy reverb, delays and reversing is something that is hard to escape in modern EDM.

...the title of the track itself is created by use of a sampler. Simpson used samples of recorded vocals, as well as snippets of dialogue taken from comedy records. The memory (or lack thereof) within the sampler is what gave the track its name –with 'Voodoo Rage' being shortened to 'Voodoo Ray'...

Repetition, applying panning and shifting instrumentation around is what gives Voodoo Ray its structure...short sequenced patterns allowed for limited variation and sectional shifts, so interest and movement are created by changes in texture..

Some learners were able to make use of examples and clear conclusions to respond creditably to the proposition given in the task. For example:

Acid House was established in Chicago, and 'Jack Your Body' by Steve 'Silk' Hurley had been a number one hit during 1987, so UK audiences were already familiar with EDM. However, Simpsons take on the style was uniquely British in character – hard beats and funky bass filtered through Manchester with a DIY ethic and samples lifted from Peter Cook and Dudley Moore. For this reason Voodoo Ray can be considered to be the starting point for a truly British form of EDM.

Learners who achieved less well in this section tended to make less use of aural analysis and did not always support their response to the proposition with accurate research. For example:

The song made use of synths and drum machines which are still now used in EDM....I believe the song is 'the starting point for British Electronic Dance Music' because no one in, or even out of the UK had made or heard music like this before...

## Summary

Based on the responses seen in this series, the following should be noted:

- Analyse how specific music technology equipment was used in production based on research and aural analysis of musical material.
- Ensure that all elements and the specific focus of each section are considered.
- Understand music technology equipment in terms of historical development and able to make comparisons between past and current applications and process.
- Explain wider technology in direct relation to the production of music in context, with focus upon the specific given area of content.
- Evaluate the consumption of music in context, with reference to changing formats and an understanding of how technology changed the way in which artists are able to interact with the audience.
- Methodically apply aural analysis of the given musical material to draw conclusions and consider given propositions.
- Make use of wider related musical examples to inform discussion.

It is suggested that the following areas should be considered in future sessions:

- Learners should make efficient use of the given preparatory period to undertake research.
- Available sources of information and examples should be considered and verified as part of research.
- Learners should make use of access to the audio material during the preparatory period by applying listening skills to discern musical and production features.
- Learners should use research as a basis for commentary, explanation and evaluation rather than simply restating found information.
- Learners should reference information found through research appropriately within their submission.

- Learners should consider the skills of written communication in the development of their work.
- Particularly learners are advised to produce a response which features sections in a clear structure as requested by the set task.



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