

From blogging to self-regulated learning in music

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Abstract: Having done two differently-designed pilot studies on the use of blogging in teaching music theory and analysis, I draw upon Self-Determination Theory (Deci & Ryan, 1985) to re-examine the two studies in order to propose ways to motivate learning that go beyond “learning about” to “learning to be” in the subject.

Keywords: music, blogging, self-determination theory, intrinsic and extrinsic motivation, self-regulated learning

Introduction

I begin with two educational ideals dear to the hearts of educators. First, it is the ideal of being able to motivate students in their learning to the extent that they become self-regulated learners—an educational objective which has become increasingly important in the modern knowledge-based economy which calls for life-long learning. Second, it is the subject-disciplinary aim of inducting students into the discipline in question. As Jerome Bruner once said about physics teaching: “we should teach physics rather than teach *about* physics” and by that he meant teaching “the mode of thought ... rather than a collection of facts that can be got out of a handbook” (Bruner, 1972, 124).

As a teacher of music theory and analysis, both aims are easier said than done. Most music students are primarily interested in performing music, a handful are interested in composing, but few come with a natural interest in music theory or music analysis. For music education students, the tertiary level of music theory and analysis is often seen as being too specialized for their teaching needs. In short, I could hardly expect a high level of natural motivation from my students let alone expect them to, on their own accord, go beyond fact-learning to *become* a thinking musician capable of deep analytical musical understanding and able to communicating that—two assets I consider essential for any music teacher, teaching at whatever level. Hence, I explored using blogging as a means to make the course more appealing to and engaging for my students who, in the case of my institution, are increasingly being exposed to ICT-enabled modes of learning.

Two differently-designed pilot studies were previously conducted on the use of blogging in teaching music theory and analysis (Chong & Soo, 2005a, 2005b). Table 1 summarizes the essential features of each study:

Table 1: *Two Pilot Studies on Blogging in Music Teaching*

	1 st Pilot Study	2 nd Pilot Study
Technological setup	Student-owned blogging strategy	Group-owned blogging strategy
Sample size	6 individuals	2 groups of 3
Blogging tasks	At least 4 out of a choice of 6 for each individual: i. Comparative analysis of given musical excerpt and one chosen by student ii. short composing task + peer evaluation with justifications iii. choice of two self-reflection tasks iv. critical reading and response v. mini-research task vi. analysis of pop song	Free-choice of group project on pop songs or musicals; to include: i. background information on song, composer and/or singer ii. song analysis iii. compositional response Presentation mode: information booklet or website
Learning objectives	Higher-order thinking in the form of: <ul style="list-style-type: none"> • application of knowledge • lateral transfer of knowledge • synthesis of knowledge: theory + listening + composing • metacognitive reflection • peer comments and evaluation (an element of collaborative learning) 	Similar to those for 1 st pilot study but with an emphasis on more collaborative learning and less on metacognitive reflection
Post-study survey	Conducted	Conducted

In a self-reflective consolidation that followed, I derived two pedagogical maxims that can help achieve engaged learning through blogging (Chong, 2006):

- i. allow students to take ownership
- ii. teacher needs to be involved throughout

To refine this pedagogical distillation, I now re-examine the two studies using the lens of Self-Determination Theory (SDT) (Deci & Ryan, 1985; Deci, Koestner, & Ryan, 2001; Ryan & Deci, 2000, 2002) to propose ways to motivate learning—not just one that is self-regulated (Deci & Ryan, 1996), but one that goes beyond “learning about” to “learning to be” in the subject.

Need satisfaction, self-determination and self-regulation: an SDT perspective

Educational psychologists have long recognized the role of intrinsic motivation in human actions. Operant theory (Skinner, 1953) believes that motivation stems from positive reinforcements and the rewarding nature of the activity itself whereas learning theory (Hull, 1943) understands it primarily in terms of physiological or psychological needs being satisfied. Along this latter line, Deci and Ryan draw upon deCharms's notion of perceived locus of causality (deCharms, 1968) to develop their Cognitive Evaluation Theory as part of their broader Self-Determination Theory (Deci, 1975; Deci & Ryan, 1985; Ryan, 1982). They initially highlighted two basic innate needs that are relevant in accounting for intrinsically-motivated behaviours:

i. the need for autonomy

When people's intrinsic need to be self-determining is met—that is, when there is an internal perceived locus of causality, intrinsic motivation for the behaviour concerned is supported and can be enhanced

ii. the need for competence

When people's intrinsic need to be competent and to master optimal challenges are met (within the context of some self-determination)—or, more specifically, when there is perceived competence—intrinsic motivation for the behaviour concerned is supported and can be enhanced

But while emphasizing that *both* the freedom and the ability to engage in a particular activity are essential for self-determination, without which intrinsic motivation will be undermined, Deci and Ryan, nonetheless, do not deny the fact that interesting activities in themselves can satisfy other basic needs as well.

At the same time, Deci & Ryan (1985) are realistic in recognizing that not all activities are inherently interesting, hence there is a place for extrinsic motivation. However, unlike deCharms (1968), they do not see extrinsic motivation as invariably non-autonomous, instead they contend that there can be a continuum of autonomy involved. In their Organismic Integration Theory (Deci & Ryan, 1985; Ryan & Deci, 2000, 2002), another sub-theory of SDT, they propose a four-level classification, differentiating the different degrees of autonomy with respect to extrinsic motivation:

i. external regulation – the behaviour is controlled by external demands or externally-imposed rewards

ii. introjected regulation – the behaviour is driven by ego or self-esteem

iii. identified regulation – the person has identified with the goals and values of the regulated activity and hence accepts the external regulation

iv. integrated regulation – the identified regulation is fully internalized such that the extrinsically-motivated behaviour becomes a self-determined one, the activity is now volitional and valued by the self

For educational contexts, they further propose the broader category of autonomous self-regulation, one which subsumes both intrinsic motivation as well as identified or integrated regulation—any of these can underlie self-regulated learning (Deci & Ryan, 1996).

A third aspect of SDT is its recognition of the interpersonal dimension (Deci & Ryan, 1985). Acknowledging the presence of intrinsic motivational tendencies in humans, Deci and Ryan nonetheless argue that these inherent organismic propensities need appropriate external conditions as catalysts, that is, they need interpersonal events and structures that foster a sense of autonomy and feelings of competence. In educational settings, such informational—as opposed to controlling, or worse, amotivating—events and structures allow for choice and provide information useful for the learner to engage in the learning task. As such, the classroom setup and the teacher's orientation both play a part in supporting intrinsic motivation. The teacher needs to offer optimal challenges, effectance-promoting feedback, and non-demeaning evaluations—all these within an “open” classroom structure that offers choice in learning within appropriate limits (informational limits). Needless to add, such informational environments will also foster the personal-identification or internalization of extrinsic motivations, nudging students towards self-regulated learning: “In classrooms this means that students' feeling respected and cared for by the teacher is essential for their willingness to accept the proffered classroom values” (Ryan & Deci, 2000). In subsequent discussions, Deci and Ryan more explicitly relate this interpersonal dimension, in part, to a third innate psychological need—that for a sense of relatedness (Ryan & Deci, 2000, 2002; Ryan, Stiller, & Lynch, 1994).

Methodology: Evaluating the level of self-regulated learning

Before proceeding with our re-examination, the basis for evaluating self-regulated learning in SDT terms must be clarified. In general, to examine the level of motivation in learning, psychologists have generally used one of two methods—examining free-choice behaviours and relying on self-reports. In our case, the present attempt to take a second look in SDT terms is an afterthought, hence neither the element of free-choice behaviour nor that of self-report by participants have been formally built-in into the study. However, we can consider my personal, admittedly subjective, class observations, as well as make some inferences about students' motivational levels based on their blog discourses and post-study survey feedback. Additionally, one of the students from the second study had, on his own accord, chosen to do an independent survey with his fellow classmates to write his term paper for a course on academic writing in the following semester (Lim, 2006), the survey done thus provided us additional evidence—objective insofar as it was initiated by the student and not done under my purview.

In terms of evaluating the nature and level of motivation, Harter's motivation scale offers a useful point of departure (Harter, 1981). She defines five subscales in terms of an intrinsic and an extrinsic pole:

- i. learning motivated by curiosity versus learning in order to please the teacher

- ii. learning motivated by desire for personal satisfaction versus being motivated by grades
- iii. showing a preference for challenging schoolwork versus preference for easy assignments
- iv. desiring to work independently versus dependence on the teacher for help
- v. having internal criteria for success or failure versus depending on external criteria such as grades and teacher feedback to determine success or failure

Without quantifying our assessment for each sub-scale level as Harter does (since ours are pilot studies with too small a sample size for making any statistically-valid generalization), we shall only make qualitative observations along the lines suggested by Harter. At the same time, inline with our adoption of Deci and Ryan's definition of self-regulated learning, we shall admit the possibility of extrinsic motivation being identified with or internalized. But, for any of our observed self-regulated learning, it will be difficult to distinguish between the intrinsically-motivated ones from those that stem from identified/internalized extrinsic motivations.

For the purpose of determining the extent of "learning to be", we shall additionally cast our eye on any manifestation of "modes of thought" essential to music theorizing and music analysis. But it must be borne in mind that, given that the blogging tasks were crafted to promote the exercise of such modes of thinking and knowledge construction in the first place, it would be difficult to determine whether or to what extent any such manifestation was the result of the use of blogging as a mode of learning as opposed to due to the nature of the academic task itself.

Edu-blogging from an SDT perspective

The present research is premised on the belief that blogging appeals to our digital-age students. However, one cannot assume that this is true of everyone of this IT-generation, nor should we forget that blogging out of personal interest and blogging to fulfill academic obligation are two different things (Downes, 2004). As one student put it bluntly: "[I] can't be bothered to go online unless necessary" and "[i]t's only because it's our assignment that we're forced to access it regularly" (Lim, 2006). Such sentiments were certainly expressed to varying extent by students in both studies but their often lengthy postings and their post-experiment feedback—admitting personal benefits from the blogging exercise, expressing a willingness to adopt edu-blogging in their own teaching later on—suggest that such reluctance may have been overcome to a good extent. Or, in SDT terms, sufficient motivation must have been present despite the likely absence of intrinsic motivation on the one hand and, it should be added, the clear presence of extrinsic motivating factors and even amotivating factors on the other. How could this be possible?

Let us first identify the extrinsic motivating and amotivating factors which, according to SDT, can potentially undermine intrinsic motivations. First of all, all the blogging tasks were course requirements involving deadlines and grades, both of which are classic controlling

factors antagonistic to intrinsic motivation. Secondly, because blogging was done in the public domain, any mistakes made would appear before the rest of the class (and any visitor to the blog); indeed some of the students had expressed hesitations to blog for fear of losing-face: “having the fear to make mistakes, especially stupid ones” (2nd survey). And worse, one of the blogging tasks in the first study even explicitly required the students to peer-evaluate: researches have cautioned that mere expectation of evaluations is sufficient to decrease intrinsic motivation (Inagaki, 1984, cited in Deci & Ryan, 1985; Shalley, 1985)! We may also note that the free-choice and open-ended nature of the tasks not only caused some anxiety for some students, but over challenged some students at times. Finally, from the students’ complaints and their inability to adhere to the sub-task deadlines (especially in the first study), it was clear that their generally heavy study workload (as an inhibiting factor) made it challenging for them to find sufficient time for the blogging assignments; the situation appears even worse when we factor in the students’ complaints about IT-related problems encountered or the scanning and uploading of musical excerpts being time-consuming!

Under such circumstances, it was fortunate that there were sufficient mitigating factors to save the situation. The element of choice—in terms of choosing the blogging tasks in the first study or choosing the group-project focus in the second—meant that the students’ personal musical interests and their innate need for a sense of autonomy were met to some extent (“I get to choose what I want to study”—from the 1st survey). Many of the students’ enthusiasm for the music chosen for analysis and discussion was at times very evident in their blog entries—this was certainly more apparent when one compares their discourse here with that for the first blog assignment in the first study where the music to be discussed was in part chosen by the teacher. At the same time, within the time period dictated by the given set of deadlines for the tasks, the students had the flexibility of doing the assignments “at your own time and pace” given the 24-hour availability of internet access.

Apropos the need for competence, there was admittedly a lack of perceived competence in some cases especially with respect to the tasks involving music analysis. While the blogging tasks were designed to go hand-in-hand with the course coverage as far as possible such that as much of the relevant technical knowledge and skills were anticipated and taught so as to enable the students in their tasks (especially in the case of the first study), I was mindful of the potential problem in allowing students to choose their own music for analysis: they might choose music that was beyond them at their stage of learning. I had therefore made it clear to the students at the start as well as repeatedly thereafter that they should feel free to pose questions or seek clarifications in their blog entries as part of this collaborative learning process, and that, when necessary, I would step in to guide as I deemed fit. This latter teacher intervention is a form of effectance-relevant information necessary for developing competencies. In SDT’s understanding, students are more likely to internalize extrinsic motivation (which was inevitably present in both studies) if they have the relevant skills or knowledge to succeed in the task. At the same time, in retrospect, I realize that my conscious

effort to be encouraging—for example, seizing opportunities to applaud students' correct technical readings and insightful interpretations— had possibly helped to raise the students' perceived competence.

We turn next to the students' psychological need for a sense of relatedness, which is equally important both for self-determination to be supported as well as for autonomous self-regulation to be fostered. Now, it may be true that co-operative learning settings are more intrinsically motivating in the first place (Deci & Ryan, 1985), and indeed both our studies did have a co-operative element in terms of peer-learning and/or it being a group-based project, but this in itself will not ensure a sense of relatedness. In both cases, I had consciously aimed to help the students cultivate a positive mindset towards this mode of ICT-enabled learning and constantly encouraged them not to feel embarrassed to seek clarifications or make mistakes. When responding to the students' blogs, besides trying to sound encouraging, I also pointed out any mistakes in a tactful way. In short, on reflection, these attempts can be seen as helping to make the students feel willing and comfortable as members of the learning community they are in. It was therefore not without cause that in the students' feedback many conveyed positive feelings towards their peer-learning experiences, with one even expressing "great joy to have responses to your blog" (2nd survey). These, presumably, may be taken as indirectly reflecting a certain degree of success in the engendering of a sense of relatedness; the general tone of collegiality in all the blog exchanges further testifies to a positive climate of interaction.

More specifically, we may attribute the success in establishing a more positive learning climate to informational supports, which worked hand in hand with autonomy-supporting conditions. Besides the providence of choice elements and effectance-enhancing information as well as a deliberate effort at fostering a sense of relatedness, my attempts at persuasion also involved acknowledging conflicting feelings. I was very upfront with the students when it came to anticipating reservation or even fear towards the use of ICT. However, I assured them that this was natural and understandable, I then urged them to adopt an open mind and be willing to learn. With the second group, the ultimately positive experience of the first group was also mentioned as an encouragement for them. With respect to the potentially detrimental effects of being peer-evaluated in public, I explained the rationale, namely, to give them the practice of assessing since they would soon become teachers themselves. Hopefully, this understanding helped them accept the peer evaluation more positively; thankfully, their blog-responses suggest that they did take it in good spirit. To be true, their peer evaluation comments did sound somewhat apologetic in some cases and perhaps not critical enough, but (from a teaching point of view) the justifications they had to provide to substantiate the grades given for their fellow students' compositions presumably made them think more deeply when assessing, even if they did not reveal everything in their posted comments.

Finally, if intrinsic motivation was not spontaneously occurring in the students, there was at least one element in both studies that could have acted as a motivating factor—learning with an

expectation to teach others (Deci & Ryan, 1985; Benware & Deci, 1984). In the spirit of collaborative learning, I had encouraged the students to respond to each other's postings including answering any questions raised or pointing out mistakes. One student, in the first survey, wrote at length on how "stepping into a teacher's shoes" when responding to fellow students' entries "force[d] me to constantly reassess my understanding of fundamental concepts and provide[d] reinforcement for my learning." In general, the level of detailed technical discussion and at times extensive exchange in the peer discussion suggest that the students were indeed engaged—and presumably motivated—to varying extent.

Evaluating the learning

Now, the presence of a conducive enough learning environment and even indications of engaged learning is one thing, whether the learning is self-regulated and of the learning-to-be kind is quite another. That the students have affirmed having learnt much—even describing their blog-based learning experience as "interesting and exciting" and "great"—is no direct evidence. Given the mandatory nature of the assignments, it is difficult to determine whether any engaged learning observed was intrinsically or extrinsically motivated. We have, at best, some circumstantial evidence of either intrinsic motivation or internalized external motivation, which allows us to infer some possible contributory factors. In contrast, we are on comparatively firmer grounds determining the extent of learning-to-be.

In respect of intrinsic motivation, one student from the second study revealed that she had been "wondering much about the 'strange' harmony used in [*The Phantom of the Opera*] but ha[d] never gotten round to taking a closer look at the scores", hence "it was great" that she could benefit from the analysis done by her classmates. Presumably, her engagement was in part motivated by curiosity which (following Harter) would suggest some intrinsic motivation involved. Other students have also variously expressed their appreciation for the different analytical perspectives gained from reading each other's blogs: one may again presume that this positive reception is suggestive that the musical-intellectual pleasure of being enriched by alternative analytical readings was experienced. In yet another instance, one student's recommendation to a fellow student to "[p]lay that bar, listen to the effect and *enjoy* the magic of the falling bass line" (italics mine) likewise hints at the personal pleasure experienced. Optimistically speaking, such betrayals of curiosity and pleasures—manifestations of a "self-driven thirst for understanding" (Brown, 1988)—could well have resulted in some degree of intrinsic motivation that led to self-regulated learning.

Apropos Harter's third sub-scale, we may again note that there were indeed a couple of instances where the students clearly chose challenging pieces to discuss despite my recommendation that they find something they could manage. In the case of the compositional-response task, one of the students in the first study took up the challenge of pushing tonal boundaries and playing with more complex rhythms as opposed to writing a

simple tonal melody to meet the minimum requirement. Another student decided to compose a teaching piece which “will ambitiously contain ALL of the augmented 6th chords” he had learnt and in the end, he ended up writing three very different pieces for this purpose. Yet another, in the second study, went beyond just composing the melody to provide the full piano texture. The students were clearly going beyond what was called for in their assignments. With regard to the students’ independence in learning, it was difficult to ascertain the level, but by and large, I did not perceive an unhealthy dependence on me for help even though there were certainly occasions when the students needed extra help with the technical work involved and they made this known on their blog. As for their criteria for success, there was, alas, no opportunity for the students to express their thinking on this nor did they happen to explicitly reveal that in their survey feedback, hence no inferences may be drawn here.

As mentioned above, we do however have some grounds to infer the extent of the students’ learning-to-be. As illustrated in more detail elsewhere (Chong & Soo, 2005a, 2005b), the encouraging evidence of higher-order thinking clearly points to their learning beyond facts. Whether it was their deliberating over analytical issues (even to the extent of engaging in compositional speculation to explore alternatives), or responding to fellow students’ musical interpretations and musical compositions, or even articulating what they did not know or are uncertain of, these were the kinds of musical thinking—part of learning to be a thinking musician—a music teacher would like to cultivate in their students. Unfortunately, the extent to which such manifested modes of disciplinary thinking became more permanently assimilated remains to be investigated.

Closing remarks

Admittedly, the small sample sizes here forestall any valid generalization. However, there were sufficient evidence of engaged learning and arguably self-regulated learning to warrant a more extensive (and perhaps quantitative) study on the motivational effects of blogging as an instructional strategy (separating, of course, this pedagogical efficacy from that arising from the nature of the academic tasks themselves). For now, the present re-consideration of the pilot studies using SDT whilst only affirming to some extent the validity of the two pedagogical maxims obtained from the earlier consolidation, does offer a more refined understanding of their operations, helping us to be more aware of what some of the motivating factors, both intrinsic and extrinsic, are and the conditions under which they can operate optimally. Table 2 lists some recommendations stemming from this understanding as discussed in the preceding sections:

Table 2: *Some recommendations to motivate learning*

SDT considerations	Some general recommendations
For intrinsic motivation	
<ul style="list-style-type: none"> • pertaining to the need for a sense of autonomy 	Design assignments that offer students choices, preferably catering to their personal interests (but informational limits as opposed to controlling ones can be set)
<ul style="list-style-type: none"> • pertaining to the need for perceived competence 	Task must be sufficiently but not overly challenging Enable students through prior teaching and/or sufficient scaffolding
<ul style="list-style-type: none"> • pertaining to the need for a sense of relatedness 	Respect the students, connect with them, establish a sense of being a member of a learning community
More generally in terms of informational supports	
<ul style="list-style-type: none"> • dealing with external regulation 	Be assuring and encouraging, give positive feedback
<ul style="list-style-type: none"> • concerning introjected regulation 	Help students feel positively connected within the learning community
<ul style="list-style-type: none"> • fostering identified and integrated regulation 	Make the whole learning journey/experience pleasurable

For a teacher who wishes to embark on blogging as an instructional strategy, she can be more critically aware of how she may create an informational learning environment that is supportive of the three innate psychological needs identified by SDT to be the basis for self-determination. At the same time, given the inevitable presence of extrinsic motivating factors such as the mandatory nature of the assignments and the need for grades to be awarded, she would also know how to administer these without inhibiting autonomous self-regulated learning.

To close, we do well to take cognizance once again that our digital-age students may be IT-savvy and prefer ICT-based learning, but that does not mean that edublogging will automatically bring about motivated learning, not to mention learning of the kind desired. The teacher needs to pay heed to the effects of intrinsic and extrinsic motivating factors as well as of the learning environment on the one hand, and craft the kinds of assignments that do foster learning-to-be on the other.

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