



Esslin-Peard, Monica: Shorrocks, Tony: Welch, Graham F.

The art of practice. Understanding the process of musical maturation through reflection

Niessen, Anne [Hrsg.]; Knigge, Jens [Hrsg.]: Theoretische Rahmung und Theoriebildung in der musikpädagogischen Forschung, Münster : New York : Waxmann 2015, S. 125-145, (Musikpädagogische Forschung: 36)



Quellenangabe/ Reference:

Esslin-Peard, Monica; Shorrocks, Tony; Welch, Graham F.: The art of practice. Understanding the process of musical maturation through reflection - In: Niessen, Anne [Hrsg.]; Knigge, Jens [Hrsg.]; Theoretische Rahmung und Theoriebildung in der musikpädagogischen Forschung. Münster ; New York : Waxmann 2015, S. 125-145 - URN: urn:nbn:de:0111-pedocs-126184 - DOI: 10.25656/01:12618

https://nbn-resolving.org/urn:nbn:de:0111-pedocs-126184 https://doi.org/10.25656/01:12618

in Kooperation mit / in cooperation with:



http://www.ampf.info

Nutzungsbedingungen

Gewährt wird ein nicht exklusives, nicht übertragbares, persönliches und Bevannt wird ein nicht exhusives, nicht ubertragbares, personities und beschränktes Recht auf Nutzung dieses Dokuments. Diesen Dokument ist ausschließlich für den persönlichen, nicht-kommerziellen Gebrauch bestimmt. Die Nutzung stellt keine Übertragung des Eigentumsrechts an diesem Dokument dar und gilt vorbehaltlich der folgenden Einschränkungen: Auf sämtlichen Kopien dieses Dokuments müssen alle Urheberrechtshinweise und sonstigen Hinweise auf gesetzlichen Schutz beibehalten werden. Sie dürfen dieses Dokument nicht in irgendeiner Weise abändern, noch dürfen Sie dieses Dokument für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen Verwendung dieses Dokuments erkennen Sie die Mit der

Nutzungsbedingungen an.

Kontakt / Contact:

DeDOCS

DIPF | Leibniz-Institut für Bildungsforschung und Bildungsinformation Informationszentrum (IZ) Bildung E-Mail: pedocs@dipf.de Internet: www.pedocs.de

Terms of use

We grant a non-exclusive, non-transferable, individual and limited right to

We grant a non-exclusive, non-transferable, individual and limited right to using this document. This document is solely intended for your personal, non-commercial use. Use of this document does not include any transfer of property rights and it is conditional to the following limitations: All of the copies of this documents must retain all copyright information and other information regarding legal protection. You are not allowed to alter this document in any way, to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. distribute or otherwise use the document in public.

By using this particular document, you accept the above-stated conditions of use.



Musikpädagogische Forschung Research in Music Education

Band | vol. 36

Anne Niessen, Jens Knigge (Hrsg.)

THEORETISCHE RAHMUNG UND THEORIEBILDUNG IN DER MUSIKPÄDAGOGISCHEN FORSCHUNG

THEORY FRAMEWORK AND DEVELOPMENT IN MUSIC EDUCATION RESEARCH

WAXMANN

Musikpädagogische Forschung Research in Music Education

Herausgegeben vom Arbeitskreis Musikpädagogische Forschung e. V. (AMPF)

Band 36

Proceedings of the 36th Annual Conference of the German Association for Research in Music Education

Anne Niessen, Jens Knigge (Hrsg.)

Theoretische Rahmung und Theoriebildung in der musikpädagogischen Forschung

Theory Framework and Development in Music Education Research



Bibliografische Informationen der Deutschen Nationalbibliothek

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über http://dnb.d-nb.de abrufbar.

Musikpädagogische Forschung, Band 36 Research in Music Education, vol. 36

ISSN 0937-3993 ISBN 978-3-8309-3313-7

© Waxmann Verlag GmbH, Münster 2015 Steinfurter Straße 555, 48159 Münster

www.waxmann.com info@waxmann.com

Umschlaggestaltung: Anne Breitenbach, Münster Satz: Sven Solterbeck, Münster Druck: Hubert & Co., Göttingen

Gedruckt auf alterungsbeständigem Papier, säurefrei gemäß ISO 9706



Printed in Germany

Alle Rechte vorbehalten. Nachdruck, auch auszugsweise, verboten. Kein Teil dieses Werkes darf ohne schriftliche Genehmigung des Verlages in irgendeiner Form reproduziert oder unter Verwendung elektronischer Systeme verarbeitet, vervielfältigt oder verbreitet werden.

Inhalt

Anne Niessen & Jens Knigge
Vorbemerkung
Matthias Proske
Unterricht als kommunikative Ordnung
Eine kontingenzgewärtige Beschreibung 15
Teaching as communication. A contingency-based approach
Hermann J. Kaiser
Paradigma versus Denkstil
Modi systematischer Historiographie in der Musikpädagogik
Dimensions of historiography – Paradigma versus thought-style
Thomas Busch
Das Wer, Wie und Was von (An-)Ordnungen
Überlegungen zu Raumtheorie und Gerechtigkeit im Feld
der Musikpädagogik
Who arranges what – and how? Considerations regarding the theory
of space and justice within the area of music education
Verena Weidner
Soziologische Systemtheorie und Musikpädagogik
Annäherungen an ein Theorieverhältnis
Sociological Systems Theory and music education. Approaches to a relation between the theories

Geltungstheoretische Überlegungen zu musikbezogenen historischen

<i>Validity – usage – content. Reflections on validity regarding the construction of historical context from a music educational perspective</i>
Malte SachsseMensch und Musik im ,Rahmen' der TheorienPluralisierung, Reflexion und Kritik als Aufgaben einerbildanthropologisch orientierten musikpädagogischen Forschung
Samuel Campos Subjekte der Praxis – Praxis der Subjekte Subjektivierung als Perspektive musikpädagogischer Unterrichtsforschung 111 Subjects of practice – practice of subjects. Subjectivation as a perspective for studies in music education
Monica Esslin-Peard, Tony Shorrocks & Graham F. Welch The Art of Practice Understanding the process of musical maturation through reflection 125
Lisa Knörzer, Christian Rolle, Robin Stark & Babette Park " er übertreibt und das macht mir seine Version zu nervös" Einzelfallanalysen musikbezogener Argumentationen
Johannes Hasselhorn & Andreas C. Lehmann Leistungsheterogenität im Musikunterricht Eine empirische Untersuchung zu Leistungsunterschieden im Bereich der Musikpraxis in Jahrgangsstufe 9

Adrian Niegot

Geltung – Gebrauch – Gehalt

Inhalt

Melina Carmichael & Christian Harnischmacher
Ich weiß, was ich kann! Eine empirische Studie zum Einfluss des musikbezogenen Kompetenzerlebens und der Motivation von Schülerinnen und Schülern auf deren Einstellung zum Musikunterricht
I know my own skills. An empirical study regarding the influence of music-related competence and motivation of students in their attitudes towards music education at schools of general education
Daniel Fiedler & Daniel Müllensiefen Validierung des Gold-MSI-Fragebogens zur Messung Musikalischer Erfahrenheit von Schülerinnen und Schülern der Sekundarstufen an allgemeinbildenden Schulen
<i>Validation of the Gold-MSI questionnaire to measure musical sophistication of German students at secondary education schools</i>
Michal Bischoff, Tim Sandkämper & Christoph Louven Jugendliche und ,Klassische Musik' Vorurteile und Klischees
Teenagers and classical music – Prejudices and clichés
<i>Michael Ahlers & Andreas Seifert</i> Sprachliche Heterogenität im Musikunterricht
Language diversity in music lessons

The Art of Practice

Understanding the process of musical maturation through reflection

Abstract

Much has been written in the last 30 years about musical practice and performance, but there is little consensus over what practice really means, or how musicians progress by practising. Researchers tend to focus on specific elements in practice rather than maintaining a more holistic perspective. Whilst academics historically focused on (primarily Western) classical musicians, more recent research has encompassed popular, jazz and folk musicians. The current research project at the University of Liverpool focuses on the practice and performance of both popular and classical musicians as described in students' reflective essays. We posit a model for musical maturation that incorporates key elements from psychology, epistemology and sociocultural theory.

Introduction

The "Art of Practice" research project at the University of Liverpool¹, School of Music seeks to explore how students of classical² and popular³ music acquire the knowledge, skills and expertise of practising. This prompts not only an investigation into the process of practice, but also the educational and social context of the learning. This paper presents a review of relevant literature and then considers

¹ The Russell Group represents 24 leading UK universities which are committed to maintaining the very best research, an outstanding teaching and learning experience and unrivalled links with business and the public sector.

^{2 &}quot;Classical" is used to describe musicians who have been educated in the tradition of Western classical music, for example those who play orchestral instruments or piano or sing and largely perform works from the Western classical oeuvre. These musicians generally start their instruments at a young age and are used to the expectation of several hours of practice a day.

^{3 &}quot;Popular" is used to describe musicians who are largely self-taught and whose preferred style of music is popular. This term is also used to encompass jazz and folk musicians. These musicians typically learn from peers or musicians whom they admire, and develop their skills more informally through experimentation and group practice sessions.

the initial findings from data gathered from the 2012–2014 cohort of popular and classical undergraduate musicians on the performance module at the University of Liverpool.

Background

Historically, music education research has centred on classical musicians. It is well documented that practice is a key part in the development of musical excellence (e.g., Austin & Haefner-Berg, 2006). Classically trained musicians have often reported 10,000 hours or ten years of practice to reach professional standards (Ericsson, Krampe & Tesch-Römer, 1993). In an attempt to explain the phenomenon of practice, researchers draw on a wide variety of models. Miksza (2011) offers a tripartite division between the individual, comparison of student and teacher views, and changes in approaches to practice over long periods of time. Surprisingly, researchers have not agreed on a single model which encompasses practice behaviours. Hallam (2001, p. 28) investigated expert practice and concedes that even the definition of experts is open-ended:

They know how to do the right thing at the right time. There is no single expert way to perform all tasks.

However, she concludes from interviews with 22 professional musicians that they do indeed "learn to learn". In a subsequent paper, Hallam (2006, p. 122) identifies eight expert practice strategies which she links to the concept of metacognitive practice. This focus on *how* an individual learns to practise is central to our research which involves both classical and popular music undergraduates.

More recently in the last 20 years, following the ground-breaking work of Green (2002), research has also focused on popular music, including a lively debate about formal versus informal learning models, which we will discuss later.

Two further areas are important to frame this study. Firstly, assessment—both formative and summative—is a key part of the individual, group and institutional process employed to track progress. Musical assessment varies from institution to institution and by musical genre, including peer and faculty assessment (Ginsborg & Wistreich, 2010; Lebler, 2007, 2008). Secondly, reflective practice has been embraced by tertiary educational institutions in England, Scotland and Wales over the last two decades, following theories of reflective practice that were developed by Schön (1987) and refined for educational practice by Ghaye (2011). It is reported that reflective journals or practice diaries offer one type of tool to develop metacognitive thinking skills, but the process needs to be managed carefully, see Cowan (2013).

The research question

In our research at the University of Liverpool, the aim is to develop a model which explains the maturation of musicians through practice and performance, based on the following premise:

To explore the self-reported behaviours of undergraduate popular and classical musicians, and identify similarities and differences in changes which individuals experience in the development of musical expertise.

This is essentially a study about intending professional musicians, based in their world of making music daily, rehearsing and performing and trying to capture the moment when students self-report that they consciously understand their practice.

The research context

The University of Liverpool offers three-year undergraduate courses in Music and Popular Music. The intake each year is approximately 65 students. Music students have access to a wide range of topics in each year of study, spanning musicology, composition, sociology of music, production, gender, aesthetics and audio-visual media, and can choose the 'performance' module in all three years of study, subject to a successful audition at the start of their first semester. This university is unique in assessing students not only through performance, worth 70 % of the marks, but also by requiring them to write a reflective essay about their experience of practice and performance, which is worth 30 % of the marks.

All performance students, both classical and popular, attend weekly two-hour workshops with their respective tutors. As the Head of Performance explains:

The first years—pop and classical—get a lot of input in class into aspects of learning and practising. Some sessions are people explaining in front of the class what their one-to-one instrumental or vocal lesson content has been, followed by "how" they practised it, what problems arose, discussions as to how it could be practised and then all have to make notes as to what they could use.

It is important to note that the tutors take care *not* to "instruct" their students how to practise. Whilst the student handbooks have some basic guidelines, the emphasis is on a process of self-discovery, which is enhanced by discussion with peers and tutors. This concurs with Cowan's approach (2013, p. 4):

I want to empower each learner supportively and without exercising authority. [...] I nudge the learners forward into Vygotsky's Zone of Proximal Development where they can make more progress through prompting than they could manage on their own. I do no more than that. I certainly do not instruct, or tutor.

Methodology

The data for this project are drawn principally from the students' reflective essays, which are made available to the lead researcher (first author) at the end of each academic year, after assessment results have been made public. When comments are identified in reflective essays which need further explanation, she invites students to participate in individual interviews, which are audio recorded and transcribed for subsequent analysis by an independent typist to avoid any bias.

We adopt a mixed approach to analysing the data, using both quantitative and qualitative techniques, a method which is commonly used in (music) education research, following Bryman (2006, p. 100). Quantitative data plays a lesser role in this project, serving to show trends, such as, for example, in students taking music lessons.

Qualitative data drawn from the reflective essays and interview transcripts are examined based on the principles of textual analysis. Following McKee (2003), we seek to gain an understanding of how students make sense of their practice behaviours. Repeated close reading of all the available narratives was considered to be the most appropriate method to ascertain how students' behaviour and attitude towards practice was changing, which follows the "zooming in" approach of Johansson (2013) and methods adopted by Green (2002) and Smith (2013) in exploring interview data from popular musicians.

As music research in any educational setting, such as tertiary education, is—by necessity—also affected by the physical and socio-cultural environment, the musical backgrounds of the participants, their concepts of self-identity and the influence of peer groups, we are keen to take the "bigger picture" into account in our research, and concur with the philosophical standpoint cited by Yarbrough (2003, p. 10) of:

the behavioural psychologist who studies and interprets musical phenomena and behaviours in light of environmental and cultural influences, learning and achievement, and nurturing aspects.

A research project based on self-reported behaviours begs the question whether student behaviour is voluntary, or determined by their teachers, c. f. Cowan (2013). As stated above, the tutors seek to leave the students as much freedom as possible to understand their own learning journeys, whilst also being available to offer advice and support.

Ethical considerations

Ethical approval was obtained from the university Ethics Committee in October 2012. Students were given information about the research project and 47 signed a

consent form to confirm that they understood the nature of the study, and could withdraw at any time for any or no reason. This form also offered an opt-in clause for taking part in interviews.

The lead researcher, as a full time music teacher in London and part-time doctoral student, has made considerable efforts to keep her distance from students when conducting focus groups and one-to-one semi-structured interviews in order to avoid influencing the content of reflective essays.

Discussion of results for 2012-2014

The results which we discuss below are based on the data from reflective essays which were available for the first two years of study for the student cohort who started in October 2012. Throughout the discussion below, we highlight important similarities and differences between the practice behaviours of classical and popular musicians.

Baseline data about instrumental and vocal tuition for both years were collected for 32 popular musicians and 15 classical musicians (see Figure 1 below). The take up for the 15 classical musicians in the group was 100 %. Popular musicians, on the other hand, did not all make use of the provision in the first and second years.

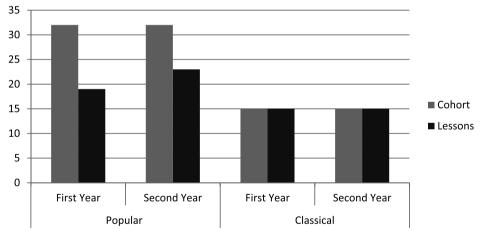


Figure 1: Individual Instrumental/Vocal Tuition 2012–2014 (n = 47)

Analysis—General considerations

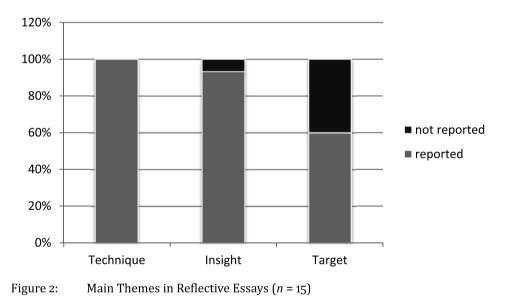
The principle challenge in the analysis of a total of 94 reflective essays was to make sense of narratives which had been generated in many different styles, and with a wide range of foci for reflection. The lead researcher read through the essays to identify common themes, which, for the first year, were consistent across the two sub-groups of musicians in terms of common elements which might be deemed relevant to musical maturation through practice.

In addition, many of the first-year popular musicians described the social aspects of band formation, and identified a host of barriers to their learning, such as non-attendance, or arguments about the direction and content of rehearsals. This area of investigation has been excluded from the present paper, as it detracts from the principle focus on the development of practice.

In the second-year essays, there was a marked divergence between themes which emerged due to the difference in the content of the workshops led by the two performance tutors. Popular musicians were increasingly focusing on creating their own material, whilst the classical musicians put a great deal of emphasis on their developing understanding of intonation.

Analysis—First-year classical musicians

All 15 classical musicians submitted reflective essays. Close reading and re-reading of their texts revealed Technique, Insight and Targets as the three most common themes (see Figure 2 below).



Technique

The majority of classical musicians identified technique as a major area of focus in their practice. Students gave a variety of responses: some described what their teacher was working on with them, others wrote about their own attempts to tackle technically difficult pieces or specific passages. Some students who were admitted with playing or singing skills below ABRSM Grade VIII⁴ may have felt under pressure compared with their peers, and so were encouraged to focus on building technique by their teachers.

Lessons have consisted almost exclusively of singing exercises to build up technique from the basics, rather than building upon flawed foundations. (Singer)

Insight

The majority of the first-year classical students described instances of practice that demonstrated varied levels of insight into their personal practice routines. There is certainly some evidence of a change towards an examination of the "how" to practise, rather than re-iteration without reflection. For example:

Throughout the year I have learnt that there is a difference between simply just playing through a piece and actually practising a piece. [...] I now question myself more as to why I cannot do certain things and try and find solutions. (Saxophonist)

A first-year viola player who had previously been a junior student at the Royal Academy of Music in London, and who had completed one year of conservatoire study before coming to Liverpool, described the transition from re-creating a performance to being creative in performance:

When I started my year, in my private work, I was trying to achieve the feelings and match the sound identical to that of a performance and I was only satisfied if I had recreated that sound. This behaviour is now alien to me and pretty unimaginable. Who would only want to re-do?

Compared with her peers, this first-year student has a much deeper understanding of what practice and performance is about.

Targets

Just over half of the first-year classical musicians had set themselves longer term goals which encompassed particular performance opportunities, such as playing a concerto, or taking a specific music exam. Nine out of the 15 musicians cited targets,

⁴ The Associated Board of the Royal Schools of Music offers a graded sequence of practical and theoretical examinations in the UK and around the world. The examination syllabus caters for classical and jazz musicians. Grade VIII, the highest grade, is often required for school leavers wanting to study music at university.

which included a more regular use of the practice diary in the following year, or changes in practice habits, such as breaking down pieces into smaller chunks to overcome technical difficulties and spending time more effectively and not 'playing through' pieces which points to the emergence of some metacognitive practice strategies.

Analysis—First-year popular musicians

The popular musicians are a diverse group. Their ages and backgrounds vary, including those that are mainly self-taught, those that have had some instrumental or vocal lessons and those that already consider themselves to be experienced performers. Whilst the majority of these students tended towards a narrative description of their experiences in the first year, 28 articulated some kind of insight into their own development as musicians. A minority of students exhibited much deeper levels of reflection, both in terms of their individual development, and about the process of band rehearsals. The same three themes were used to analyse these essays to highlight the differences and similarities between the classical and popular musicians.

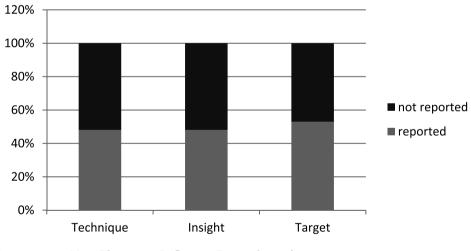


Figure 3: Main Themes in Reflective Essays (n = 32)

Technique

Not surprisingly, the 19 popular students who were taking regular lessons (Figure 3) wrote about technique. Many of the vocalists, like their classical musician peers, accepted to a greater or lesser extent that practice was necessary to develop their

skills. In particular, they were very positive about their lessons, even though seven out of nine reported a focus on warm-ups and technique, which was new for many:

Before I had any lessons from Anne, I didn't always warm up before individual practice, but by having these lessons, I now know the importance of a decent warm up and so before practising in the future, I will always warm up.

Similarly, a guitarist reported:

I have to admit I was a bit hesitant to begin with. My tutor was covering material that was mainly orientated towards a jazz style of playing, which was unfamiliar territory for me.

He persevered with the technical work on chord voicings, alternative chord shapes and modal scales and reported that this enabled him to be more creative when working with others, whatever the genre:

One thing I have learnt is how I always need to be able to adapt to the type of band I am playing in as I have realised how differently many musicians work.

Unlike classical musicians, who had extensive experience of individual tuition and practice, one popular guitarist wrote:

Although I appreciated [that] these chords and scales were useful, and perhaps vital in my progression to becoming a better player, I found the practice tedious, bland, insipid and dull.

Insight

The popular musicians' weekly tutor-led workshops offered an opportunity for bands to perform to each other and gain peer and tutor feedback. In addition, the tutor spent three evenings a week coaching bands in rehearsal. It seems clear that he was keen to encourage first-year bands to bring a creative twist to their cover versions. Here is a typical comment:

By jamming along to and transposing songs from a wide range of different genres from hip-hop to deep house, I have gained an insight into alternative scales, intervals, phrasing and percussive techniques that can be used to great effect in creating original sounds.

One guitarist's commentary stands out from his peers as he gained experience not only from bands, but also by playing for a musical theatre production, recording how he dealt with a large amount of unfamiliar material. He listened to the musical numbers, practised difficult passages and ensured that he had the appropriate guitars and equipment. He noted that he spent a couple of hours a day in preparation, but does not say for how many days this practice took place. In this context, his comments suggest that he was displaying behaviours more typical of his classical peers, in the sense that he prepared before the rehearsals and focused on technical aspects to ensure that he could play fluently.

The rehearsals were incredibly different to the ones I have with the university band. Due to the small amount of time we had to go through the songs, we all had to be concentrating and be 100 % prepared for it.

Targets

We were somewhat surprised to find that 17 out of 32 students mentioned general targets, either for improvement within their first year, or for the second year. This seems to be in line with DeNora's (2000) comment that popular music is situated in a social context and, as such, group identity may be more important than individual identity. This may go some way to explaining why there were no clearly defined individual goals to be found, as many of the student musicians see their musical development within the band.

Analysis—Second-year classical musicians

All 15 classical musicians continued with the performance module in their second year of study and were active not only as soloists, but in a wide range of orchestras, choirs, chamber ensembles and concert bands, on and off campus. There was also evidence of cross-genre "musicking" which we discuss separately below. The most commonly discussed themes in the second-year reflective essays were tuning and intonation; metacognitive practice strategies and change and 'A-HA' moments. This is partly due to the nature of the taught content of the first semester and, as we will show below, can be explained by a change in student behaviour.

Tuning and intonation

In the regular weekly lectures, the Head of Performance worked with the students on different tuning temperaments for a harpsichord. The objective of this exercise was to develop aural acuity and to recognise the interference beats of notes that are out of tune. Consequently, 8 out of the 15 students offered comments that reflected on intonation. One saxophone player's comments demonstrated a real change in attitude to tuning: Despite the initial resentment that I felt towards the lectures spent tuning a harpsichord, it did not take me long to realise and appreciate the vast development that it was making on my playing. I found myself constantly listening out for tuning issues.

One of the pianists says that, as a result of the lectures, "It is the pianist's job to play the piano in tune." This suggests that the student has not only learnt and internalised aurally what it means for her to be in tune, but can also vary her touch at the keyboard to improve intonation.

Metacognitive practice strategies

Metacognitive practice strategies have been reported by Hallam (2001). Her research, based on the experiences of 22 professional musicians, points clearly to key elements in mature practice such as acute self-awareness, planning practice tasks using a wide variety of strategies and effective time management. Furthermore, mental rehearsal techniques are cited in the literature about metacognitive practice and these were echoed in students' written reflections. A viola player described what she heard in her head, and what she was thinking about:

I am imagining what can be done, and how I could be improving. The music is clearer and louder in my head, as is the image of the viola when I am not practising.

In summary, the reflective writing about practice strategies by the second-year classical musicians provides more evidence which points to conscious thought about *how* to practise and an understanding of which strategies to use in a specific set of circumstances.

Change and 'A-Ha' moments

One of the original questions which emerged in discussions with colleagues—both professional orchestral musicians and singers, as well as musical theatre performers, chamber musicians, choral singers and organists—was how to define the moment when a developing musician "gets" what practice is all about, and starts to use metacognitive practice strategies deliberately.

Although there is no theoretical model for an "A-Ha" moment and the students were not told deliberately to identify such moments in their reflective essays, the examples which we give below seem to suggest some kind of breakthrough in learning and understanding. For example, one of the singers missed half of the three months through illness and said he was stuck in his practice. However, at the end of the second semester, he reportedly made a major breakthrough with his singing teacher by combining physical movement with vocal exercises. As a result, he was able to use metacognitive strategies such as planning his practice schedule to work on his technique and the interpretation of the songs for his second-year recital. Despite admitting that he was not using a practice diary, the student described in an interview how he internalised the change which had taken place:

Whereas last year I was trying a new approach with practising, I feel that lately it has become more of a natural attitude and habit than something I am affecting to do, [...] resulting in a much faster rate of progress than I was previously experiencing.

We would suggest that this singer is demonstrating not only evidence of learning *how* to learn, but also of owning the strategies and internalising them.

Analysis—Second-year popular musicians

All 32 popular musicians continued with the performance module in the second year. Of these, 23 students explicitly mentioned going to lessons provided by the music department—an increase of four students from the first year—and this seems to underlie one of the areas on which they focus in their reflective essays, namely technique and performance craft.

In our discussion below, we focus on two areas, namely individual practice, and band practice/working on original material. As song writing is so central to the development of bands, we believe that it is impossible to divorce the creation of new material from the process of band development. In accounts of both individual and group practice sessions, we have been looking for indications of metacognitive practice strategies.

Individual practice

Using "practice" as a term to describe individual work to improve technical or interpretative skills (as reported by the majority of classically-trained student musicians) can be quite misleading in the cultural context of popular musicians. This was made clear by one guitarist, who reported that in a week he does seven hours of practice which includes practising on his own, rehearsing in two bands and playing in gigs. "Practice" is used to describe a much greater range of musical activities and encompasses many informal learning situations. In addition, some students told us that they regard live performances as a kind of practice. Not surprisingly, with a great deal of time spent in band rehearsals, there were fewer accounts of individual practice in the second-year essays. A female vocalist reported,

On top of lessons, I also practise on my own. My solo practices are enjoyable, [...] although I feel like sometimes because I am on my own, I will slack off and maybe not be as picky with my playing as I would be in band practice or in my lessons: I do better when I am accountable to somebody. Nevertheless, she is demonstrating the need to develop technique, strongly motivated by positive experiences in bands. Unlike their classical-musician peers, who have grown up with a culture of individual practice, popular musicians develop the motivation to practise individually *as a result of* playing in bands.

Band practice/working on original material

If the band is the centre of focus for learning for popular musicians, then it seems worth exploring how the students describe their band rehearsals. Green (2002) describes a variety of different models for generating original material, ranging from a single composer bringing music to the band in an almost finished state to collaborative jamming based on a single riff or musical idea as a starting point. The same processes can be seen in the student bands at the University of Liverpool, driven by the rapport between musicians. One singer described the process of rehearsal thus:

I feel we understand each other as musicians to the point that, if one person has an idea that they're struggling to articulate, someone else will know what they are trying to say, and help them explain it to the band.

One bass player explained in detail how a new band 'Defunkt' worked in the second year:

We began to plan our practice slots more carefully, running through the songs we had, consecutively and collectively discussing ideas for new songs with a hands on approach to playing them as we discussed what direction to follow, and focusing on sections of songs that we felt needed work instead of wasting time by running through the whole song.

In conclusion, it seems fair to say that the majority of popular musicians made some progress in their second year, as they showed a developing sense of what effective individual or group practice entails. Most importantly, they were moving beyond "play through" behaviour and developing some metacognitive practice strategies, such as overcoming technical challenges by practising a small section of the piece.

Into the melting pot—Cross-genre experiences

The School of Music encourages performance students to go to concerts in a wide range of musical genres. This is believed to increase the likelihood that students will explore unfamiliar musical styles. As one-to-one and focus group interviews revealed, the key characteristics which are required to succeed in this cross-genre "musicking" are flexibility, adaptability, and keeping an open mind. Mixed-genre groups typically use different rehearsal resources—sometimes with notation, sometimes working aurally. The actual practice routine may be quite formal, or very informal—and the learning style can move continuously on the continuum between formal and informal as described by Folkestad (2006). As bands become established, it is clear that friendship plays an important role, as does a common purpose focused on future concerts, gigs or recording sessions.

We discuss three examples of cross-genre musicians. A classical violinist joined an all-girl acoustic folk-rock group and also played a wedding gig with a guitarist previously unknown to her in the USA. She described the different challenges thus:

The Schubert quintet, the acoustic cover band and the wedding in San Francisco—for all three of them you have to operate differently and get into a different mind-set and you work with the musicians differently.

A classically-trained saxophonist had been playing with the Funk Soul Continuum since it was formed, and was managing to learn formally and informally, despite admitting that improvisation and working without notation was very challenging at the start. This sentiment was reflected by a third-year classical violinist, who was very sceptical in her early days of playing with an Indie Rock band:

We've got four classical and four popular musicians. At the beginning, we just sat there asking 'Why are we playing through the set again and again and again without making anything better?' And them asking us 'Why are you stopping every 30 seconds to change this?' The processes are so different.

The data suggest that all musicians who took the plunge and explored "musicking" in new genres gained insights, not only into their own practice behaviours, but also in beginning to appreciate the benefits of exploring learning along the formal-informal continuum. We hope to explore this finding further in our future research.

Discussion—Elements in musical maturation

The key question which arises at the end of the students' second year is to what extent they have made progress with their practice and performance. How would they answer the question "What is practice". As a starting point, we suggest that Harris and Crozier's (2000) definition is helpful:

The central purpose of practice is to progress—to solve problems, to develop and broaden musicality, to *think* about the music.

As a means of summarising the first two years of research, we created tables of possible evidence which may point towards the maturation of the student musicians. The statements in the tables are extrapolated from the student narratives.

Table 1 shows a summary of data drawn from the reflective essays written by the *classical* musicians in the 2012–2014 cohort. There are clear differences between those students who seemed to be maturing in their understanding of practice, and those who were not making as much progress as their peers. An individual musician may exhibit evidence which points exclusively either towards a more or less expert approach, or a mix of behaviours from both columns of the table.

Table 2 shows the success factors for maturation for *popular* musicians. Many of the behaviours reported by the students point to the development of metacognitive practice strategies, starting with the band and, in some cases, being applied to the individual. The right hand column summarises the situation of the popular musicians who provide less evidence of maturation. Possible explanations may lie in popular music students not taking lessons. Others could be for personal reasons, such as musicians working with groups outside the university. It seems to be the case that the busiest musicians, both inside and outside the university, were more professional in their attitude. Clearly, there are many contextual questions to be asked about personal musical biographies, motivation and the overall context of an individual's learning intentions which may be resolved through planned one-to-one semi-structured interviews in the coming year.

	Evidence suggesting maturation	Evidence suggesting less maturation
Individual practice	Makes use of practice diary or "virtual" practice diary (i. e., mental diary) Works independently Recognises what is needed for per- sonal comfort—e. g., correct location, correct time of day Has routine for practice, e. g., warm up with technical exercises or open strings, long notes, tonguing Uses mental practice techniques Can identify problems and chunk down to solve issues Is largely motivated to practise Relates individual practice to per- formance or other playing situations and applies what has been learnt Uses audio recording/video for feedback or as record of lesson	Sporadic of little use of practice diary Irregular practice Lack of motivation to practise (but not in cases of illness) Tendency to play through pieces (re-iteration) Relies on teacher to establish good practice habits Relies on teacher for direction of practice and interpretation Recognises that there is a need to act differently, but does not do anything about it No mental practice Does not ask "how" change can happen

Table 1: Classical musicians 2012–2014

	Evidence suggesting maturation	Evidence suggesting less maturation
Technique	Identifies shortcomings in technique Recognises that there is always room for improvement Works with peripatetic music staff and/or independently to improve technique	Reliant on teacher to identify weaknesses in technique Not conscious of issues in timing, intonation, instrumental or vocal technique
Ensemble	Plays/sings regularly in ensembles Can adjust in the moment to ensem- ble with regard to tempo, intonation, phrasing Communicates constructively with other players Listens "in" and "outside" the ensem- ble to monitor progress Takes strategic approach to rehearsal	Finds ensemble work intimidating Concentrates on individual part, rather than listening to group Lacks strategies for band rehearsal
Identity	Identifies with instrument as person Identifies with role as instrumental player/vocalist Has medium/long term goals related to instrument/vocal/musical development	No strong identification with instrument No strong identification with band or musical environment
Perfor- mance	Enjoys performance Prepares thoroughly for performance Is "in the zone" when playing	Suffers from nerves Seeks to avoid performance Last minute preparation for recital
Attitude	Willing to work outside comfort zone Open to new and unfamiliar musical genres Able to work effectively with musi- cians that are not part of course/ friendship group Motivated, positive	Negative or passive attitude as individual, or in ensemble Feels less able than peers Resistant to exploring new or unfamiliar musical genres Stays within comfort zone
Relation- ship with tutor/ peripatetic music staff	Is open to new ideas/techniques/ approaches Is open to the challenge of working with a new teacher Uses impetus from teacher for independent practice	Resistant to new ideas/ techniques/approaches Finds it hard to overcome the challenge of working with a new teacher Does not seek out tutors/teachers for feedback/help
Goals	Medium to long-term personal goals linked to musical activity	Personal goals as a musician poorly articulated, or not articu- lated at all

	Evidence suggesting maturation	Evidence suggesting less maturation
Individual practice	Reports practice as individual, as well as in band rehearsals Some focus on technical development Some reference to practice diary Refers to lessons or examples of self- directed learning in reflective diary	Little or no reports of individual practice in reflective essay Little or no reflection about <i>how</i> practice is being done Lack of technical ability, e. g., poor sense of rhythm Practice only takes place with the band
Band practice	Regular band rehearsals Flexibility in arranging rehearsals, e. g., for sectionals for vocalists, or singer-songwriters to prepare materials Ability to manage planned absences Distribution of originals using audio/ video/social media before and between rehearsals Ability to identify difficult passages and break these down for rehearsal Clear communication between band members Constructive feedback by members Good time management of prepara- tion for gigs/assessments	Little evidence of regular rehears- als Large number of absences at rehearsals A long time spent trying to reach a decision about songs to perform Conflicts about musical genre Conflicts about roles of musicians in the band Poor time management in rehears als Easily distracted in rehearsals
Working on original material	Original material is a key focus for the band Original material created through collaboration of all members or provided by singer-songwriter who takes on creative leadership in the band	Difficulties in managing the crea- tion of original material Conflicts between singer-song- writers in the band Sticks to covers, lacking ability as composer or lyricist
Band develop- ment	Band has a leader/manager/agent or player/organiser Band books gigs, plays outside university environment Band develops its image in the local community Band works in recording studio	Band does not have a clear leader Band only performs within the university, focusing on assessmen gigs No aspirations to play outside the university
Identity	Strong level of identification of play- ers with the band Band has strong branding/identity	Lack of personal identification with the band

Table 2:Popular musicians 2012–2014

	Evidence suggesting maturation	Evidence suggesting less maturation
Attitude	Band members respect each other as musicians, and may also be friends Shared taste in musical genres and/ or open to new musical genres Manage conflict/differences of opinion positively Take creative risks (both as perform- ers, or in their performing environ- ment) Enjoy band and individual practice	Takes a "laid back" attitude, may be lazy, always chooses the safe option Unresolved differences of opinion about musical genre Personality conflicts Problems in communication between band members
Relation- ship with tutor/ peripatetic music staff	Take advantage of feedback from course tutor and peripatetic music teachers to improve individual or band performance skills Work collaboratively with tutors in one-to-one lessons	Resistant to new ideas or develop- ment of technique in one-to-one lessons May not be having any one-to-one lessons Does not react to feedback given by tutor or peripatetic teachers
Goals	Clear goal setting as individuals/ band Plans articulated for future of the band	Set list undecided until the last minute No medium or long-term goals for the band

Drawing on the evidence for musical maturation above, we propose a model which describes a contextual learning process for these undergraduate musicians. The Spiral of Reflection, (Figure 4 below) which is the basic model, implies iteration in practice, rather than re-iteration. Re-iteration is the mindless repetition of a phrase, a passage or a song or a piece without any reflection. However, *iteration*, or mindful repetition utilising metacognitive processes, results in change. Iteration, we would suggest, implies a conscious process of planning, doing, reflecting and *changing* which is symbolised by the spiral. When this model was presented to students in October 2014, many commented that it was helpful in describing productive practice behaviours, but also pointed out that there were days in which they might not consciously acknowledge that progress had been made; either they were "stuck", or might even have thought that they had fallen backwards. This is an important aspect of the model which will require further investigation in the future.

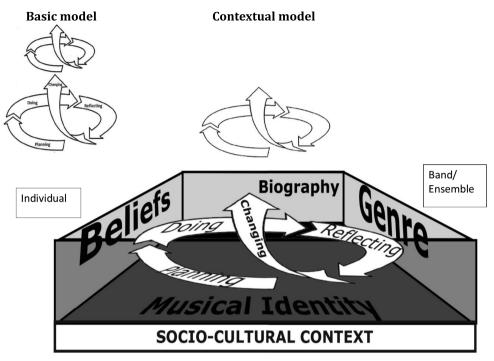


Figure 4: The Spiral of Reflection Models

We have refined this model, drawing from Welch's Russian Doll model of musical learning (2007). Students bring their personal experience of music before university, which is described here as "biography". They also hold a set of beliefs about their musical potential, and a personal preference for one or more musical genres. Furthermore, they are, or may be becoming conscious of their own musical identity.

This happens in the socio-cultural context of the learning institution, both the university campus with its venues for rehearsal and performance, and the city of Liverpool. The institution provides support from tutors and one-to-one peripatetic music teachers who, in their own way, will also influence the learning journeys of students. A student can access this learning zone either as an individual, or as a member of a band or ensemble, or through both routes. The combination of these psychological factors and the socio-cultural and institutional context give rise to differing levels of maturation in the spiral of reflection. Maturation depends not only on the individual, the group and the context, but also the degree to which a student can progress through a series of spirals.

Conclusions and further areas of research

The research we have conducted so far, based on data drawn from reflective essays and interviews, suggests that there are similarities in the musical maturation of classical and popular musicians. Whilst it would seem on the current evidence that popular musicians come to understand the importance of individual practice learning their craft—later than classical musicians, further research with both sub-groups in their final year will compare both individual and group behaviours.

In addition, we would like to test the robustness of the model by gathering feedback from students in the 2012–2015 cohort to ensure that the model mirrors their experiences of musical maturation. It may be that this feedback requires us to adapt our model, but if the model and the maturation factors stand up to scrutiny, we believe that the "Spirals of Reflection" model can be used not only to accelerate effective learning practices, but may also have an impact on the design of tertiary education performance modules for undergraduate musicians.

Bibliography

- Austin, J. & Haefner-Berg, M. (2006). Exploring music practice among sixth-grade band and orchestra students. *Psychology of Music*, 34(4), 535–558.
- Bryman, A. (2006). Integrating quantitative and qualitative research: how is it done? *Qualitative Research*, 6, 97–113.
- Cowan, J. (2013). Facilitating reflective journaling—personal reflections on three decades of practice. *Journal of Learning Development in Higher Education*, 5, 1–17.
- DeNora, T. (2000). Music in Everyday Life. Cambridge: Cambridge University Press.
- Ericsson, K., Krampe, R. & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3), 363–406.
- Folkestad, G. (2006). Formal and informal learning situations or practices vs. formal and informal ways of learning. *British Journal of Music Education*, 23(2), 135–145.
- Ghaye, T. (2011). Teaching and Learning through reflective practice. Abingdon: Routledge.
- Ginsborg, J. & Wistreich, R. (2010). *Promoting Excellence in Small Group Music Performance: Teaching, learning and assessment*. Royal Northern College of Music. Available at: http://labspace.open.ac.uk/mod/resource/view.php?id=456882&direct=1 [03.08.2014].
- Green, L. (2002). How Popular Musicians Learn. Aldershot: Ashgate.
- Hallam, S. (2001). The development of meta-cognition in musicians: Implications for education. *British Journal of Music Education*, 18(1), 27–39.
- Hallam, S. (2006). *Music Psychology in Education*. London: Institute of Education, University of London.
- Harris, P. & Crozier, R. (2000). *The Music Teacher's Companion*. London: Associated Board of the Royal Schools of Music.
- Johansson, K. (2013). Undergraduate students' ownership of musical learning. *British Journal of Music Education*, 30(2), 277–295.
- Lebler, D. (2007). Student as master? Reflections on a learning innovation in popular music pedagogy. *International Journal of Music Education*, 25(3), 205–221.
- Lebler, D. (2008). Popular music pedagogy: peer learning in practice. *Music Education Research*, 10(2), 193–213.
- McKee, A. (2003). Textual Analysis: a beginner's guide. University of Queensland: Sage.

Miksza, P. (2011). A Review of Research on Practicing: Summary and Synthesis of the Extant Research with Implications for a new Theoretical Orientation. *Bulletin of the Council for Research in Music Education*, 190, 51–92.

Schön, D. (1987). Educating the reflective practitioner. London: Jossey Bass.

Smith, G. D. (2013). *I drum, therefore I am.* Farnham: Ashgate.

Welch, G. F. (2007). Addressing the multifaceted nature of music education: An activity theory research perspective. *Research Studies in Music Education*, 28(1), 23–37.

Yarbrough, C. (2003). Multiple methods of research: Possibilities for the study of music teaching and learning. *Research Studies in Music Education*, 21, 3–15.

Monica Esslin-Peard Department of Music University of Liverpool 80-82 Bedford Street South Liverpool L69 7WW Monica.Esslin-Peard@liverpool.ac.uk

Tony Shorrocks Department of Music University of Liverpool 80-82 Bedford Street South Liverpool L69 7WW shorroa@liverpool.ac.uk

Graham F. Welch UCL Institute of Education University College London 20 Bedford Way WC1H oAL UK g.welch@ioe.ac.uk