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Learning to read text and learning to read music: conceptual and pedagogical parallels

Abstract

This article explores whether current guidelines regarding the early teaching of reading are comparable to current dominant discourses in policy and pedagogy regarding the teaching of the reading of music. Although clear parallels between the two forms of reading are identified, expectations regarding the use and intended timing of reading acquisition of the two genres are shown to be very different. The possibility of transfer between the two forms of reading is also considered, and the notion of near- and far- transfer is explored. The article provides a lens through which to evaluate firmly-held assumptions implied or imposed in current guidance concerning the teaching of early reading, and also contained in the Henley Review (DfE, 2011).

Key words: early reading, notation, pedagogy, transfer, decoding, symbol recognition

An easy question to begin. Would one consider a person who can fluently read, write and understand two completely different types of written script to be bi-literate? The probable answer is, 'Yes'. And if those two scripts were taken from a list which included English, Mandarin, Arabic, Russian, Sanskrit, Greek or Hebrew, one might be most impressed at the contrasting nature of that person's bi-literacy. The physical written appearance of each of these languages is very different from the others, yet a fluent reader of two or more such scripts might well be able to identify areas of comparison and contrast, both in the structure and format of the texts, but also in the experience of learning to read such completely different codes. We might find ourselves envious of such a polyglot, assuming him or her to be the sort of person who finds the acquisition of a variety of languages easy. Moreover, in the hierarchy of what is deemed to be linguistically impressive, being able to read both English and Arabic might be thought to be a greater achievement than the ability to read both English and Italian, because the graphemes used in English and Arabic are dissimilar, whereas the graphemes in English and Italian are shared (even if the grapheme-phoneme correspondences differ in convention and consistency).

But what of the person who can fluently read a language (perhaps English), and who can also fluently read music? Are we equally impressed, and does one consider such a person to be biliterate? Well, generally, no. We expect a reader of music to also be able to read a language, and so there is nothing remarkable here. In the eyes of a non-reader of music, if someone chooses to learn to play an instrument, conventionally s/he might be expected to learn to read music also, as if the learning of one will automatically and symbiotically lead to the learning of the other. Again, to the non-reader of music, the two skills (playing an instrument, and reading music) are deemed to come as a package. So no, there is no need to be impressed here. The reader of both English and music is an artisan. The reader of both English and Arabic is a linguist.

But they all have to be learnt, these diverse scripts of English, Arabic and music. Abstract symbols have to have meaning ascribed to them. Conventions of direction, symbol-recognition, correspondence, sequence and form have to be recognised and observed. This being the case, regarding the reading of texts, the experiences of the acquisition of multiple language scripts are generally perceived to be mutually enhancing for the emergent reader (Grabe, 2009; Kroll, 2003; Urquhart & Weir, 1998; Verhoeven, 1990). Skills of reading one language are acknowledged by these writers to transfer to the reading of another. But how beneficial is learning to read music for the learning of literacy. And can we learn anything about the teaching of reading from current wisdom regarding the teaching of the reading of music?

When considering these questions, we make two acknowledgements, Firstly, when considering textual reading skills, we are here referring to skills of decoding. There is not scope in an article of this length to consider wide aspects of reading such as comprehension,

inference, or genre preference. Secondly, it is most likely that learning to read music will occur after children have acquired of text-reading skills, and so a piece of research might most readily consider how experience in the decoding of text might enhance skills in the reading of music. But this article is written because the order of skills acquisition need not be so prescriptive. We will publish elsewhere the findings of a recent piece of research that examined whether a 6-week intervention of music reading had an effect on phonic decoding skills in children aged 5-6. Although that study sought to investigate whether an identifiable and measurable connection between the two reading genres could be found, this article considers how children's experience of acquiring both reading genres may be mutually beneficial. Although we draw parallels between the two for pedagogic purposes, the chronological aspects of the acquisition are not central to our argument here. Although we are considering transfer between the two genres, we are not dictating a direction of transfer.

To this end, this article explores two areas. First, it explores the notion of near- and far-transfer, by use of a taxonomy (Barnett & Ceci, 2002) which can help to reveal whether the degree to which skills of reading and writing contained in the two genres (reading a language and reading music) are sufficiently similar for pedagogical comparison to be made. It would be pointless to consider whether the pedagogy of the teaching of music notation can illuminate current practice with regard to the teaching of the decoding of text if demonstrable parallels between the two forms of reading could not be shown. To this end, it would be useful to first explore similarities and differences in context as well as function of the two genres. Secondly, this article identifies dominant discourses in the policy and pedagogy surrounding the teaching of the reading and writing of music in primary and Early Years settings, and will compare them those currently prevalent regarding the reading and writing English.

Near- and far-transfer.

Table 1: Barnett & Ceci's taxonomy for near & far transfer

Context: When and where transferred from and to								
	Near -				Far			
Knowledge	Mouse vs.	Biology vs.	Biology vs.	Science vs.	Science vs.			
domain	rat	botany	economics	history	art			
Physical	Same room	Different	School vs.	School vs.	School vs.			
context	at school	room at school	Research lab.	home	The beach			
Temporal	Same	Next day	Weeks later	Months later	Years later			
context	session	•						
Functional context	Both clearly academic	Both academic, but one non-evaluative	Academic vs. Filling in tax forms [functional]	Academic vs. informal questionnaire	Academic vs. at play			
Social	Both	Individual	Individual	Individual vs.	Individual			
context	individual	vs. pair	vs. small group	large group	vs. society			
Modality	Both written,	Both written,	Book	Lecture vs.	Lecture vs.			
	same format	multiple	learning vs.	wine tasting	wood carving			
		choice vs.	oral exam					
		essay						

Source: Barnett & Ceci (2002: 621)

Barnett and Ceci (2002) have developed a taxonomy of transfer (Table 1). They ask two interesting and fundamental questions with regard to the notion of a skill developed in one context or discipline being transferred to another, different context. The first question is "What is being transferred" (p.621), and the second is "What and where is learning transferred from and to?" (p.623). This second question is clumsy, being something of a hybrid, but this taxonomy builds on the analysis of Salomon & Perkins (1989), who demonstrated what they perceived to be happening in transfer by separating the 'how' of transfer (the cognitive mechanisms), from the 'what' of transfer (the kinds of knowledge and skills that are being transferred). Barnett & Ceci (2002) identify six 'contexts', to which they

apply the perspective of 'near' and 'far' transfer (Table 1). The use of this Table can help to identify whether the learning experiences of a child who learns to read, and also who learns to read music, might benefit from the dual experiences. In other words, might the transfer acknowledged by Grabe (2009) and by Kroll (2003) as existing between the development of reading skills in two languages also pertain between the reading of music and the decoding of text? If this potential transfer is 'far' (by Barnett & Ceci's categorisations), then we need not detain ourselves in the argument any further. If 'near', then we might want to welcome, and be interested by, the Henley review (DfE, 2011) which acknowledged the contribution of the learning and teaching of music across and beyond the curriculum, and made specific reference to the beneficial relationship music can have with the development of literacy skills:

The benefits of a quality music education are those of increased self-esteem and aspirations; improved behaviour and social skills; and improved academic attainment in areas such as numeracy, literacy and language.

(DfE, 2011: 42)

The Henley Review (DfE, 2011) called for the status of music within primary schools and Early Years settings to be enhanced, not only as a celebration of the teaching of music, but also for what its recommendations might do for the teaching and learning of reading.

Barnett and Ceci (2002) are not alone in analysing transfer. The notion of transfer is grounded in a concept of multi-literacies and the multi-modal nature of contemporary literacy practices (Mills 2010; Unsworth, 2001). Learners of all ages are becoming increasingly accomplished at receiving and articulating knowledge and information through a variety of media and sources, and the development of early reading has become similarly multi-modal.

The recognition of symbols, logos and signs involves a multiplicity of visual, auditory, social and physiological skills, and this is reflected in the stated aims of early reading programmes such as Letters and Sounds (DfES, 2007) and Jolly Phonics (2011) which celebrate a multisensory approach to reading acquisition. Beach (2004) grappled with the differing contexts inherent in the notion of transfer, and considered that since all learning is context-dependent, transfer is impossible to prove, and yet difficult to deny. Bransford and Schwartz (1999), who preceded Barnett and Ceci in presenting a non-linear approach to transfer, suggested that, if we are to consider the possibilities of transfer, in addition to a consideration of "the replicative 'knowing that', and the applicative 'knowing how', we should add the associative 'knowing with'" (Bransford and Schwartz, 1999: 61).

However, we chose to present Barnett and Ceci's taxonomy, because they have attempted to both categorise the contextual variables and to give examples of the range of experience that might be experienced in each. We make reference to this taxonomy because the point is well made by Barnett & Ceci (2002) that transfer is not an homogenous concept, applicable to all and every learning situation. The reason that transfer is so notoriously difficult to prove is that one is rarely comparing like with like. There are (according to Barnett & Ceci) six contextual variables alone, each with degrees of distance. Were we to use Barnett & Ceci's (2002) contextual categorisations to make comparison between the sorts of things that go on when learning to read the two different genres of text and music, Table 2 might be the result. Although this table is a blunt tool, and readers may position entries somewhat differently from our own classifications, the table shows that parallels can be identified between the learning experiences of children, and the teaching strategies of teachers. We are using this table as a lens to make an argument that that a child's experiences of decoding, and of reading music, are, under Barnett & Ceci's six classifications, at least comparable, and that the potential for transfer is not 'far'.

Table 2: A mapping of skills of reading, and music reading

Context: When and where transferred from and to								
	Near ← Far							
Knowledge	Interpretation of	(but in different						
domain	symbols	formats)						
Physical	N/A	Different room at						
context		school (usually)						
Temporal	Text reading,	Music reading,						
context	probably taught	perhaps taught						
	every day	once a week						
Functional	Both academic							
context								
Social	Whole class and							
context	small group,							
	occasionally							
	individual							
Modality	Both written	(but in different						
•		format						

Adapted from Barnett & Ceci (2002: 621)

In addition to the contextual aspects identified by Barnett and Ceci (2002), there are also functional similarities between the two genres of reading. Butzlaff (2000) listed four hypothetical reasons why instruction in music may help children acquire reading skills at different levels. First, he observed that both written text and written music must be read from left to right, and in both cases the symbols map directly to a specific sound.

Butzlaff's (2000: 167) second suggestion was that "skill in reading requires a sensitivity to phonological distinctions, and skill in music listening requires a sensitivity to tonal distinction". In other words, auditory skills of phoneme recognition and phoneme/grapheme correlation may be enhanced through musical experiences.

Butzlaff's third suggestion related to the repetitive nature of books designed for children's early reading, which is mirrored when children read the words of songs – the repetition (of, for example, songs with several verses interspersed with a chorus) encourages and allows prediction at word, sentence, and structural levels. In Butzlaff's view, such predictable text may train reading skills. Young children will happily engage with a song, and if they do not know a section will hum or 'la', or wait until a familiar section returns, at which point they will resume singing without any sense of failure or lack of engagement. This is particularly true of chorus songs. Hansen et al. (2007: 47) confirm this view. "Wouldn't it be interesting if children were allowed to say "la, la, la" when they couldn't read a word in order to keep moving in the sentence?" Perhaps this is a pedagogic strategy that could be explored by teachers of reading.

Finally, Butzlaff offered a motivational approach. He suggested that the peer experience when playing in a group or ensemble has a motivational effect, since the success of the whole is dependent on the team effort of the parts. "Perhaps personal responsibility ... leads to heightened academic responsibility and performance" (Butzlaff, 2000: 167).

It can therefore be argued that there are aspects of engagement in musical activities that might enhance, or transfer to, aspects of reading. Hansen et al.'s (2007) suggestion of what a child might be taught to do when unable to decode a word or make sense of a sentence is an example of how an approach to learning music might be adapted to enhance the learning of reading.

<u>Dominant discourses in policy and pedagogy regarding the teaching of reading, and the</u> teaching of the reading of music.

So, is this potential exchange of pedagogy one example of many, which might therefore expand to constitute a rich seam, or is it an isolated example, the pursuit of which might lead to an unhelpful cul-de-sac? The teaching of the reading of music has not yet benefited from the relentless gaze of successive governments in the way that has been enjoyed by the teaching of literacy, and, in particular, phonics. The Henley review (DfE, 2011) attempted to raise the profile of music in all compulsory phases of education in England, and the implications of this review were due to be implemented in 2012. In addition to the review's commitment to the cross-curricular benefits of the teaching of music (p.42), amongst the review's recommendations were the following

All children at Key Stage 2 should have the opportunity to learn an instrument through whole class ensemble teaching. Ideally, this would be for a period of one year, but at the barest minimum, one term of weekly tuition should be offered.

Much primary school classroom teaching of music is provided by non-specialist teachers. A new minimum number of hours of [Initial Teacher Training] for primary music teachers should be spent on the delivery of Music Education.

(Recommendation 21, p.35)

(Recommendation 3, p.31)

All primary schools should have access to a specialist Music teacher. (Recommendation 22, p.36)

There should be a clear pathway through from Early Years Provision for all children. (p.13)

In spite of these diverse and ambitious recommendations, the Henley review (DfE, 2011) was not accompanied by a prescribed pedagogy with regard to the teaching of music, as was the Rose review (DfES, 2006a) for the teaching of phonics, except for the suggestion that the teaching of an instrument should be undertaken through whole-class teaching (DfE, 2011: 31). This recommendation for whole class teaching of an instrument shows again how the pedagogy of one subject can indeed influence that of another. Literacy, mathematics, science: these subjects are often taught in whole-class settings, and objections to this approach are rarely heard. However, a trawl of academic writing on the pedagogy of music teaching reveals that nowhere is there to be found vociferous theoretical underpinning for instrumental whole-class teaching recommended as an official pedagogic recommendation by the Henley review. Indeed, the opposite is true. Gammon (1996) refers to situations, usually as a result of time restraints, in which music teachers are "forced into patterns of whole-class teaching, [resulting in] intolerable cacophony" (p.121).

This call for whole-class instrumental teaching is, as yet, only a recommendation, not a policy. As such, even in the light of governmental interest, decisions about what is appropriate to be taught with regard to the reading of music, and how, and at what age, have not been imposed upon a passively receptive profession, as they have within the field of phonics. Instead, these decisions about the teaching of music continue to be made by individual teachers, and not by ministers of state and their advisors.

This comparison between the levels of governmental interest is an interesting one. Examples of current primary and Early Years documentation with regard to phonics (EYFS, DCSF, 2007; Letters and Sounds, DfES, 2007) are teeming with instructions about what should be taught and learnt, and when and how, although nowhere do these documents explain why. Why these skills, and why at this age? If an educationalist in 2014 were to suggest that the formal teaching of phonics in Early Years and Key Stage 1 was inappropriate, or perhaps too early or unnecessary, that practitioner would be shouted down as a misfit and a heretic. But the same question when applied to young children's reading of music, a question which is considered in most published literature on the general teaching of primary music, receives responses which generally hold the child as the driver of reading acquisition and use, not the documentation.

For example, Mills (2009) is representative of most writers on the subject when she states that "pupils should not be introduced to music reading until a musical need has arisen" (p.69). Hallam (2010) reinforces this view, considering that any form of notation, even if fluent, "interferes with creativity" (p.117), and so should be used only if a student chooses to use it. Odam (1995) was of the same view. Until the publication of the new National Curriculum (DfE 2013) there was no mention of the reading and writing of music in primary or Early Years documentation. The unused Rose Review (DCSF, 2009) was articulate on the need for children to learn to read and write texts through the systematic teaching of synthetic phonics, yet in his proposed restructuring of the curriculum under the heading 'Understanding the Arts', Rose had nothing to say on children's reading and writing of music.

Glover & Young (1999) considered that since the ability of children in primary phases to compose music far outstrips their ability to notate it in any form, the need for the formal teaching of notation is redundant. Jones and Robson (2008) agree:

Music notation can be seen as something that could be learnt when needed. The motivation to read music lies in the desire to learn an instrument. ... Wholesale music notation teaching to primary children would be more of a hindrance to becoming musical because it will take away valuable time that can be used to experience actual music.

(Jones & Robson, 2008: 92)

In this article we are not making a case for or against whole-class teaching of music, but we do aim to provoke a the discussion about whether or not there is a place for the teaching of musical notations, formal or otherwise. For example, were we to apply the attitudes to music pedagogy presented above to the rhetoric of current national priorities in language acquisition, the results would be startling. Imagine trying to defend the following arguments.

- Wholesale phonics teaching to primary children would be a hindrance to becoming
 literate because it will take away valuable time that can be used to experience actual
 stories.
- Since the ability of children in primary phases to compose narratives and/or functional texts far outstrips their ability to write them in any form, the need for the formal teaching of phonics is redundant.
- The compelling evidence shows that any form of writing, even if fluent, interferes with creativity and so should be used only if a student chooses to use it.

Such arguments in the current climate would be deemed laughable. In spite of the views of Jones and Robson (2008), Mills (2009) and Hallam (2010), the reading of music has been

recently included in the new National Curriculum (DfE, 2013) which insists on children having the means and opportunity to write music conventionally. Although there is no mention of music notation in Key Stage 1, within the aims of the music curriculum for Key Stage 2 it is prescribed that "Pupils should be taught to ... use and understand staff and other musical notations" (DfE 2013: 218). This resonates with HMI (DES, 1985), which stated that "7-year-olds should be able to associate sounds with symbols; to show a readiness to see the relationship between performed music and various forms of notation (pictorial, graphic and conventional" (p.3). Thus, the reading and writing of music is not deemed to be an optional skill within current primary school documentation, and so it is only right to consider what parallels might be found between the pedagogies of learning to read text and learning to read music.

Conclusion

This article has considered the pedagogic and cognitive parallels between the decoding of texts and the reading of music. These parallels are not presented as an argument for wholesale change to our literacy or music provision, but they are presented to provoke some thought on the questions of why we do the things we do (or do not do) in the teaching of the reading of music, and in the teaching of decoding; the assumptions we make about what is important; and the spectrum within which we might consider doing things differently. Certainly our arguments suggest that if there are developmental links between reading text and reading music, it is entirely plausible and justifiable that an argument might be made for pedagogic links as well.

3671 words

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