

ISSN 2043-8338

Journal of Trainee Teacher Education Research

## Encouraging creative composition through use of extra-musical stimuli: A critical evaluation of a Year 7 class making programmatic music on GarageBand

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#### Abstract

Despite its importance in music education, there is a lack of clarity surrounding definitions of creativity and how it can be taught, learnt, and assessed through composition. This investigation follows a case study of Year 7 class at a comprehensive school in Eastern England taking part in virtual and non-virtual lessons. It looks to KS3 to consider how students are creative and compose ahead of their GCSE ventures, and how this is facilitated, with a hope to influence further research and good practice. Findings suggest that the use of extra-musical stimuli is a helpful strategy for encouraging creative composition in the secondary school music classroom, if stimuli are carefully selected and the pedagogical strategies used to help students utilise the stimuli are thoughtfully planned and flexible. Creative process models are evaluated and investigated, with a focus on inspirational moments, but further research is required in this domain.

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## Encouraging creative composition through use of extra-musical stimuli: A critical evaluation of a Year 7 class making programmatic music on GarageBand

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## Introduction

Musical composition is an act often allied with the concept of creativity (Philpott, 2016). Composition bears weight in A-Level and GCSE examinations and the KS3 National Curriculum in England states that music "embodies one of the highest forms of creativity" and that all pupils must compose music (DfE, 2013, p.1). Despite this, there is a lack of clarity surrounding definitions of creativity and how it can be taught, learnt, and assessed through composition (Burnard, 2016).

Teachers need to develop clear concepts of creativity for themselves so that they can "plan for an environment that promotes its development" (Philpott, 2016, p.115). Moreover, teachers need to consider students' visions of creativity to ensure that both children and adults can relate to creative activities that are culturally and socially situated (Burnard, 2016). It is partly for these reasons that I chose to undertake this research project. Another catalyst for this project was the observations I made during my first placement as a trainee music teacher: several GCSE students struggled with composition (despite loving music, generally) and reacted to their struggles by misbehaving and avoiding focussing on composition coursework. Students mainly wrestled with how to begin or develop the composition after hitting a creative stall or block. In this study, I look to KS3 to consider how students are creative and compose ahead of their GCSE ventures, and how this is facilitated, with a hope to influence further research and contribute to practice (initially my own) that minimises the issues described above.

I have narrowed my investigative lens to focus on how students use extra-musical stimuli to aid composition - and how certain teaching strategies can be used to effectively facilitate this - and how doing so relates to existing creative process models. This report first critically reviews academic literature spanning fields of music education, English education, and psychology, resulting in the statement of three central research questions. I then outline the rationale and methodology of the case

study (a Year 7 class, taught by myself, undertaking a scheme of work which requires them to use extra-musical stimuli to create a programmatic piece on GarageBand), before delving into data analysis and a discussion of findings. I conclude that the use of extra-musical stimuli is a helpful strategy for encouraging creative composition, if stimuli are carefully selected and the pedagogical strategies used to help students utilise the stimuli are thoughtfully planned and flexible.

It must be noted that this study is focussed on teaching to promote creativity, rather than on teaching creatively, because whilst the two are inextricably linked they are not synonymous (Philpott, 2016). Additionally, whilst they are important and related issues, this research project (for space reasons) does not delve into difficulties associated with assessing creativity (see Hickey, 2007) and notating compositions (see Hallam & Rogers, 2010).

## Literature review

This review explores definitions of creativity, uses and flaws of creative process models, pedagogical strategies for nurturing creativity in the composing classroom, and relations between cross-modal stimuli and creative inspiration. Research questions are then set out to guide the case study.

It is firstly necessary to clarify several key terms. Creativity is a "slippery concept" (Philpott, 2016, p.110) and will be scrutinised as a sub-section of this review. Composition may be thought of as "the act of forming or constructing a revised piece created over time" (Burnard & Younker, 2002, p.248), a "powerful form of self-expression" (Odam, 2000, p.126), and something that "require[s] the highest levels of creativity" (Hallam & Rogers, 2010, p.106). Extra-musical refers to referential contents and "programmatic correlations with music" (Elkoshi, 2019, p.480).

## What is creativity?

Creativity is a complex term that is viewed and defined in a myriad of ways (Oleynick, Thrash, LeFew, Moldovan & Kieffaber, 2014). Hargreaves (1986) explained that whilst it is often thought that "creativity is mysterious, unconscious, [and] irrational", some people insist that creativity "involves no more than conscious planning and rational decision making" (p.147). Another common perspective is that creativity involves novelty and the breaking or invention of rules (Pateman, 1991). Oleynick et al. (2014), after conducting a scientific study of inspiration in the creative process, conceptualise creativity as an "appraisal of novelty and usefulness that may be applied to any variety

of objects, particularly ideas and resulting products" (p.4). This definition fits well with composing processes, where the appraisal of novelty is constantly applied to ideas and products.

Creativity may also be defined plurally. Burnard (2016), a music education scholar, argues that musical creativities should be characterised by their unique values, meaning the existence of individual, collaborative, communal, empathetic, intercultural, performance, symbolic, and computational creativities (p.15-16). She pushes for such a conception because whilst ways of making and consuming music are constantly changing, "the notion of equally valid creativities through which we can fluidly move" is not recognised, and this is a "major threat" to music education (p.10). Dymoke (2011), an English education researcher, also supports the idea of multiple creativities, but classifies them as either within the preserve of geniuses or an original work made by any person. Craft, Jeffrey and Liebling (2001) refer to these groups as "big C Creativity" and "little c creativity", respectively. Relatedly, Boden (2004) declared those who produce a thoroughly original idea as "Hcreative" and those who establish an idea that is new only to them or few others as "P-creative". Whilst such dichotomies may be proposed with good intention (to show that creativity is a potential in everybody) their labels could perpetuate the patriarchal trope of creative genius, implying that true creativity is a gift – a problematic concept in music education (Philpott, 2016). I therefore return to supporting both Burnard's (2016) concept of multiple and equally valid creativities, and Oleynick et al.'s (2014) definition of creativity being an appraisal of novelty applied to any idea or product.

Technological developments have added further complexity to the conceptualisation of creativity. Some musical ideas can now be realised prior to development of technical motor skills on an instrument (Hallam & Rogers, 2010). Whilst this can increase accessibility to composition, it opens debates about whether technique is necessary for creativity (see the works of music education philosophers Elliot, 1995; Reimer, 1989).

#### Creative process: a four-stage model?

A creative process can be defined as "a series of mental operations and actions that lead to the generation of ideas [...] as well as [...] performances" (Lubart, 2001, p.3), and a process model operationalises such a series. Wallas (1926) famously split the creative process into four stages: preparation (a problem is defined and researched), incubation (unconscious processes start to dominate and imagination is heightened), illumination (a creative solution is thought of), and verification (a creative solution is refined). Whilst this model has been highly regarded for almost a

century, the four stages have been adapted. The stages are now sometimes considered less distinct and more as a set of important subprocesses: problem finding, formulation and redefinition; divergent thinking; combination and reorganization of information; and analytic-evaluative processes (Welke, Purton & Vessel, 2021). Thrash and Elliot (2003) stray further and suggest a model segmented according to moments of inspiration (a state of increased motivation for creative endeavour) which act as critical points on the journey from ideation to actualization. This journey may be segmented into three stages: evocation (stimuli or external objects catalyse thought processes), transcendence (feelings about possibilities beyond reality), and approach motivation (desire to cement evoked feelings into a real object or action).

Whilst initially it may seem logical to support the less-distinct-stages model of creative processes due to its flexibility (as explained by Welke et al., 2021), this does not provide areas for clear pedagogical intervention. The three-stage model mapping moments of inspiration (Thrash & Elliot, 2003) is promising in its flexibility and is relevant to this study due to its consideration of external stimuli but is yet to be thoroughly studied as in-depth as Wallas' (1926) four-stage model. In this study, therefore, I focus on the four-stage model whilst also incorporating elements of more recent models.

Wallas (1926) stated that a person could experience co-occurrence of stages or they could return to earlier stages if necessary. Berkley (2004), however, added that, whilst composing, students "must always progress [through the four stages] in the order noted", but may revisit earlier stages whilst drafting (p.239-240). Burnard and Younker (2002) suggest that there are three pathways of movement through stages of the creative process when composing: linear (minimal movement between incubation, illumination, and verification), recursive (more movement between stages, particularly incubation and illumination), and regulated (more movement across all four stages support that "creative thinking in music is [...] a dynamic process" which alternates between divergent thinking (generating many possible solutions) and convergent thinking (evaluating possibilities to finalise a best solution) (Burnard & Younker, 2002, p.248). Burnard and Younker (2002) extend that when there is more movement between stages, "interaction with divergent and convergent thinking is more involved" (p.254).

A key criticism of the four-stage model is that it does not expose information about the "mental processes that actually occur" (Guilford, 1950, p.451), it may be read to superficially only classify

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potential subprocesses. Guilford (1950) asserts that the creative process would be more effectively utilised if subprocesses were examined. Inspiration is an important subprocess in the creative process, but one that has not been well investigated until recent years (Oleynick et al., 2014). This current research project intends to contribute to such a body of literature.

### Pedagogical strategies for nurturing creativity

There are several pedagogical strategies suggested to (not guaranteed to) nurture creativity in the composing classroom. I outline four common, related strategies: setting constraints, problem solving, using musical features as stimuli, and using extra-musical features as stimuli. Note that individuals in various settings respond differently (Batey & Furnham, 2006; Burnard, 1995), and therefore a pedagogy for creativity should be flexible and capable of moving between different stages of the creative process (Philpott, 2016).

OFSTED (2012) stated that development of creative ideas in music lessons across England was "most successful [when] composing work was framed by well-structured teaching" (p.16). Composing without a structured framework can be daunting, and therefore it is essential that teachers set some constraints in composition briefs (Hallam & Rogers, 2010). However, such restrictions must be balanced with freedoms, because giving students "too much detail limits creativity" (Hallam & Rogers, 2010, p.107). Moreover, the interdependence of constraints and freedom as a set of choices is highly important in determining an individual's creative style (Burnard & Younker, 2002; Sternberg, 1988).

The four-stage process model (Wallas, 1926) centres around using creativity to solve a problem. Berkley (2004) maintains that teaching composing as problem solving is an effective pedagogy for creativity if a flexible framework is navigated. Philpott (2016) adds that any starting point may be used as an expressive problem to form the essence of the composing activity, such as a concept, skill, or fact. Objective or propositional knowledge about music and procedural or technical knowledge can then be turned into a composition experience by asking questions about how to utilise this knowledge to provide a product/solution.

Using musical features as stimuli for composing is another pedagogical strategy for nurturing creativity. Building on the concept of problem solving, Swanwick (1988) asserts that real musical ideas from specific contexts must be used to construct knowledge of music by acquaintance to solve

problems, because musical understanding will not happen inadvertently. This strategy allows students to think divergently about how to adapt the possibilities of specific features.

The final strategy I will discuss here, the focus of this investigation, is using extra-musical features as stimuli for composing. Extra-musical stimuli can "be part of the expressive problem to solve (e.g., programme music)" (Philpott, 2016, p.117), and I argue that they are also a form of constraint/framework that can be interpreted. Philpott (2016) recommends the use of extra-musical stimuli because music is abstract and therefore knowledge of music is often held in attachments to external ideas. He suggests that such ideas could be used to inspire melodic shapes or structures, and stimuli could include artefacts, pictures, and many other visual means. This pedagogical approach gains strength from the "many artists and musicians [...who] cite the creative works of others or the beauty of nature as a source of inspiration" (Welke et al., 2021, p.4). It is also supported by the common recognition that "the interaction between the individual and the environment [...] ultimately shapes creativity" (Hallam & Rogers, 2010, p.109). Welke et al. (2021) suggest that moments of inspiration may be elements of the creative process "amenable to intervention" (p.26), which means that using extra-musical stimuli in music lessons could be promising.

#### Cross-modal stimuli and creative inspiration

This investigation is primarily concerned with extra-musical stimuli, but I discuss here cross-modal stimuli because of a lack of studies concerning how extra-musical stimuli can be used in education. I therefore refer to potentially transferable psychology research and English education research on cross-modal stimuli for creative writing. Fitzgerald, Smith and Monk (2012) found that a multisensory context with an external experience stimulates the process for creative writing. Swanwick and Tillman (1986) found that movement, visuals and images "promote, stimulate and intensify [musical] expressiveness" for children in the early years of school (p.336). I hypothesise that such a reaction may be just as well utilised in music education in secondary schools. Using extra-musical stimuli, however, has sometimes been criticised by policy makers for its wasting of class time on extra-musical considerations and emotions rather than concentrating on music as sound (Elkoshi, 2019). I will now briefly summarise and critique key considerations for how cross-modal stimuli can encourage creativity.

Inspiration is commonly cited to be a phenomenon evoked by the interaction between external stimuli and internal feelings (Ishiguro & Okada, 2020; Kontelis, 2018). The first consideration, therefore, is

where musical understanding lies. Elkoshi (2019) states that musical understanding "lies in the relationship between the stimulus and the responding individual" (p.489). Hallam and Rogers (2010) advocate that a stimulus provided for creative work should correspond to the interests of those participating, because "motivation is central to creativity, so tasks must be enjoyable, [and] students must feel that they have ownership and control of them" (p.115-116). In support of this, Burnard (2016) states that students should have choice of what [creative] task they will undertake. The belief that stimuli should be of interest to and relatable for students is further corroborated by Paynter and Aston's (1970) definition of creative music being a "way of saying things which are personal to the individual" (p.7). The importance of autonomy is reiterated by audiovisuology research that has found that cross-modal activities "allow students the freedom to convey extra- and intra-musical interpretations in the most autonomous and creative ways" (Elkoshi, 2019, p.489).

Building on the idea that students must be interested in the stimulus they use to compose creatively, several researchers have found that the state of being inspired within a creative process is very similar to a feeling of being aesthetically or emotionally moved, and that the latter can serve as a prompt for the former (Kontelis, 2018; Welke et al., 2021). These findings resulted from creative writing tasks, and are yet to be thoroughly explored in a musical domain. Welke et al. (2021), however, found that non-text visual stimuli aesthetically moved and inspired textual writing, suggesting that "the underlying mechanism is at least partially independent of modality" (p.33), which is promising for the current investigation.

The final consideration necessary here is where within the four-stage creative process model moments of stimulus-driven inspiration and stimulus use occur. It may seem logical to assume that external stimuli act as a "jump-start or catalyst for the composing process" (Kennedy, 2002, p.104). Kontelis (2018), however, states that in psychological studies inspiration is most strongly associated with stage three of the creative process, illumination, because at this stage "sensory information associated with a known or unknown stimulus is said to suddenly become linked through neural networks to the language centers of the brain, creating unexpected associations that produce insight" (p.25). Alternatively, it may be possible that there are "multiple cycles of ideation, inspiration and actualization", meaning that stimulus-driven inspiration may occur during several stages of the creative process (Welke et al., 2021, p.26).

#### **Research questions**

This review has shown that creativity is a dynamic concept, with many definitions and uses. Critiquing creative process models has shown that the four-stage model (Wallas, 1926) is highly regarded and amenable to intervention, but may be best used in conjunction with the three-stage model (Thrash & Elliot, 2003) which incorporates ideas about critical moments of inspiration. There are several pathways for movement through the creative process, but the subprocesses within these stages are currently under-researched. Inspiration and interaction with extra-musical stimuli is one subprocess and also a pedagogical strategy recommended for nurturing creativity in the composing classroom (though with little research or rationale) and therefore forms the focus of this investigation. Accordingly, the remainder of this study is guided by three research questions (RQs):

- RQ1. Do Year 7 students find an extra-musical stimulus helpful when composing?
- RQ2. At what stage of the four-stage creative process do Year 7 students utilise an extra-musical stimulus when composing?
- RQ3. What teaching strategies can be used to help Year 7 students utilise extra-musical stimuli creatively?

## Methodology

Before outlining classroom activities and data analysis methods, it is important to qualify the terms of my epistemological and theoretical standpoint. This investigation was carried out within an interpretivist paradigm, from a social constructivist perspective. Interpretivism is a sociological strategy whereby the "meanings and actions of actors" are interpreted according to a "subjective frame of reference" (Williams, 2000, p.210). Social constructivism suggests that learners first construct knowledge in a social context, and then internalise it (Vygotsky, 1978). I have chosen to utilise such paradigms because a classroom (virtual or not) presents an irreplicable social situation which fosters nuances that can best be thoroughly analysed in accordance with subjective qualitative data analysis.

This research comprises a basic case study design. A case is "a location, such as a community or organization", and a case study entails the "intensive analysis of a single case" and a phenomenon

within it (Bryman, 2008, p.52-53). Scope for detailed analysis is a strength of case study research and, relatedly, such studies can be associated with both theory generation and theory testing (Bryman, 2008). An obvious limitation of a case study design is that findings cannot be generalised with ease or support, perhaps reducing external validity.

There are several types of case that may be distinguished, and a study may comprise a combination of these (Bryman, 2008; Yin, 2003). My chosen case is exemplifying (it aims to capture circumstances of a commonplace situation in a broader category) with an element of longitudinal (investigated at more than one juncture). My case is a Year 7 class at a comprehensive school in Eastern England, taking part in a series of virtual and non-virtual lessons. The class consists of 30 students aged 11-12. The class have a variety of musical backgrounds but are all classified as having a medium-high (compared to average) level of literacy ability. To analyse students' creative processes in sufficient depth to answer the research questions, I focus on the details of six students (two male, four female) within my case. These students were chosen on the grounds that they reliably submit work when learning remotely during the COVID-19 pandemic, and therefore will provide data to analyse, and they exemplify a range of musical experiences (note that musical experience was not determined by an official measure, but by consideration of their other class teacher's judgement from previous projects).

The rationale for using a qualitative case study design in this investigation is that detailed insights into unquantifiable thought processes can be gained (Stauffer, 2014), and these may illuminate students' creative processes when composing, and suggest successful pedagogical strategies for teaching composition.

### **Data Collection Methods**

<b>Research</b> question	Data to be collected		
RQ1 Do Year 7 students find an extra-musical stimulus helpful when composing?	<ul> <li>Examples of student work (ongoing and final); screen-recordings of GarageBand compositions, and photographs of composing diaries.</li> <li>Responses to a Microsoft Forms end-of-scheme questionnaire, gauging students' opinions on the utility of their extra-musical stimulus video, feelings towards their video, and reflections on their creative work.</li> <li>Comments made within a semi-structured focus group interview, elaborating on responses given in the questionnaire and on compositional work submitted.</li> </ul>		
RQ2 At what stage of the four-stage creative process do Year 7 students utilise an extra- musical stimulus when composing?	<ul> <li>Examples of student work (ongoing and final); screen-recordings of GarageBand compositions, and photographs of composing diaries.</li> <li>Responses to a Microsoft Forms end-of-scheme questionnaire, gauging students' opinions on the utility of their extra-musical stimulus video, feelings towards their video, and reflections on their creative work.</li> <li>Comments made within a semi-structured focus group interview, elaborating on responses given in the questionnaire and on compositional work submitted.</li> </ul>		
RQ3 What teaching strategies can be used to help Year 7 students utilise extra-musical stimuli creatively?	<ul> <li>Examples of student work (ongoing and final); screen-recordings of GarageBand compositions, and photographs of composing diaries.</li> <li>Self-reflection notes on teaching (incorporating feedback from an observing, senior music teacher).</li> <li>Comments made within a semi-structured focus group interview, elaborating on responses given in the questionnaire and on compositional work submitted.</li> </ul>		

All research strategies used are shown in Table 1.

Table 1: Research questions and corresponding data collection methods

#### Student work

Screen-recordings (audio-video DAW representations) of student compositions and written composing diaries/plans (addressing RQ2 specifically) were collected and analysed to inform all three research questions. Marking and giving feedback on this work allowed common misconceptions and successes to be highlighted (addressing RQ1, as well as informing future lesson plans), and suggested which teaching strategies were most successful (addressing RQ3). This data was collected (via Microsoft Teams) and analysed after each lesson.

## Questionnaire

Closed questions (participants choose an answer from a fixed set) do not require coding and require less effort from participants. Open questions (participants respond however they wish), however, allow respondents to give unusual insights and not be affected by researcher-bias. I therefore used both open and closed questions, laid out in a way that is structured yet allows for explanation (see Appendix). My questionnaire was included as a Microsoft Form within the final lesson of the scheme, for all participants to complete. The questions asked students about their compositional work, whether they found the extra-musical stimulus helpful when composing (RQ1) and at what stage in the creative process they utilised the stimulus (RQ2). It also asked students about their perceptions of creativity.

#### Semi-structured focus group interview

A focus group is a form of interview involving several participants and a facilitator/moderator (in this case, myself). The main rationale for using a focus group in this research is to suit the case demographic; young students may require the familiarity of, and prompting from, their peers to aid their contributions. Another strength of a focus group interview is that participants' perspectives can be revealed that may not in an individual interview, through discussion and joint construction of meaning (Bryman, 2008). Limitations include group dynamics that discourage certain participants from speaking honestly. A semi-structured interview follows a series of general questions that are planned but may be deviated from. This is beneficial as it means that questions that are not prepared can be asked as the interviewer picks up on things said by the interviewees, allowing unexpected perspectives to be unveiled. My focus group lasted c.20 minutes and involved the six aforementioned students. The questions allowed students to elaborate on their responses given in the questionnaire. I collected this data following the final lesson of the scheme by audio-recording and transcribing conversations.

#### Self-reflection notes

Methodological self-criticism involves using a "confessional style of ethnography" to consider one's actions (Bryman, 2008, p.683). Whilst this form of data may include bias, it allows the researcher to improve and adapt because of constant reflection. Additionally, I incorporated feedback from a senior music teacher observing the lessons to reduce bias. Writing self-reflection notes immediately after each lesson, and then cross referencing them with common misconceptions and successes arising in student work (shown in feedback notes after each lesson) allowed a reliable consideration of what teaching strategies can be used to help Year 7 students utilise extra-musical stimuli creatively (RQ3).

### **Research plan**

The scheme of work upon which this research is based was 'Programme Composition: Animal Music'. The scheme was taught over three 100-minute lessons, with the outcome being that students produced their own composition reflecting an animal's journey. The composition had to be for orchestral instruments on GarageBand and include a clear melody and accompaniment. Table 2 outlines the main objectives and activities for each lesson, alongside key data collection points.

Lesson	Objectives	Main activities for students	Data collection opportunities
1 (23/02/21)	<ul> <li>To understand how composers exploit musical elements to create programme music.</li> <li>To understand how to compose a short melody that reflects a story.</li> </ul>	<ul> <li>Listening, discussions and interactive quizzes surrounding orchestral programme music, specifically <i>Peter and the Wolf</i>.</li> <li>Planning and composing at least eight bars of melody in response to video of an animal's journey (from a choice of three; polar bears, penguins, monkey).</li> </ul>	<ul> <li>Examples of student work (for RQ1, RQ2, and RQ3).</li> <li>Self-reflection notes on teaching (for RQ3).</li> </ul>
2 (09/03/21)	<ul> <li>To understand how composers exploit musical elements to create programme music.</li> <li>To understand how to compose a pedalbased or functional harmony-based accompaniment for a melody.</li> </ul>	<ul> <li>Listening, discussions and interactive quizzes surrounding orchestral programme music, specifically <i>Carnival of the Animals</i>.</li> <li>Planning and composing at least an accompaniment to the melody composed last week in response to video of an animal's journey.</li> </ul>	<ul> <li>Examples of student work (for RQ1, RQ2 and RQ3).</li> <li>Self-reflection notes on teaching (for RQ3).</li> </ul>
3 (23/03/21)	<ul> <li>To understand how composers exploit musical elements to create programme music.</li> <li>To understand how to be critical and to respond to feedback to develop compositional work.</li> </ul>	<ul> <li>Listening, discussions and interactive quizzes surrounding orchestral programme music, specifically <i>Flight of the</i> <i>Bumblebee</i>.</li> <li>Developing and refining their melody and accompaniment animal's journey composition, based on teacher-given feedback and self-critique.</li> <li>End-of-scheme questionnaire.</li> </ul>	<ul> <li>Examples of student work (for RQ1, RQ2, and RQ3).</li> <li>Self-reflection notes on teaching (for RQ3).</li> <li>Responses to a Microsoft Forms end-of-scheme questionnaire (for RQ1 and RQ2).</li> </ul>

#### Table 2: Scheme overview

Lesson 1 was taught remotely (via Microsoft Teams Live Call) and Lesson 2 was delivered asynchronously (due to COVID-19 restrictions). Lesson 3 was taught in school. Throughout each

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lesson, all students had access to an iPad and composed using GarageBand. Whilst it is important to consider the creative benefits of using technology (as briefly discussed in the literature review), this investigation does not primarily concern the use of technology for teaching. All students had prior knowledge of basic keyboard skills and of using GarageBand.

I designed specific learning activities to address the research questions. Asking students to keep a composing diary/plan aimed to allow insight into their thought processes and demonstrate how helpful they found the stimulus and at what stage(s) of the four-stage creative process they utilised it when composing, addressing RQ1 and RQ2.

Regarding RQ3, compositional constraints were enforced through the following instructions: Students must use an instrument from the orchestra, must use musical elements that reflect an animal's journey as shown in a video stimulus (structure, tonality -must be C major or A minor, dynamics, pitch, tempo, and melody), and must create a clear melody and accompaniment. Students were given the choice of three c.60-90-second videos as stimuli because choices are important for creating an interdependence of constraints and freedom (Burnard & Younker, 2002; Sternberg, 1988). Furthermore, having a choice of stimuli increases the chance that students will feel emotionally moved by a video, a feeling which may be an important prompt for creative inspiration (Kontelis, 2018; Welke et al., 2021).

Also in address of RQ3, I modelled and scaffolded each activity through video tutorials and planning examples and analysed the success of these techniques through self-reflection notes on teaching cross-referenced with assessment of students' work. Additionally, students were exposed to several examples of orchestral programme music within lessons, and discussed the elements used by composers. Such discussions removed the confusing abstract nature of musical elements such as pitch, as melodic pitch contours were matched to animal cartoons (e.g., the bird in the *Peter and the Wolf* cartoon shown in Lesson 1), a strategy advocated by Philpott (2016).

#### Data analysis approaches and validity concerns

The main approach taken was thematic analysis, a technique that extracts themes within a qualitative data set. One well-used strategy for this method is the Framework approach where key themes and sub-themes are represented in a matrix, of which the cells can be filled with snippets from the data. Bryman (2008) defines the themes as "the product of a thorough reading and re-reading of the

transcripts or field notes that make up the data" (p.554). Advice I used to search for themes included looking for repetitions, metaphors and analogies, similarities and differences, and missing data (e.g., whether interviewees omit answers) (Ryan & Bernard, 2003). The data in my case was made up of written transcriptions of participants' responses from the focus group interview, a collation of written feedback that I gave to each of those six students after marking their composition work (both ongoing and final), and questionnaire responses from all students in the class. The students' work, particularly their composing diaries, was also analysed with the specific aim of answering RQ2 in mind, considering the following sub-questions: Does the stimulus act as a jump-start, or is it more important in other stages of the creative process? Is it clear where the four-stage process model (Wallas, 1926) and three-stage model (Thrash & Elliot, 2003) overlap? Do students exhibit stages in order?

The questionnaire was analysed in various ways for each question. Open question responses were analysed through thematic analysis (as above), and closed question responses were used to create percentage representations of whether students felt inspired to compose after watching their video, whether they could relate to their video, whether they found the video helpful and whether they felt they were creative.

Finally, I analysed my self-reflection notes by cross-referencing them with the feedback on students' work to understand which teaching strategies were most successful. This triangulation gives strength to the validity of my findings, ensuring they are as robust as they could be within the circumstances.

## Ethics

This research was carried out in accordance with the British Educational Research Association's ethical guidelines (BERA, 2018). It took place as part of the normal processes of teaching, with pupils in a class for which a qualified teacher had legal responsibility, approved activities, and acted as a gatekeeper. To the best of my belief, the research was not to the educational detriment of any pupils involved and did not cause harm to any participant. Notably, this meant that all students were given the same tasks so that no group was at an educational advantage. I sought necessary permissions for recording conversations and working with students outside of timetabled lessons, in line with the school's policies and procedures, and the students and school remain anonymous in this report.

## **Data presentation**

All written data was collated, and audio-recorded data transcribed, before thematic analysis took place and data was further coded in relation to the three research questions.

Participants are assigned a number for anonymity (P1, P2 etc.) which allows withdrawal of data if desired. No further details on gender or musical experience of participants are provided in this report, as this enquiry did not focus on these factors.

## Do Year 7 students find an extra-musical stimulus helpful when composing?

Questionnaire responses, focus group interview responses, and feedback provided for student work all showed that Year 7 students do, generally, find an extra-musical stimulus, specifically a video, helpful when composing. 27 students from the class of 30 responded with positivity to question seven in the questionnaire (Did you find the video helpful for doing your composition? Please explain why it was or wasn't helpful) with varying reasons. The three students who claimed that they did not find the stimulus helpful could not well relate to their stimulus video (see Table 3). This may be because they did not feel that they shared personality traits with the characters in the videos (polar bears learning to walk, penguins helping each other in a nerve-racking situation, or a playful monkey).

Participant	Response to Q7 (Did you find the video helpful for doing you composition?)	Response to Q5 (Did you feel like you could relate to the video?)
11	Not really. It would've been better if we could've chosen any animal [] it would've made the piece more personal.	Could relate a little bit.
28	No.	Could not relate.
25	Not really, I would have preferred to [completely] choose a video I like.	Could relate a little bit.

<b>Table 3: Questionr</b>	aire responses	of participants w	vho did not find	the stimuli helpful
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Reasons why students did find the video stimuli helpful can be categorised into four sub-themes (see Table 4 for participant quotations to support this, from both the questionnaire and focus group interview).

Sub-theme (reason)	Participant quotations
The video provides a storyline.	It gave me an understanding of the story (P23). I knew exactly how [the characters] acted (P18). It was so much better to base it on something than to make it up entirely (P13). It made it easier to compose if you knew what it was about (P8). It was [helpful] because I didn't have a lot of ideas (P6). You didn't have to make up what happened (P7).
The video helps to visualise ideas and concepts.	I could see when I should change sections (P1) You could imagine it (P26). It helped me visualise what instruments to use (P24). It gave me a clear vision on what I wanted to do (P14). You could actually see what you are aiming for and how your music could sound (P10).
The video shows movements which relate to and inspire musical elements (mainly structure and tempo).	I could see when I should change sections (P15). It helped me to determine when I should make it slow (P30). The way the polar bears moved inspired my piece (P27). It had lots of movement in it which opened lots of possibilities in the music (P22). I could watch the bears' movement (P19). The video tells you when to make it slower music (P30). The way [the animals] moved and what they did, you could put it in your music (P27).
The video acts as an emotional prompt.	It helped me feel the emotions (P29). It helped me find the emotions and match the emotions to the music (P4). It gave me a lot of ideas and it was relatable (P2).

 Table 4: Participant quotations stating the reasons that the video stimuli were helpful

Firstly, several students stated that the video provides them with ideas and a storyline upon which to build their programmatic piece. For reference, Figure 1 shows a transcription of P27's (within the focussed six students) composition from Lesson 1 and how it reflects the storyline of her chosen video.



Figure 1. A transcription of P27's composition from Lesson 1 and how it reflects the storyline of her chosen video, as well as demonstrating movement-inspired writing and effective use of structure.

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Secondly, the videos helped students to visualise ideas and musical concepts, removing a complex abstract sphere of thought. Thirdly, it became apparent that the movements of the animals in the video stimuli enabled students to effectively manipulate various musical elements to reflect their chosen storyline. Figure 1, again, demonstrates this, as does Figure 2 which shows a screenshot of P30's (within the focussed six students) composition from Lesson 1 and how it corresponds to the movement of the animal in his chosen video. Elements that were best utilised and manipulated included structure and tempo, and this finding relates also to the way manipulation of these elements was modelled by myself, a result I will discuss further in due course. Finally, several students stated that the video stimuli acted an emotional prompt for their composing.



## Figure 2: Correspondence between movement in the stimuli video and pitch movements/note lengths P30's composition

Another theme that arose regarding RQ1 was the importance of balancing freedom and constraints for an extra-musical stimulus to be helpful. One sub-theme of this is that students in the focus group unanimously agreed that they did not want rules or constraints when composing, but also did not perceive the video stimuli as a constraint. For example, P6 said that "a few rules is ok but it was good that we had freedom to erm [...] interpret" and P30 said that "interpret[ing] the videos differently, I think, was good but I wouldn't want lots of rules". The second sub-theme relating to this involves teacher modelling and examples. Students in the focus group stated that demonstrations were good for showing possibilities whilst allowing students to "think how [they] would do the same but different for [their] video" (P26). Demonstrations were good as they explained things students could add to their composition but did not "have to" (P27).

# At what stage of the four-stage creative process do Year 7 students utilise an extra-musical stimulus when composing?

Most students used the stimuli at the start of their process only. This was gleaned by questionnaire and focus group responses and the absence of responses in the composing diary template that asked: "Have you watched the video again after the first time?" The stage students perceived as the start is likely the second stage/incubation (unconscious processes start to dominate and imagination is heightened) and the third stage/illumination (a creative solution is thought of), as stage one/preparation (a problem is defined) largely involved the class discussions and assignment set by myself. Most students did not write in detail in their composing diaries, meaning that it cannot be garnered whether they followed linear (minimal movement) or recursive (more movement between incubation and illumination) pathways (Burnard & Younker, 2002).

Two students used the stimuli at additional stages. P16 stated that they "continued to watch [the stimulus video] over and over to help", suggesting that a "regulated" (more movement across all four stages) pathway of movement between stages of the creative process is possible when composing (Burnard & Younker, 2002). P27 watched the video when she thought she had finished "to see how [well the music] fit". This suggests use of an extra-musical stimuli can be helpful during stage four/verification (a creative solution is refined), but it is less common than use in earlier stages for students in Year 7.

It was not clear if/where the four-stage process model (Wallas, 1926) and three-stage model (Thrash & Elliot, 2003) overlapped, as students did not write in detail about points of inspiration in their composing diaries. Moreover, several students claimed not to be inspired by the videos at all, but to have used them in a functional manner. P27 said, "it's quite hard to tell if something has been an inspiration, but it was useful," and P30 said, "I don't think [the stimulus] inspired me [...], but it helped me." Reiterating this, self-reflection notes on teaching (based on feedback given to students after Lesson 3), read "not many emotions shown on plans/composing diaries, suggesting students understand a non-personal construct of inspiration."

# What teaching strategies can be used to help Year 7 students utilise extra-musical stimuli creatively?

As previously mentioned, students thought generalist demonstrations and examples were useful as they ensured a balance between freedom and constraints.

Well-modelled and explained concepts were used effectively by students. There are two sub-themes within this finding. Firstly, structural, tempo, and melodic developments were strong in many student compositions, but harmonic and rhythmic understanding was poor across the sample. This was clarified through the collation of self-reflection notes on teaching (incorporating feedback given to students) from across the project as presented in Table 5.

#### Reflections

Several compositions showed timing issues or uncertain rhythms. I will explicitly model how rhythms can be balanced in question-and-answer phrases next lesson (rather than just modelling how to reflect the mood/journey of the stimulus). All work shows that I modelled the *structure* clearly, but perhaps didn't talk enough about how to justify instrument choice, melodic choice etc. [Taken from teaching reflection notes based on feedback given to students after Lesson 1].

Clarification about what a pedal note is will be needed, as some students used a short repeating note but mostly alternated between tonic and dominant, and still referred to a pedal in their diary. This feedback shows that I did not model clearly enough for the asynchronous lesson how to rhythmically align chords and how to relate the accompaniment to the mood of the programme. [Taken from teaching reflection notes based on feedback given to students after Lesson 2].

I should have spent more time explaining how to align harmonies (I mostly explained about aligning rhythms and making phrases balanced, as this was an issue in last lesson's work) – many students did not understand quite how to experiment with notes 1, 4, and 5 as I instructed them to. Timing and harmonic understanding generally poor, and I did not spend lots of time explaining this (unlike structure which was largely well thought out), suggesting modelling is effective where used well and not when not! [Taken from teaching reflection notes based on feedback given to students after Lesson 3].

#### **General Note**

It is worth noting that some students may have been able to better understand information in a model depending on their prior knowledge and how often concepts were modelled to them, although this was not formally tracked here.

## Table 5: Self-reflection notes on teaching (incorporating feedback given to students) evidencing that well-modelled and explained concepts are used effectively by students

Secondly, listening elements of lessons successfully informed students' choices of instrumentation, pitch, and tempo, and this was highlighted in both self-reflection notes on teaching, and by P26 stating that "[one] would know how [an animal] might sound like a low instrument for a big animal or a like a hard sounding instrument for a scary animal, not like the flute."

Finally, personalised mid-project feedback (and subsequently adapted lesson plans) was effective in aiding students' composition processes. P27 said, "it was quite good I could change the dynamics

[...] but I probably wouldn't have done this if I didn't look on Teams [at the feedback]." A screenshot of P27's work in Lesson 3 is shown in Figure 3, evidencing the addition of contrasting dynamics following mid-project feedback.



Figure 3: Dynamics additions to P27's composition following mid-project feedback



Figure 4: P6's compositions from lessons 1 and 3, showing development and improved understanding of pulse and rhythmic phrasing as a result of teacher modelling

Strengthening this, self-reflection notes on teaching (based on feedback given to students after both lessons 2 and 3) say, "specific and direct feedback helps students to utilise their stimuli more

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efficiently" and "improvements based on feedback and Lesson 3 teaching plan adaptations good". An example of this can be seen in Figure 4 (above), where P6's (within the focussed six students) work goes from having no recognisable pulse to demonstrating more balanced rhythmic phrasing, as modelled following adaptations to lesson plans after Lesson 1.

#### **Additional findings**

Further to findings that directly addressed the research questions, two key discoveries were prominent. Firstly, inspiration and creativity were confirmed to be slippery concepts. Many students, when asked to define creativity, did so using a metaphor (often referring to being 'outside the box'). Importantly, all but one student said they thought they were being creative when doing their composition. As previously mentioned, several students claimed not to be inspired by the videos at all, but simply to use them in a functional manner, and over half of the class said they were not inspired by their stimulus in the questionnaire (despite a clear majority stating the stimulus was helpful for composing).

Secondly, several students associate written or recorded work as final and unchangeable. P27 said that doing a plan at the start of their composing process was restrictive as it meant "saying 'this is definitely what I'm gonna do", and P6 said that a mental plan is better than a written one because "you can change that very easily". Another sub-theme of this is that students voiced their preference for more opportunities for experimentation (despite such opportunities existing). P19 said, "maybe if we had time to just think about it, not make anything but think about it in your head and experiment with different sounds. That would be good," and P30 agreed immediately.

## Discussion

I will now explain how the findings comply or differ from existing research before outlining this study's limitations, implications for further research and future educational practice.

#### Do Year 7 students find an extra-musical stimulus helpful when composing?

The small minority of students (three from the class of 30) in the case study who did not find the extra-musical stimuli helpful for composing also claimed not to relate to their chosen stimulus video. This finding supports the advocations of Hallam and Rogers (2010) that a stimulus provided for

creative work should correspond to individuals' interests. Whilst students had a choice of three videos, this choice could be extended in future lessons.

Most students found the extra-musical stimuli helpful, which indicates that findings of psychology and English education research on cross-modal stimuli for creativity are largely transferable to music education, as predicted. Reasons stated by students for this largely supported previous literature.

The videos helped students to visualise ideas and musical concepts, removing a complex abstract sphere of thought. This was a reason that Philpott (2016) recommended the use of extra-musical stimuli, and he suggested that stimuli could inspire, specifically, melodic shapes or structures, two elements of which students focussed on closely.

The animals' movements in the videos enabled students to effectively manipulate various musical elements to reflect their chosen storyline, which suggests that specifically videos (or real-time movement art) as extra-musical stimuli can be helpful. Swanwick and Tillman (1986) found that movement (albeit children moving themselves, rather than watching movements) can "promote, stimulate, and intensify [musical] expressiveness" for children in the early years of school (p.336), and I seemingly correctly hypothesised that such a reaction may occur in secondary schools and regarding observation of movement.

Several students referenced emotional prompts given by the videos, corroborating claims of several scholars that inspiration is evoked by the interaction between external stimuli and internal feelings (Ishiguro & Okada, 2020; Kontelis, 2018; Oleynick et al., 2014). Elkoshi (2019) asserted that using extra-musical stimuli is sometimes criticised by policy makers for its wasting of class time on extramusical considerations and emotions rather than concentrating on music as sound. Relatedly, a hitherto scarcely mentioned yet perhaps obvious reason for the stimuli's helpfulness was that the videos provided ideas and a storyline upon which to build a programmatic piece. This meant that more time was spent on musical development than contextual thought.

The finding that freedom and constraints must be carefully balanced for extra-musical stimuli to help composing processes strengthens the research of Burnard and Younker (2002), Hallam and Rogers (2010) and Sternberg (1988), who each labelled this balance as crucial for nurturing creative style.

# At what stage of the four-stage creative process do Year 7 students utilise an extra-musical stimulus when composing?

The finding that most students used the stimuli at the 'start' (likely including stages two and three) of their process supports both Kennedy's (2002) assertion that external stimuli act as a catalyst for composing, and Kontelis' (2018) claim that inspiration is most strongly associated with stage three due to the sensory information associated with the stimuli producing insight. Two students indexed use of stimuli at additional stages, but with more time in lessons and to compose, this result may have been different. Moreover, the data collection method used to understand which stage within the four-stage creative process students used the stimuli (or even whether the four stages clearly occurred) was vague and reliant on students' own self-reflection and disciplined logging of thoughts.

It was not clear where the four-stage process model and three-stage model overlapped. This may be because of a lack of constant reflection and documentation by the students, but it may also be because "creative acts may not always entail a single strong moment of inspiration" (Welke et al., 2021, p.26). It may also be unclear because several students claimed not to be inspired by the videos at all, but simply to use them in a functional manner, as they found inspiration difficult to define or understand.

The way students moved through stages of the creative process was unclear, but it may be inferred that most followed linear or recursive routes, with two of 30 students perhaps following a regulated pathway. Burnard and Younker (2002) highlight that when there is more movement between stages "interaction with divergent and convergent thinking is more involved" (p.254), thus it seems that most students in this case did not do a lot of divergent thinking. This relates closely to the finding that students associate written and recorded work as final and unchangeable, and stated desires for experimental opportunities despite such opportunities existing. Rationale behind students perceiving written work in music as finalised may be a result of the lack of time given to music in the curriculum (little time to experiment and workshop ideas); Fitzgerald et al. (2012) said, "the impact of the publication in local and national league tables in the 1990s of English Key Stage 3 SATs and GCSE examination results arguably diminished creative risk-taking in the English classroom" (p.57).

# What teaching strategies can be used to help Year 7 students utilise extra-musical stimuli creatively?

Generalist demonstrations and examples for how to use and manipulate musical elements in conjunction with an extra-musical stimulus were useful for students as they achieved a balance between freedom and constraints, again strengthening the research of Burnard and Younker (2002), Hallam and Rogers (2010) and Sternberg (1988), who each labelled this balance as crucial for nurturing creative style.

Well-modelled and explained concepts were used effectively by students, as shown by structural, tempo, and melodic developments being strong in many student compositions, but harmonic and rhythmic understanding being poor, and by students' choices of instrumentation, pitch and tempo reflecting listening elements and discussions in lessons. It is therefore of paramount importance that guided appraisal and practical modelling forms an integral part of music lessons, and that careful consideration of what students need to know and in what order informs curriculum planning.

Personalised mid-project feedback (and subsequently adapted lesson plans based on common misconceptions) were also effective in aiding students' composition processes, and should be non-negotiable aspects of teaching music, specifically composition, to young students.

#### **Additional findings**

As previously mentioned, inspiration and creativity were confirmed to be slippery concepts, supporting that a pluralised definition of creativity is useful (Burnard, 2016). Positively, students appeared not to perceive creativity as being the preserve of a genius, thus implying that perpetuation of a patriarchal idea that true creativity is a gift is not as problematic in music education as Philpott (2016) asserted.

#### Limitations and implications for further research

The logistics of conducting educational research during the COVID-19 pandemic have meant that several limitations have occurred during this study. Fitzgerald et al. (2012) state that, because creativity involves risk-taking, "a pre-requisite is that trusting relationships and mutual respect have been developed" (p.61), but I met and taught two thirds of this scheme to the Year 7 class in this case online, before a strong relationship could be established. Whilst the effects of this circumstance could

not be quantifiably measured, it is important to note that my positionality within this circumstance may have skewed findings. Furthermore, this cohort of students have had a disrupted year of learning, and all students may not have had the same prior experiences with composing. This is likely to have affected their use of extra-musical stimuli; "the role of prior knowledge as an explanatory factor in the choice of approach to composing has been emphasised in a number of studies" (Burnard & Younker, 2002, p.247).

Another limitation, unrelated to the pandemic, is that all students did the same task (bar their choice of stimuli), no student composed *without* stimuli, so variables were not changed for a control group and the usefulness of extra-musical stimuli cannot be quantified or summarised as comparatively useful. This may be beneficial to explore in future studies.

This study followed students over a six-week scheme of learning, meaning that their longitudinal progression in composition (over years) is unknown. This could be an interesting venture for future research because creative skills may change in focus as children age and gain experience (Swanwick & Tillman, 1986). Another timeframe-related limitation regards that a person's creativity can vary over the course of even a minute (Zenasni & Lubart, 2002), so my findings (particularly from retrospective interviews and questionnaires) may not be completely robust. If this study was replicated, a method for gathering in-the-moment student opinions could be employed.

The data collection method used to understand which stage within the four-stage creative process students used the stimuli (or even whether the four stages clearly occurred) should be less reliant on students' own self-reflection and disciplined logging of thoughts. This may include regularly stopping a class and asking them to rate their inspiration levels and how many times they have used their stimuli within a short period, although this may encourage students to use the stimulus when they might not have otherwise done so, so should be carefully considered. Several students' understandings of the term 'inspiration' were indistinct and not associated with functional idea formation, and this finding provides an important starting point for further research in a previously understudied body of literature.

Lastly, future studies would benefit from enlisting a larger and more representative participant sample so that findings can more confidently be generalised, and employing several interviewers and coders would ensure a less biased analysis.

#### Implications for future educational practice

A catalyst for this research project was the observations I made during my first teaching placement as a trainee music teacher: GCSE students often wrestled with how to begin or develop compositions and reacted to their struggles by misbehaving and avoiding focussing on composition coursework. The findings I have gleaned from studying KS3 to consider how students are creative and compose ahead of their GCSE ventures, with a focus on using extra-musical stimuli, have unearthed several ways that my future teaching can adapt to minimise such issues and contribute to good practice.

Firstly, this study has shown the importance of hearing pupil voices. Considering students' visions of creativity and their preferences for composing and being taught to compose has allowed me to understand and develop thoughts on all the following issues and processes.

The importance of balancing freedoms and constraints is a theme that has constantly recurred throughout this investigation. Doing so in my teaching is perhaps not only essential for compositional tasks but for other musical activities and projects, such as performance, too. This finding has supported the idea that a pedagogy for creativity should, above all, be flexible (Philpott, 2016).

Well-modelled and explained concepts (including guided listening and appraising discussions) proved invaluable and will continue to form an integral part of my music lessons, as will personalised mid-project feedback (and subsequently adapted lesson plans), both for composition and other aspects of musical learning.

Finally, I will endeavour to allow more time for students to experiment and utilise divergent thinking skills when composing. Whilst music teachers are limited by the parameters of governmental and school-assigned timeframes for lessons, they must strive to encourage creative risk-taking and remove the perception that written work is final. This may be achieved through enforcing working on 'scrap paper', completing low-stakes compositions prior to assessments, and utilising a sketchbook-style approach (with more ideas than necessary) to planning musical projects.

## Conclusion

Following a critical evaluation of a Year 7 class making programmatic music on GarageBand, I judge that the use of extra-musical stimuli is a helpful strategy for encouraging creative composition in the

secondary school music classroom. Reasons for this support and extend findings of previous literature across domains of music education, English education, and psychology (including storyline prompts, visualisations to remove abstract complexities, and emotional prompts). Students should be given a choice of stimuli, however, and stimuli should be carefully selected to ensure that students can relate to them in some way, contributing to a vital balance between freedom and constraints that nurtures individual creative style. Moreover, video stimuli have proven particularly helpful due to their movement component and how this can directly inspire manipulation of musical elements.

Most students used extra-musical stimuli at the 'start' (likely including elements of stages two and three of Wallas' four-stage model, 1926) of their creative process. The short timeframe and data collection methods used to understand which stage within the four-stage process students used the stimuli meant that understanding the details of such processes was hampered. A reason for this, however, may also be because "creative acts may not always entail a single strong moment of inspiration" (Welke et al., 2021, p.26).

Several teaching strategies that can minimise issues in the composing classroom and contribute to good practice in music education more broadly include: constantly considering pupil voices, visions of creativity and preferences for composing/being taught to compose; balancing freedoms and constraints (through both clear yet generalist instruction and provision of resources); focussing on modelling and explaining concepts in a clear yet generalisable and adaptable way (including guided appraising discussions); providing personalised mid-project feedback (and subsequently adapting lesson plans); and allowing time for experimentation and divergent thinking. Moreover, this study has reiterated Philpott's (2016) assertion that a pedagogy for creativity should be, above all, flexible.

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## Appendix 1

## Questionnaire

Below is a copy of how the End of Animal Music Questionnaire looked to students (although they completed it in Microsoft Forms Online Format). Red text shows a closed question. Green text shows an open question. (All text showed up black for the students).

Please take a few minutes to fill in this form and submit it. Well done for completing some great animal music compositions!

1. Please write your name.

2. Which video did you base your composition on?

- The monkey
- The penguins
- $\circ$  The polar bear cubs

3. Why did you chose that video?

4. What emotions did the video make you feel?

5. Did you feel like you could relate to the video? (e.g., did you think the friendship of the penguins was like you and your friends, or that you are determined like the polar bear cubs, or that you are energetic like the monkey?

- o Yes
- o No
- o A little bit

6. Did you feel inspired to compose after watching the video?

- o Yes
- o No
- o A little bit

7. Did you find the video helpful for doing your composition? Please explain why it was or wasn't helpful (one sentence is fine).

8. What do you think creativity is?

9. Do you think you were creative when you did your composition?

- Yes
- o No