CHAPTER 8

Balancing Educational Purposes Within Higher Electronic Music Education – A Biestaian Perspective

Eirik Sørbø

University of Agder

Abstract: The massive invasion of electronic dance music in the popular music scene in combination with accessible and affordable technology has created a large group of young musicians having acquired their skills and experience via online resources, often in solitude. This, in turn, creates challenges for the teachers regarding what the expected knowledge base is for the students entering the programs, how to maintain a balanced program, and how to relate to ever-evolving technologies, just to mention a few. In an educational system such as the Norwegian system, based on learning objectives and effectivity, some aspects of the broader educational purpose tend to get downsized. Based on the framework of Biesta's educational purposes, this article proposes that educators in higher electronic music education emphasize subjectification in addition to qualification and socialization, and the objective of this article is to address questions pertinent to how teachers and curriculum-makers in popular electronic music might create balanced programs for their students. It is argued that subjectification might be approached through the emphasis on the students' unique artistic expression, and that this opportunity is distinct in art education in general and in electronic music education in particular. Further, it is argued that electronic music students might benefit from having a conscious relationship to the technologies they are immersed in, in order to see alternative ways of making (popular) electronic music.

Keywords: Gert Biesta, subjectification, popular music, music technology, electronic music, higher education

Citation of this chapter: Sørbø, E. (2020). Balancing educational purposes within higher electronic music education – A Biestaian perspective. In Ø. J. Eiksund, E. Angelo, & J. Knigge (Eds.), *Music technology in education – Channeling and challenging perspectives* (pp. 211–232). Cappelen Damm Akademisk. https://doi.org/10.23865/noasp.108.ch8

Lisens: CC BY-NC-ND 4.0.

The massive invasion of electronic dance music in the popular music scene in combination with accessible, affordable technology and enhanced informal learning platforms has created a large group of young musicians using their laptops, tablets or phones as creative tools (Bell, 2018). These young musicians are often self-taught, having acquired their skills and experience via online resources from their bedroom studio, often in solitude (Bell, 2014). The rise of this group suggests that "educators need to accept contemporary musical practices (...) as valid, and teach the associated skills," which further "involves transforming the ways in which we think about music and music education" (Brown, 2015, p. 5). In other words, while still developing "conventional" popular music in educational settings, we must also pay attention to the development of electronic music within this very field. The questions asked when engaging with these issues are important in terms of the answers they will provide, and this article aims at addressing some relevant (and potentially overlooked) questions worth considering in this matter, in light of some of the more general educational trends and challenges. In other words, the research question for this article is "which important questions should educators within the field of higher electronic music education ask in order to further develop educationally balanced programs?"

After an outline of the current educational context in popular music education and in education in general, I will use the framework of educational theorist Gert Biesta¹ to investigate which questions will be generated when applying this framework to higher electronic music education (HEME). More specifically, I will use Biesta's reflections on *why* and *who* we educate to generate questions related to *how* we educate in HEME. In this process I will also draw on works exploring how popular musicians learn differently to classical musicians (Folkestad, 2006; Green, 2002, 2008), to find similarities and differences in the relationship between how popular musicians and electronic musicians learn. I will emphasize the branch of electronic music that has emerged from the realm of *popular* music, not that of classical art music or jazz. This is due to how the entry of electronic music into the popular music scene in combination with

¹ This framework is developed and presented in four books (Biesta, 2006, 2010, 2013, 2017b).

affordable and accessible technology has created both interesting and challenging situations in popular music education. To further elaborate, I will also bring in some aspects of Heidegger's discussions on technology (Heidegger, 1977). Lastly, there will be a brief discussion of how to approach potential answers to the generated questions of how we educate in order to find a meaningful balance of educational purposes in HEME. I argue that art education in general and electronic music education in particular have a unique opportunity to address subjectivity through unique artistic expression which will contribute to a balanced education for our students. Though there may be some implications in the arguments made in this chapter, I wish to be clear that I am not discussing whether or not HEME should be separated from higher popular music education (HPME), just as HPME in many cases has been separated from western classical music education. However, I still think it is important to talk about HEME in slightly different terms than HPME due to some quite substantial differences that will be addressed in the following sections.

Educational Context of Popular (and) Electronic Music

To clarify the context of this chapter I will give a brief outline of how the Department of Popular Music (DPM) at the University of Agder in Norway approaches higher popular music education and electronic music, before placing it in the broader context. DPM was established in 1991 and is one of two courses that the University Board defined as a signature study in 2013, meaning a course that "truly excelled, and that was the very hallmark of this university" (Tønsberg, 2014, p. 29; emphasis in original). It is a performance-based program, and many students become participants at the highest level in the Norwegian popular music scene following the completion of their Bachelor, Master or PhD program. Due to technological developments in the music industry, DPM introduced a specialization in electronic music in 2013, offering students electronics (most commonly laptop) as an instrument. One implication of this approach is that the program not only utilizes composition and production as an

educational tool, as proposed by Tobias (2013) and Lebler and Weston (2015) for example, but also explores the ways in which technology enables the students to bring the studio onto the stage in live performances. The technologies in the latter approach are described as threshold technologies by Knowles and Hewitt (2012), who further describe how artists such as Ed Sheeran and Imogen Heap use performance recordivity² to make their music-creating transparent. Renzo and Collins (2017) elaborate on how threshold technologies contribute to transparency, and Kjus and Danielsen (2016) show how different Norwegian artists use such technologies differently to implement their works from the studio into their performances, dependent on their desired type and level of creative agency in the performance. These approaches to electronics and technologies at DPM have opened the door to the realm of art music and improvised electronic music, and the tension between the popular electronic music and electronic art music has proved to be an interesting interface for exploring musical ideas.

When looking at the field of popular music education more broadly, the research undertaken by Lucy Green has been a major influence, showing how popular musicians learn in informal settings outside formal education institutions (Green, 2002). Through her numerous studies she shows how popular musicians develop their musicianship through informal and collaborative approaches to learning, and addresses how teachers tend to approach popular music in the curriculum in the same way they approach classical music, missing out on using the techniques actually used by popular musicians (Green, 2008). Based on these and similar studies (e.g. Folkestad, 2006; Söderman & Folkestad, 2004), institutions around the world have implemented aspects of these informal methods and techniques to enhance their formal programs. Queensland Conservatorium in Griffith University serves a good example (Lebler & Weston, 2015). Though these methods differ from the classical approach to music in many ways they still align nicely with other educational endeavors, for example, collaboration. Consequently, the motivation and argumentation for implementing them in the programs are quite easily recognized.

² Performance recordivity is when recording in a live performance.

This is a critical point as I now move into the realm of higher electronic music education.

Though electronic music is well established within fields like art music, hip-hop and dance music, its massive invasion into the popular music scene, in combination with enhanced online resources and accessible, affordable technology, represents a new situation in the field of education. Students often enter the educational system with radically different musical backgrounds and approaches than what is expected by the teachers, which has clear similarities to the cases Green and her likeminded researchers observed more than 15 years ago. As noted by Brown, "Information is accessed on a need-to-know basis, rather than deliberately organized or following a set curriculum," and "the experiences of such musicians resemble a pedagogy that is based more on creativity than on repertoire" (Brown, 2015, p. 20). Burnard (2007) argues similarly, urging educators to explore the potential in the relationship between creativity and technology. However, it's fairly easy to recognize the same pitfall - the tendency of institutions to simply change the content without acknowledging the fundamental structural differences in how electronic musicians acquire and develop their skills compared to popular musicians.

An important and easily overlooked aspect regarding the content is how the content itself often serves as a means to a different end. Take the content of learning notation as an example as this represents a long and ongoing discussion (Dean, 2019; Paul, 2017; Schmidt-Jones, 2018). The purpose and end of learning notation is not really learning notation. The purpose is to provide meaningful ways to write, analyze and talk about music. If we miss the distinction between content and end we might easily lose important aspects of what we are actually teaching, as well as meaningful methods to reach that end. For electronic musicians, notation might not be the best way to describe the music they are producing due to the importance of sound quality, timbre, effects and other parameters not covered by the current notation system (Roads, 2015, xxii). There are numerous other ways in which electronic musicians can discuss their music which may be more accurate and meaningful. To be clear, this is not to argue against notation in electronic music curriculum. There are strong arguments that support keeping notation in the curriculum due

to communication with other musicians and being a part of the broader music business. Rather, this is an attempt to show how content and ends are not necessarily the same, and that focusing on the *end* when establishing the content and pedagogical methods is crucial.

Educational Context in General

The general educational policy in Norway during the last decades, which I partly criticize in this article, has been heavily influenced by the surprisingly weak PISA results in the early 2000s (Kjærnsli et al., 2004; Roe et al., 2007). The response to these reports was a clear turn towards a management by objectives-oriented approach to education, mainly through National Tests³ (Søgnen et al., 2002) and a new national curriculum, the LKo6 (Søgnen et al., 2003). This focus on standardization and educational transferability was also reflected in the higher education system when Norway joined the Bologna process in 1999. Comprehensive research was (and still is) done to define and select competencies that would prepare learners to join the future workforce, a workforce that will probably be both increasingly diverse and complex, and transformed by automation (Council Recommendation of 22 May 2018, 2018; Fadel et al., 2015; Fullan & Langworthy, 2014; OECD, 2005; UNESCO, 2014). Hence, over the last decades it seems to be a tendency to put more emphasis on competencies of "personal character," 4 the human traits that distinguish us from automation, machines and artificial intelligence. Creativity, the ability to put knowledge into use, to communicate and collaborate well across cultures and borders, and to be a confident, open-minded and engaged citizen are some of the features that are suggested will be sought after in the future in many of the abovementioned reports. The Norwegian educational policymakers are aligning with these predictions, and in 2020 there will be implemented a new, national curriculum, heavily based on the abovementioned reports (Ludvigsen et al., 2014; Ludvigsen et al., 2015), with a clearer emphasis on these personal characteristics

National Tests is a national system for benchmarking Norwegian schools.

⁴ Commonly referred to as "soft skills".

(Department of Education and Research, 2019). However, in this new national curriculum the management by objectives-oriented structure is still present, which comes with a set of challenges that have been subject to profound criticism.

One of these challenges was addressed by the Norwegian philosopher Hans Skjervheim in the 70s. He argues that education is victim to the instrumentalistic mistake: the tendency to generalize educational principles based on research conducted in specific settings (Skjervheim, 1996, pp. 241–250). He further argues that this positivist approach to education contributes to the objectivation of things and others instead of treating them as subjects (Skjervheim, 1996, pp. 71-87). Øivind Varkøy argues similarly that technical rationality, which is closely related to instrumentalism and the objective-oriented structures that dominate Norwegian (music) education (Varkøy, 2013), can be regarded as a "type of totalitarian ideology, meaning that it presents itself as the one and only way of thinking about education, thereby marginalizing and suppressing other discourses" (Varkøy, 2015, p. 48). This argument can also be found in Heidegger's critique of technology (Heidegger, 1977). According to Heidegger, the instrumental view of technology has turned into something more challenging to human society, and our approach to technology seems to influence our view of humans as well. One of his points is that technology is so effective that we seem to lose sight of other possible ways to exist. In other words, he does not problematize the technology itself but how it blocks other ways of viewing the world. This is not merely a critique of technology but a critique of the instrumental way of viewing the world in general, and the tendency to objectivate others.5 David Lines develops these ideas of Heidegger towards music education, and argues that "this leads to questions of subjectivity - to images, concepts and perceptions of self in music technology contexts, and to an examination of ways in which the self can project positive and creative pedagogical action within controlled technological paradigms" (Lines, 2015, p. 64). This becomes particularly pertinent in the realm of electronic music education which is

⁵ The format of this chapter doesn't allow a proper development of Heidegger's intricate line of terminology and argument, but I still allow myself to make a few points with reference to his thinking.

often very technology oriented and, to quote Lines again, "it seems fitting to discuss some of the deeper questions of how technology shapes the ways of music teaching, in pedagogy, thinking and musicianship" (Lines, 2015, p. 63).

Gert Biesta is currently one of the major international contributors to the critique of what he calls the "Technological" approach to education; that is, when making strong connections between educational input and output, and relying heavily on measurements and standardization, in order to ensure the desired output (Biesta, 2015). Again, we see a similar argument as those made above. Further, Biesta argues that this critique has to do with normative validity, concerning the question of "whether we are measuring what we value, or whether we are just measuring what we can easily measure, thus ending up valuing what we (can) measure" (Biesta, 2010, p. 13). In the following section I will illustrate aspects of Biesta's critique by comparing his educational ideas to those of some of the abovementioned reports to show some fundamental differences. I will do so by discussing the question of *why* and *who* we educate in general and, in turn, bring some of these conclusions into the field of electronic music education.

Why Educate?

The question of why we educate, the *purpose of education*, is one of Biesta's concerns with contemporary education. The purpose of education found in many of the abovementioned reports is to produce human beings to keep the wheels running in society. In other words, education of the individual is a means to a *different end*, that is, to educate *objects* with certain qualities. Biesta, on the other hand, urges us to see education of the unique subject as *an end in itself*, and to educate *subjects* rather than objects. One example of how this is *not* the case in contemporary education can be found in the four-dimensional educational framework of Fadel et al. (2015). They present three broad purposes of character education: (1) to

To distinguish between *Technological* as used by Biesta and technological when discussing technology, I will use a capital T when referring to Biesta's term.

build a foundation for lifelong learning, (2) to support successful relationships at home, in the community, and in the workspace, and (3) to develop the personal values and virtues for sustainable participation in a globalized world (Fadel et al., 2015, p. 81). As we observe, they emphasize the development of "personal values and virtues," but as a means to achieve a different end, namely "sustainable participation in a globalized world," and similar arguments for character development are present in other reports as well (e.g. European Commission, 2019). However, there are other reports that seemingly take the stand for subjectification, although the terminology is a bit different. The OECD DeSeCo project⁷ suggests "acting autonomously" as one of the three main categories of competency, concluding that individuals "need to develop independently an identity and to make choices, rather than just following the crowd. In doing so, they need to reflect on their values and on their actions" (OECD, 2005, p. 14). However, in light of how this OECD framework has been utilized to make educational policies, the role of measurement and normative validity comes into play, and the actual emphasis on acting autonomously is in most cases almost absent.

These are some of the reasons I find Biesta's thinking and educational framework to be an important and useful alternative. He introduces three main purposes of education: (1) *qualification*, that is, the acquisition of knowledge, skills and dispositions; (2) *socialization*, that is, becoming a part of existing social, cultural and political orders; and (3) *subjectification*, that is, how we exist outside the existing orders through our initiatives and responsibilities (Biesta, 2010, p. 20). One of his main critiques of contemporary education is the lack of balance between these three purposes of education: "much contemporary education seem to be significantly out of balance as a result of a strong – and in some cases – excessive emphasis on the domain of qualification, and often only on a small number of measurable 'outcomes'" (Biesta, 2015, p. 19). The absence of actual emphasis on socialization and subjectification in contemporary education is problematic, and to tackle this Biesta introduces the *educational ambition:* "arousing in another human being the desire to exist in

⁷ DeSeCo is the *definition and selection of key competences*-project by OECD, published in 2003.

the world in a grown-up⁸ way" (Biesta, 2017a, p. 85). With this articulation he places emphasis on the subject itself rather than on the function the subject will have in the "human machine," which implies objectification of the subject. In other words, it matters *who* we educate.

Who to Educate?

Another manifestation of the Technological approach to education is, according to Biesta, the language of learning, which refers to how terminology from industrial processes and capitalism has been transferred to the realm of education. This has some critical implications, one of them being that learners are easily thought of as consumers and teachers as providers of goods. From this follows the assumption that "the customer is always right," placing the teachers and educational institutions in a difficult spot where they have to "deliver" an educational "product" according to the expectations of the customer: the student. The effect is the notion that students know best what they should learn and, ultimately, should determine the content of their own education. Biesta argues that if this is the case, if the content and purpose of education is individualized, it will eventually be decided by the market (Biesta, 2006, pp. 22–24). This might, in turn, reduce our students to "customers," suggesting that it doesn't really matter who we educate, only that we educate. In other words, the process-modeled educational system, amplified by the language of learning, produces interchangeable human beings or mere objects. The role they are to fill in society can ultimately be filled by anyone else.

Biesta rejects this notion and, in order to build his argument, he emphasizes human subjectivity as an *event* rather than an *essence*. His understanding of subjectivity emphasizes *responsibility* as a defining feature of unique, human subjectivity. In his own words, "What makes me unique,

⁸ When using grown-up in this setting, Biesta (2017a) refers to the ability to distinguish between what one desires and what is desirable, taking into account long-term and contextual consequences.

For further reading on his critiques of humanistic essentialism in defining humans, see Biesta, 2006.

¹⁰ Responsibility in this context is understood as pre-conscious and beyond our control, an obligation prior to any commitment.

what singles me out, what singularizes me, is the fact that my responsibility is not transferable" (Biesta, 2013, p. 21). To further develop this argument, and to explain how we bring our subjectivity into the world, he turns to Hannah Arendt and her thinking concerning human beings as active beings. Arendt distinguishes three modes of action: labor,11 work,12 and action (Arendt, 1998). While labor and work are means to different ends, actions are activities that are ends in themselves, and Biesta argues that this is where our subjectivity encounters the world. To act is to bring something new into the world, a "new beginning," to which the world of other beginnings re-acts. To exist as a human being is to be a beginner. Again, we observe the emphasis on the event. In order for this event to take place there must be a space to bring our beginnings into the world, and this space must necessarily consist of other beginners, bringing their own beginnings into the very same space. This ability to act in such a plural space is, according to Arendt's line of argument, the very definition of human freedom. Hence, without this plural space of other beginnings we cannot act and, accordingly, we cannot exist as free human beings. Further, this suggests that we cannot forcefully make others act. All we can do is to create a space where others freely can project their beginnings and hope for them to do so.13

This is clearly a radically different approach to human subjectivity than that of the interchangeable human being, and though it might seem like an insignificant nuance at first sight, it has clear implications for how we approach education. To summarize the previous line of argument, Biesta emphasizes subjectivity as a fundamental feature of those we are to educate. This suggests that teachers must create spaces where the students can *act*, that is, to bring their new beginnings into a space of other beginnings. It is "not about the educational production of the subject – in which the subject would be reduced to an object – but is about bringing the subject-ness of the child or young person 'into play'" (Biesta, 2020,

¹¹ Labor is what it takes to maintain the state of affairs (corresponds to the biological processes of the human body).

¹² Work is when humans actively change their environment, e.g. the production of things.

In relation to music education, a similar Arendtian argument is made by Ferm Almqvist (2019), who points out that *courage* needs to be encouraged by teachers, "so that all might leave the private hiding place and show who one is in disclosing and exposing oneself".

p. 95). To achieve this, teachers should ask open and difficult questions where the answers are not given, so that plurality can emerge in a space that is unpredictable, risky and *weak*.¹⁴ Only by doing so might teachers create a space where, hopefully, human subjectivity appears.

The previous paragraphs suggest that the way we educate is fundamentally formed by how we approach the question of why and who we educate. If it matters who we educate, we must make room for our students to encounter the world as subjects, a task that by nature is both risky and weak. It is a disruptive and challenging way of educating, where students may and will encounter resistance to their own actions. This demands a whole different role of teachers than that of predefined outcomes, and Biesta puts great emphasis on the crucial role of the teacher (Biesta, 2013, pp. 43-58, 2017b). Teachers must use situated judgments for each specific situation, a task which can never be structured into a Technological education. They must also balance the educational purposes against each other, which is not an easy task as they are closely interrelated and interdependent and might even be in direct conflict.¹⁵ These questions concerning the purposes of education are normative questions where teachers must engage with values and preferences (Biesta, 2015, p. 15) which further explains Biesta's emphasis on the role of the teacher. Though this might be viewed as an argument to reintroduce the instructional method of teaching and leave the student-centered approach, that is not the whole picture. Rather, Biesta claims that his approach is neither child-centered nor curriculum-centered. In his own words: "Perhaps the best 'label' for it is to call it a 'world-centered' approach (...), focusing on what it means to exist as subject, in, with and in dialogue with the world, material and social" (Biesta, 2017c, p. 15). In other words, his proposal is for the teachers to help students find themselves existing in the world, among others, so that subjectification can happen.

Weak in this sense means that there is no strongly predefined outcome or answer, in opposition to the Technological approach.

The conflicting example provided by Biesta (2013) is how pressure on exams might be an effective way to achieve good qualifications but might have a bad impact in the domain of subjectification if it implies that competition is better than cooperation.

When I now return to Higher Electronic Music Education (HEME), I will show how the previous discussions can inform the question of *how* we educate within this field. I will use Biesta's three purposes of education to generate questions I think might be important to address in the further development of HEME, in order to find a meaningful balance between these educational purposes. Potential answers to these questions will only be briefly touched upon in this article, as answers will vary and differ with each institution and educational program. Sørbø and Røshol (2020) provide an example of how some of these questions might be approached in Chapter 10 in this volume, which is a case study of a one-to-one practice at the Department of Popular Music at the University of Agder.

Qualification in Higher Electronic Music Education

I concur with Biesta that to succeed as an educator is dependent on finding a meaningful balance between the three main purposes of education (Biesta, 2013, p. 147). HEME is, especially within and emerging from the realm of HPME, a relatively new field of education compared to most other educational fields within the arts. Consequently, this balance is not as established as in other fields, which puts a greater responsibility on each educational institution and teacher to ensure balanced educational programs. For HEME this is especially challenging, being crucially dependent on technology which seems to be developing at an increasing speed, resulting in teachers who don't stand a chance in mastering all the different tools available to their students. According to Heidi Partti, teachers often lean towards either pedagogical fundamentalism¹¹o or pedagogical populism¹¹ when facing this dilemma (Partti, 2017), neither of which are desirable. Further, the job market these students will enter is equally dependent on technology, adapting and changing at the same

¹⁶ Pedagogical fundamentalism implies a skeptical attitude towards technology, where teachers to a large extent ignore new technologies and how they affect their students' lives.

Pedagogical populism implies a glorification of new technologies, where technologies are put ahead of teaching, and the role of the teachers is often reduced.

pace, hence this becomes a question contingent on defining qualification in HEME. Teachers must teach sufficiently generally so that students can apply what they learn regardless of what DAW or electronic devices they utilize, and so that they are able to implement their knowledge in future technologies. At the same time, they must teach sufficiently specifically about technicalities¹⁸ so that the students understand how new knowledge may be applied in their specific environment. In addition, the affordances¹⁹ of the DAWs have their own musical implications (Bell, 2015, 2018; Røshol & Sørbø, 2020), which might be further illuminated by the way Heidegger discusses technology. As mentioned before, he doesn't problematize the technology itself, but how it blocks other ways of seeing the world. His solution is to connect to the essence of technology; that is, to understand and be aware of the essence of technology because only when we see technology for what it really is can we gain a free relationship to it. Though his implications deal with fundamental ontological questions, there are some pretty obvious parallels to be drawn to the way electronic music students use technologies. For example, being aware of the differences between DAWs will enable them to make informed (and hopefully better) choices in selecting a suitable DAW for specific projects. Another more fundamental example is that if the students fail to recognize how the affordances of their DAW or instrument limit and mediate the creative process itself, and how the DAW's design is in fact musical choices, they won't be able to properly examine their own practices (Bell, 2015; Mantie, 2017).

Interestingly, Heidegger argues that art is one of the ways in which this connection to the essence of technology might be achieved (1977, pp. 34–35).²⁰ The point is that when we encounter art, we might experience other ways to exist in the world, other than that provided by technology. Though we can only speculate on how Heidegger would discuss art that is itself heavily dependent on and immersed in technology, as in the case

¹⁸ By technicalities I refer to specific functions of specific software/hardware.

¹⁹ When using the term *affordance* in this chapter, it will be in the same sense as Hutchby (2001), further developed from Gibson's usage: "affordances are functional and relational aspects which frame, while not determining, the possibilities for agentic action in relation to an object."

²⁰ According to Heidegger this is because art is related to (but not similar to) technology, an argument developed from the Greek terms *Techné* and *Poesis* as used by Aristotle.

of electronic music, such speculation could provide interesting starting points for discussions and reflections on how technologies affect our practices through their affordances and mediations. As articulated by Frith and Zagorski-Thomas, "In the studio technical decisions are aesthetic, aesthetic decisions are technical, and all such decisions are musical" (2012, p. 3).

Based on the previous discussions, I suggest that the following questions regarding qualification should be considered by teachers and program developers in HEME: what might a good balance between generality and specificity be, to make musical qualifications sufficiently general to be applied across multiple technological platforms and musical preferences, but specific enough to be practically applicable across these very same platforms? How are the students' agency and aesthetics mediated by technological affordances, and how can they gain a conscious and reflected relationship to them? Which pedagogic approaches might contribute to achieve this? And lastly, what can art and music say about the technology it finds itself immersed in?

Socialization and Subjectification in Higher Electronic Music Education

When now turning to socialization and subjectification, I will discuss these two purposes simultaneously, as they are closely intertwined in the following line of argument. As a starting point, I will use the emphasis often found in art education on unique artistic expression,²¹ which might be developed both as *artistic subjectivity* and *general subjectivity*.²² Pertinent to this discussion is how Biesta distinguishes between uniqueness as *difference* and uniqueness as *irreplaceability* (2013, pp. 19–22). Uniqueness as *difference* can be connected to having a clear artistic identity that differs from other artists, to have *artistic subjectivity*, and has to do with

²¹ Unique artistic expression can also be termed personal sound, the student's own voice, individual expression etc. I've chosen unique artistic expression due to Biesta's discussion on uniqueness and expression.

²² When used in relation to artistic subjectivity, I will use general subjectivity to distinguish subjectivity as discussed previously in this chapter from artistic subjectivity.

the way the artists connect to the aesthetic discourse they are a part of. However, when approaching artistic subjectivity within the educational purposes of Biesta, the focus on unique artistic expression (uniqueness as difference) becomes a question of identity, which to Biesta has to do with socialization: how we become part of the existing order of things. In other words, to Biesta identity has to do with how we relate to the practices and structures of our society which concerns socialization rather than subjectification (Biesta, 2020).

Though this emphasis on unique artistic expression is obviously an important aspect of art in education, Biesta further argues that expression in itself is never enough; teachers need to engage in the quality of the expression put forward. Quality in this regard does not refer to aesthetic quality, but to whether what is being expressed has the quality of making students "exist well, individually and collectively, in the world and with the world" (Biesta, 2017c, p. 15; emphasis in original). I understand this to mean that teachers should engage the students in the purpose and value of their unique art and music, and illuminate the possible political implications that are inherent in all art. In this context, uniqueness as irreplaceability becomes meaningful; the students are irreplaceable in their relation to their art, but also in their relation to their teachers and fellow students. This concerns their general subjectivity, which is the "kind" of subjectivity initially discussed in this chapter. What I have tried to argue here is that the two approaches to subjectivity in HEME are closely intertwined through the emphasis on unique artistic expression; the artistic subjectification will reflect on and be informed by the general subjectification, and vice versa. In other words, teachers in HEME, as in arts in general, have a unique opportunity to address general subjectivity by using artistic subjectivity as a starting point.

Another issue that is addressed when applying Biesta's educational purposes to HEME is that of structural differences in how electronic musicians acquire their knowledge and skills. As previously mentioned, the "solution" when popular music entered the realm of classical music education (as described by Green) was for the formal institutions to adapt structural aspects from informal learning, which aligned nicely with other educational endeavors. In electronic music, however, many students that

enters HEME today are self-taught, gaining their musical skills in solitude from online sources like YouTube channels and software tutorials. There are some advantages in this solitary way of working. One often recognized at DPM is how electronic musicians tend to have a deeper focus on the "whole picture" when composing or performing, as they usually are responsible for the total result. Traditional instrumentalists, on the other hand, tend to focus on their own role and performance and, at least partly, miss the context. However, if socialization and subjectification are to be increasingly important parts of the curriculum, such isolated ways of acquiring knowledge and skills might become a challenge. Here the conflict between the purposes of education becomes very practical. Electronic musicians use online communities extensively, which might be effective in regard to qualification and socialization,23 but makes subjectification challenging. There are aspects of human interaction that cannot be fully replaced by online communication or virtual representations, at least with the current technology. One example could be the opportunity for the students to act, in the Arendtian sense of the word as developed by Biesta previously in this chapter. Such inter-acting would benefit from the students being physically together in order to grasp and understand the full range of the other students' re-actions. Hence, in considering educational balance in education, online communities and collaborations might be a helpful supplement, but can not replace the need for face-toface interaction. This exemplifies how the tension between electronic and popular music faces more severe structural challenges than is the case between popular and classical music.

Based on the previous discussions, I suggest that the following questions regarding socialization and subjectification should be considered by teachers and program developers in HEME: How can we address subjectivity through the emphasis on unique artistic expression? How can we use artistic subjectivity to inform general subjectivity, and general subjectivity to inform artistic subjectivity? What does it mean in HEME to create spaces where our students can act and re-act? Which situations,

²³ Here it becomes clear that socialization has less to do with being social and more to do with what has been described previously.

topics and questions might facilitate such spaces, and what is the role of the teacher in these situations? Further, how can teachers take methods and structures from informal electronic music learning seriously while balancing other educational purposes? What will these new approaches look like in formal settings? Finally, which values and preferences comes into play in making these decisions?

Conclusions

In this chapter I have used the framework of Biesta's educational purposes to generate questions that teachers in HEME might want to consider in order to develop their curricula and programs. To my knowledge, after conversations with Biesta and searching the available online databases, this has not been done before, and I hope this chapter can contribute to the further development of HEME with some new perspectives. I have intentionally raised questions rather than provided answers, as no one answer will fit all the various practices. However, the questions asked, and the underlying philosophy used in addressing the questions, insinuate a certain position in educational thinking, and touch upon the question of how we educate. Following the arguments in this chapter, I propose for teachers in HEME to strive for educational balance in their programs, emphasizing subjectification in addition to qualification and socialization. I argue that subjectification might be approached through the emphasis on the students' unique artistic expression, emphasizing the duality of Biesta's notion of uniqueness and expression, and that this opportunity is distinct in art education. However, I have also shown how the informal structures in which electronic music students acquire their knowledge and skills create challenges to this approach. I further argue that students might benefit from having a conscious and reflective relationship to the technologies they are immersed in, in order to see alternative ways of making music.

To find educational balance requires expertise and experience, and more publications reflecting different practices in HEME that tackle this challenge are a crucial part of the further development. Teachers continuously make situated judgments in varying situations, and each experience, good or bad, can inform other teachers in their settings. Subjectification through unique artistic expression is an underdeveloped area in research, and I would argue that case studies of good (or failing) practices will be important steps in developing these fields, in close dialogue with theory.

References

- Arendt, H. (1998). *The human condition* (2nd ed.). University of Chicago Press. Bell, A. P. (2014). Trial-by-fire: A case study of the musician engineer hybrid role in the home studio. *Journal of Music, Technology & Education*, 7(3), 295–312. https://doi.org/10.1386/jmte.7.3.295_1
- Bell, A. P. (2015). Can we afford these affordances? GarageBand and the double-edged sword of the digital audio workstation. *Action, Criticism & Theory for Music Education*, 14(1), 43–65.
- Bell, A. P. (2018). *Dawn of the DAW: The studio as musical instrument*. Oxford University Press.
- Biesta, G. (2006). Beyond learning Democratic education for a human future. Routledge.
- Biesta, G. (2010). Good education in an age of measurement Ethics, politics, democracy. Routledge.
- Biesta, G. (2013). The beautiful risk of education. Routledge.
- Biesta, G. (2015). On the two cultures of educational research, and how we might move ahead: Reconsidering the ontology, axiology and praxeology of education. *European Educational Research Journal*, 14(1), 11–22.
- Biesta, G. (2017a). Letting art teach. ArtEZ Press.
- Biesta, G. (2017b). The rediscovery of teaching. Routledge.
- Biesta, G. (2017c). What if? Art education beyond expression and creativity. In C. Naughton, G. Biesta, & D. R. Cole (Eds.), *Art, Artists and Pedagogy* (pp. 11–20). Routledge.
- Biesta, G. (2020). Risking ourselves in education: Qualification, socialization and subjectification revisited. *Educational Theory*, 70(1), 89–104. https://doi.org/10.1111/edth.12411
- Brown, A. R. (2015). Music technology and education: Amplifying musicality. Routledge.
- Burnard, P. (2007). Reframing creativity and technology: Promoting pedagogic change in music education. *Journal of Music, Technology & Education*, 1(1), 37–55.
- Council of the European Union. (2018). Council recommendation of 22 May 2018 on key competences for lifelong learning (Text with EEA relevance). *Official Journal of the European Union*. C 198, 1–13. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&from=EN

- Dean, J. (2019). The vanishing stave? Considering the value of traditional notation skills in undergraduate popular music performance degrees. In Z. Moir, B. Powell, & G. D. Smith (Eds.), *The Bloomsbury handbook of popular music education* (pp. 73–80). Bloomsbury Academic.
- Department of Education and Research. (2019). *Core curriculum Values and principles for primary and secondary education*. https://www.regjeringen.no/contentassets/53d21ea2bc3a42o2b86b83cfe82da93e/core-curriculum.pdf
- European Commission (2019). *Developing key competences for all throughout life*. EU. https://ec.europa.eu/education/resources-and-tools/document-library/developing-key-competences_en
- Fadel, C., Bialik, M., & Trilling, B. (2015). Four-Dimensional education: The competencies learners need to succeed. Center for Curriculum Redesign.
- Ferm Almqvist, C. (2019). An aesthetico-political approach to music education: Transformation beyond gender. In R. E. Allsup & C. Benedict (Eds.), *The road goes ever on: Estelle Jorgensen's legacy in music education* (pp. 79–88). Western University.
- 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.
- Frith, S., & Zagorski-Thomas, S. (2012). *The art of record production An introductory reader for a new academic field.* Ashgate.
- Fullan, M., & Langworthy, M. (2014). A rich seam: How new pedagogies find deep learning. Pearson.
- Green, L. (2002). How popular musicians learn: A way ahead for music education. Ashgate.
- Green, L. (2008). *Music, informal learning and the school: A new classroom pedagogy.*Ashgate.
- Heidegger, M. (1977). *The question concerning technology, and other essays*. Garland Publishing.
- Hutchby, I. (2001). Technologies, Texts and Affordances. *Sociology*, *35*(2), 441–456. Kjus, Y., & Danielsen, A. (2016). Live mediation: Performing concerts using studio technology. *Popular Music*, *35*(3), 320–337.
- Kjærnsli, M., Lie, S., Olsen, R. V., Roe, A., & Turmo, A. (2004). Rett spor eller ville veier? Norske elevers prestasjoner i matematikk, naturfag og lesing i PISA 2003 [On the right track or totally astray? Norwegian students' acheivements in matemathics, science and reading in PISA 2003]. Universitetsforlaget. https://www.uv.uio.no/ils/forskning/prosjekter/pisa/publikasjoner/publikasjoner/rettspor-eller-ville-veier.pdf
- Knowles, J. D., & Hewitt, D. (2012). Performance recordivity: Studio music in a live context. Art of Record Production, (6). https://www.arpjournal.com/asarpwp/ performance-recordivity-studio-music-in-a-live-context/

- Lebler, D., & Weston, D. (2015). Staying in sync: Keeping popular music pedagogy relevant to an evolving music industry. *Journal of the International Association for the Study of Popular Music*, 5(1), 124–138.
- Lines, D. (2015). Ways of revealing: Music education responses to music technology. In F. Pio & Ø. Varkøy (Eds.), *Philosophy of music education challenged:*Heideggerian inspirations (pp. 61–74). Springer.
- Ludvigsen, S., Elverhøi, P., Gundersen, E., Indregard, S., Ishaq, B., Kleven, K., Korpås, T., Rasmussen, J., Rege, M., Rose, S., Sundberg, D., & Øye, H. (2014). *Elevenes læring i fremtidens skole Et kunnskapsgrunnlag* [Students' learning in the future school A knowledgebase]. NOU [Norwegian Official Report]. https://www.regjeringen.no/contentassets/e22a715fa374474581a8c58288edc161/no/pdfs/nou201420140007000dddpdfs.pdf
- Ludvigsen, S., Gundersen, E., Kleven, K., Rege, M., Øye, H., Indregard, S., Korpås, T., Rose, S., Ishaq, B., Rasmussen, J., & Sundberg, D. (2015). The school of the future Renewal of subjects and competences. NOU [Norwegian Official Report]. https://www.regjeringen.no/contentassets/da148fec8c4a4ab88daa8b677a700292/en-gb/pdfs/nou201520150008000engpdfs.pdf
- Mantie, R. (2017). Thinking about music and technology. In S. A. Ruthmann & R. Mantie (Eds.), *The Oxford handbook of technology and music education* (pp. 15–30). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199372133.013.1
- OECD. (2005). *The definition and selection of key competencies Executive summary*. OECD. http://www.oecd.org/pisa/35070367.pdf
- Partti, H. (2017). Pedagogical fundamentalism versus radical pedagogy in music. In A. Ruthmann & R. Mantie (Eds.), *The Oxford handbook of technology and music education* (pp. 257–276). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199372133.013.25
- Paul, F. (2017). 'Tve heard there was a secret chord'. In G. D. Smith, S. Rambarran, Z. Moir, M. Brennan, & P. Kirkman (Eds.), *The Routledge research companion to popular music education* (pp. 166–167). Routledge. https://doi.org/10.4324/9781315613444.ch14
- Renzo, A., & Collins, S. (2017). Technologically mediated transparency in music production. *Popular Music and Society*, 40(4), 406–421.
- Roads, C. (2015). *Composing electronic music A new aesthetic*. Oxford University Press.
- Roe, A., Solheim, R., & Kjærnsli, M. (2007). *PISA 2006*. University of Oslo, ILS. https://www.udir.no/tall-og-forskning/finn-forskning/rapporter/PISA-2006-Svakere-resultater-i-alle-fag/
- Røshol, A. W., & Sørbø, E. (2020). Making music, finishing music An inquiry into the music-making practice of popular electronic music students in the "laptop-era". In Ø. J. Eiksund, E. Angelo, & J. Knigge (Eds.), *Music technology in*

- education Channeling and challenging perspectives (pp. 151–278) . Cappelen Damm Akademisk.
- Schmidt-Jones, C. (2018). Open online resources and visual representations of music: New affordances for music education. *Journal of Music, Technology & Education*, 11(2), 197–211.
- Skjervheim, H. (1996). *Deltakar og tilskodar og andre essays* [Participant and spectator and other essays]. Aschehoug.
- Söderman, J., & Folkestad, G. (2004). How hip-hop musicians learn: Strategies in informal creative music making. *Music Education Research*, 6(3), 313–326.
- Søgnen, A., Seim, A., Andreassen, S. M. N., Fossland, T.-L. W., Grøndahl, S., Holden, I., Huitfeldt, A., Høgaas, S., Johansen, R., Karlsen, R. J., Lie, S., Lied, R., Nielsen, M., Ommundsen, J. B., Totland, M. E., Veierød, T., Skarheim, P., Barka, J. H., Berg, B., Berg, K., Flagtvedt, E.-K., Pedersen, E. F., Prøitz, T. S., & Refsdal, A. O. (2002). Førsteklasses fra første klasse [First class from first grade]. NOU [Norwegian Official Report]. https://www.regjeringen.no/no/dokumenter/nou-2002-10/id145378/
- Søgnen, A., Seim, A., Andreassen, S. M. N., Fossland, T.-L. W., Grøndahl, S., Holden, I., Huitfeldt, A., Høgaas, S., Johansen, R., Karlsen, R. J., Lie, S., Lied, R., Nielsen, M., Ommundsen, J. B., Veierød, T., Vårdal, Å., Skarheim, P., Barka, J. H., Berg, B., Berg, K., Flagtvedt, E.-K., Kreher, A., Nesvik, M., Pedersen, E. F., Prøitz, T. S., & Thorbjørnsen, A. (2003). *I første rekke Forsterket kvalitet i en grunnopplæring for alle* [First row Reinforced quality in basic education for everyone]. NOU [Norwegian Official Report]. https://www.regjeringen.no/no/dokumenter/nou-2003-16/id147077/sec1
- Sørbø, E., & Røshol, A. W. (2020). Teaching aesthetics A case study of one-to-one tuition in popular electronic music in higher education. In Ø. J. Eiksund, E. Angelo, & J. Knigge (Eds.), *Music technology in education Channeling and challenging perspectives* (pp. 257–278). Cappelen Damm Akademisk.
- Tobias, E. S. (2013). Composing, songwriting, and producing: Informing popular music pedagogy. *Research Studies in Music Education*, 35(2), 213–237.
- Tønsberg, K. (2014). Critical events in the development of popular music education at a Norwegian music conservatory A schismogenic analysis based on certain conflict and power-theoretical perspectives. *Finnish Journal of Music Education*, 17(2), 19–34.
- UNESCO. (2014). Global citizenship education Preparing learners for the challenges of the 21st century. UNESCO.
- Varkøy, Ø. (2013). Technical rationality, techne and music education. In E. Georgii-Hemming, P. Burnard, & S.-E. Holgersen (Eds.), *Professional knowledge in music teacher education* (pp. 39–50). Ashgate.
- Varkøy, Ø. (2015). The intrinsic value of musical experience. A rethinking: Why and how? In F. Pio & Ø. Varkøy (Eds.), *Philosophy of music education challenged: Heideggerian inspirations* (pp. 45–60). Springer.