



## Non-formal Learning as a conduit between students' social world and Formal Learning: The 'Rhythm Wave' Case Study

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### Abstract

This paper examines non-formal learning of rhythm in the context of an extra-curricular percussion group "Rhythm Wave" that formed at UHI (University of the Highlands and Islands) Perth College, Scotland, UK. Rhythm Wave, that has mutated in the present day into a community music group out with the formal sector, has been in existence for thirty years. And in the formal education context that is the nexus of this research, non-formal learning (NFL) and teaching ran contiguously with the instrumental pedagogy of the college's popular music curricula. The ensemble started with Brazilian Samba instrumentation and a tiny cell of learners but grew to encompass varied rhythm styles and textures whilst developing a network of alumni mentors who honed their musical and social skills through both peer and musical leadership interactions. Key aspects of rhythm learning that occurred in this ensemble have emerged from semi-structured interviews and observations and the enhancement of formal curricular learning of rhythm is evident in the findings. This includes aspects shared with Green's (2001, 2008, 2010, 2014) research into popular music practices and with the ongoing development of non-formal world music pedagogy (Murtadza; Walden; in Wright, Beynon, & Younker: 2016).

**Keywords:** Non-formal learning; Rhythm learning; Non-formal teaching; Musical leadership; Peer learning.

## 1. Introduction

Non-formal learning and particularly non-formal teaching has received considerable attention over the last twenty years as a mode that can be particularly effective in enhancing musical learning experiences and engendering musical rapport with learners within formal education settings (Musical Futures: 2023; Wright, Beynon, & Younker: 2016; Saunders & Welch: 2012; D'Amore: 2008; Renshaw: 2005a, 2005b; Mak: 2006; Price: 2005) and in alternative musical learning spaces and non-formal contexts (Higgins: 2015; Lonie & Dickens: 2015). Authors such as (Rogers: 2014b; Mok: 2011; Eshach: 2007; Renshaw: 2005a, 2005b; Wright, Beynon, & Younker: 2016) have helped to clarify the key concepts and terminologies and the contexts where non-formal learning and teaching can be applied effectively.

Furthermore, non-formal learning continues to be implemented and evaluated to the present day as a key part of the educator's toolkit involving hybrid learning approaches to topics such as; sustainable development (Caldana et al.: 2023); wellbeing through Community Music participation over the life course (Varvarigou et al.: 2021); Intergenerational musical learning (Kacane: 2020).

## 2. Non-formal musical pedagogy

The extra-curricular percussion group at the centre of this study i.e., Rhythm Wave, ran in parallel to the formal instrumental pedagogy employed on the college's popular music courses. The ensemble grew from a tiny cell of student learners from a popular music background, who had honed their informal musical skills, as Lucy Green expresses it, through: "... peer-directed learning and group learning ..." that, "... form central components of popular music informal learning practices..." (Green: 2001, 83).

In general, informal and non-formal learning may constitute a major part of our life-long learning experiences. Accordingly, the quantity of time that we spend in formal education such as within learning institutions is by contrast a small proportion of all that we learn over a lifetime. Non-formal Learning (NFL) can be defined as:

...learning which is embedded in *planned activities* not always explicitly designated as learning (in terms of learning objectives, learning time or learning support), but which contain an important learning element. *Non-formal learning is intentional from the learner's point of view...* (Colardyn and Bjornavold: 2004, 71), (CEDEFOP: 2009, 75) [Author's italics added for emphasis].

However, despite the UNESCO definition that NFL (non-formal learning) is; "...not provided by an education or training institution..." (UNESCO: cited in Rogers: 2014b, 8). It is possible, under the umbrella of extra-curricular activities, within an "...education or training institution..." to create a group of intentional learners, that do not seek certification or to undergo assessments, but indeed have non-formal

learning goals that incorporate planned activities. Regarding where NFL may take place Eshach (2007) takes the view that it can be located 'outside' accepted formal situations such as schools, colleges or universities. In his paper "Bridging In-school and Out-of-school Learning", Eshach (2007) examines the school science field trip as both an effective and affective context for NFL to be implemented, with a focus on interactive exhibits. His view that the place and space of NFL can be in contexts, "... beyond the spheres of formal or informal education ...", (Eshach: 2007, 173).

What we can draw in particular from Eshach, is the versatility of NFL in its application to different activities, locations and physical spaces. Apropos the classical music conservatoire, Mak (2006) gives the following mapping in which non-formal learning of music, "...refers to any organised educational activity that takes place outside the established formal education system (outside of the conservatoire)" (Mak: 2006, 5). However, Mok (2011) takes the view that non-formal learning may take place in any situation and as such, that place and space are not limits to its implementation: "... non-formal learning should not be seen as being bound by where the learning takes place ..." (Mok: 2011, 12).

Thus, NFL may equally inhabit the spaces of a formal education institution as in the case of this research project's setting in a university college campus. In respect of the research findings of this study, NFL is not bound by location as it is possible to postulate that modes of learning i.e., formal, non-formal and informal, can co-exist contemporaneously for students, alumni and staff of an extra-curricular musical group within a Higher & Further Education Institution (HFEI) locus. The three modes of learning often intersect, and contiguous interaction takes place, that in this research context is focused on the learning of rhythm.

Rather than viewing informal, formal and NFL as discrete and bounded in the context of a higher education setting, it would be more productive to delineate the convergences and correlations between them; in this case with reference to a particular discipline, such as music pedagogy. As Rogers (2014b) sums it up:

... there is of course a danger in seeing these different kinds of learning — formal, non-formal and various kinds of informal learning — as separate categories. The boundaries between them are often blurred as they *merge into each other* ... (Rogers: 2014b, 9) [Author's italics added for emphasis]

Higgins (2015) concurs with this view of the flexibility of the three modes as they potentially "...merge into each other...", and advocates their interrelationship in learning music over a lifespan: "... From a big picture perspective, the interaction of formal, non-formal, and informal learning contexts and processes is vital in the promotion of lifetime music learning ..." (Higgins: 2015, 15).

## **2.1 Non-formal musical pedagogy**

Non-formal learning of music did not gain visibility in the UK until the "Musical Futures" initiative of 2003, funded by the Paul Hamlyn Foundation. Developed through the work of Sean Gregory at the Guildhall School of Music and Drama,

London that featured *non-formal teaching*, (Price: 2005; Renshaw, 2005) it was an educational response to general disengagement with school music learning for 11-16-year-olds in England. In fact, non-formal teaching per se has been developed internationally through the pioneering work of Musical Futures, via the initial research by Renshaw (2005a, 2005b), and subsequent theory into practice (D'Amore: 2008) that embodies pupils' informal learning strategies and choices at its core (Green: 2001, 2008, 2010, 2014a); its focus being mainly on popular music making in schools but not excluding other music genres.

Research into and evaluation of non-formal musical pedagogy that includes both learning and teaching, such as Saunders and Welch (2012) 'Communities of Music Education' report, in which they interviewed both music practitioners and providers of non-formal learning and observed non-formal practices in the field, is a valuable resource to draw upon. Rather than re-stating and re-examining the informal vs. formal discourse on popular music, they shift the focus to NFL with some reference to Green (2001) and informal popular musical learning practices mentioned. However, the dichotomy they outline puts *non-formal* as a *polar opposite to formal*, as distinct from *informal learning* being positioned there: Green (2001) and Folkestad (2006). "... Traditionally, the categorisation of music education opportunities can be seen to exist on two axes; (i) formal vs. non-formal, and (ii) statutory vs. non-statutory ..." (Saunders and Welch: 2012, 15).

Nonetheless, such polarisation has become less problematic, as bridges have been constructed to create contemporary learning pathways that aspire to include more young people in school music making:

... the established dichotomy between formal and non-formal learning is increasingly less distinct ... the traditional divisions between contexts and approaches have been investigated so as to suggest more effective ways to provide more young people with meaningful musical experiences... (Saunders & Welch: 2012, 15).

Concerning the groundswell of activity over the last ten years in UK and international statutory education concerning the implementation of popular music informal learning in a formal setting, non-formal teaching has become the *modus operandi* (i.e., musical leadership that usually embodies a mix of professional and community musicians and classroom teacher specialists), rather than simply introducing informal learning practices in a formal setting. Non-formal teaching exists as an important educational strategy for enhancing not only popular music but other cultural musics (Murtadza, Walden: in Wright, Beynon, & Younker: 2016) and potentially, classical musical repertoire.

...world music learning activities may be examples of such non-formal learning, when group-based collaborative and creative music-making processes drawn from community contexts are adapted to suit classroom needs with the teacher leading the non-formal learning activities. (Murtadza in Wright, Beynon, & Younker: 2016, 1566)

As Professor Lucy Green succinctly puts it:

*...informal learning is not something that can be used in a music education context without being supported by non-formal teaching.....and indeed there is no reason why it cannot also be partnered with more formal aspects of pedagogy. (Green in Wright, Beynon, & Younker: 2016, Foreward) [Author's italics added for emphasis].*

### 3. Non-Formal Learning of Rhythm

#### 2.1 A Non-formal pedagogy utilising the Brazilian 'Mestre' System

Regarding the context of this study and it is important to briefly discuss the Brazilian master-apprentice model of non-formal learning, as this has been adopted and adapted by the Scottish percussion ensemble at the locus of this research. In Brazilian society concerning the culture of the quotidian, as distinct from the 'high arts' of for example orchestral music or classical ballet, one of the most important figures in a societal group regarding the everyday practices of popular culture is the 'mestre'<sup>1</sup> (trans: master); a highly respected master of that cultural art form.

In this role, they are responsible for transmitting (but not always actively teaching), preserving and often re-inventing or re-invigorating this cultural genre. These art forms range in diversity from traditional music, dance, poetry/rhyming, to costume making and combinations of these forms such as in carnival. The 'mestre' system in Brazil is inherent in communities that often include the poorest disenfranchised members of their society (marginal black communities are an example), but also exists as a much broader system than musical learning and encompasses a wide range of social endeavour. The Brazilian master-apprentice or 'mestre' paradigm of non-formal teaching of rhythm and percussion is utilised from small ensembles to the gigantic carnival 'bateria' and is highly effective in practice. It gives a musical learning opportunity that can be facilitated on a massive scale for percussionists and dancers to experience music as 'caught not taught'.

However, one explicit difference in adopting the Brazilian 'mestre' model in non-Brazilian contexts of Afro-Brazilian rhythm (including but not exclusively) samba learning, such as in UK or European ensembles in schools or colleges, is that non-formal teaching practices where: "... teachers (are) shedding the mantle of expert ..." (D'Amore: 2008, 44) (My added text in brackets). This may be problematic, because there is often a need to capably demonstrate the musical material. Therefore, a fair degree of expertise and mastery is called for in the moment of effectively performing rhythmic patterns or figures in front of what can often be large groups. Whilst Musical Futures advocate playing rather explaining: "...music leaders may play a lot and explain very little..." (D'Amore: 2008, 44). Then without

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<sup>1</sup> This title is not gender specific in contemporary Brazilian society.

sufficient instrumental techniques and versatility, and listening time to gain mastery of the rhythms, ‘playing’ or demonstrating may be harder to realise in practice. Nonetheless, a musical leader (mestre) with technical skills and knowledge of the rhythms themselves will still require explicit social skills to work effectively with a non-formal group. This acquisition of musical leadership skills in a Samba group is described by Higgins (2012, 21) as the “...transition from bateria (an ensemble of drummers) to mestre (master)...” and he narrates that this was a challenging transition for some participants in the PCSB (Peterborough Community Samba Band). “...having the music skills was important, but the ability to work with people was required in equal measure...” (Higgins: 2012, 21).

In fact, non-formal teaching in general, has been viewed as a challenge for both schoolteachers and community music specialists facilitating school ensembles and is recognised as a: “...discipline in itself...” (D’Amore: 2008, 45). Wright (2016, 244) takes a view on NFL pedagogy regarding Folkestad’s (2006) four analytic criteria to ascertain to what degree learning is *informal* or *formal* viz: The Learning Situation (locus); The Learning Style (aural or notation); Ownership (teacher or student led); Intentionality (i.e. to learn); that *non-formal learning and teaching* is dependent on where control actually lies i.e., with a music leader.

“...If the activity is planned, sequenced and led by a music leader but has elements of co-construction, group learning, and peer support, it might perhaps be described as further towards the non-formal range of the continuum...” (Wright, Beynon, & Younker: 2016, location 1984).

In the context of this research project, musical leadership, planned activities, peer support and group learning are all intrinsic to the ‘Mestre’ model adopted and adapted.

#### 4. Discussion

In this study university ethics procedures were applied regarding permissions, and collection and retention of all interview data.

The findings below grouped as “Key Aspects of Non-formal Learning of Rhythm” are drawn from semi-structured interviews based on the following reflective questions:

- Whether the experience of engagement with non-formal learning and performing of rhythms has enhanced the rhythmic learning of student participants within a formal learning context that embodies Further and Higher Education pedagogy?
- Does a distinct fit with popular music informal learning practices exist in this particular locus?

By means of a reflective process of consistently reviewing and reappraising these questions, the *central question of this research* was extrapolated from the two initial questions.

- In what ways does learners’ experience and engagement with non-formal

and informal learning of rhythm enhance the formal learning of rhythm in a popular music education context?

*Informal learning* is included in the question through being implicitly linked with NFL, as popular musicians bring informal practices as a constituent part of their previous rhythmic enculturation, and whether intentional or not, into any non-formal context.

Rather than using the broader term music, the term popular music is used in the research questions to indicate the actual context where the research took place as bounded by its learning practices.

#### **4.1 Key Aspects of Non-Formal Learning of Rhythm**

The list below of Key Aspects has been derived from coding, analysis and categorisation of emergent themes based on the responses of interviewees based on 'constant comparative methods' of analysis of the data (Glaser & Strauss in Charmaz: 2006, 54) and university research ethics procedures followed. In effect, the emergent classifications that represent key aspects of rhythm learning drawn from data coding and analysis are not strictly bounded. Therefore, discussion may, wherever relevant, employ interviewee responses that link concepts and contexts across the classifications and assist the building of a more complete picture of NFL rhythm learning.

- Aurality and Orality in Rhythm Learning
- Reading Music Notation and Rhythm Learning
- Embodiment in Rhythm Learning
- Visual Copying
- Temporal Immersion in the Rhythmic 'Feel' or 'Flow'
- Peer Group Learning and Teaching
- Enhancement of Instrumental Learning (First Study)

##### **4.1.1 Aurality and Orality in Rhythm Learning**

Aurality, not surprisingly, has emerged from interview data as one of the key areas of relevance, regarding non-formal learning of rhythm within the educational context of popular music learning. The results from interview data have highlighted the implicit connection between listening to (aural) and speaking or singing (oral) the sounds of the rhythms of this ensemble.

The employment of orality with aural learning often centres on the use of mnemonics. And within our popular music culture, the explicit use of vernacular words or phrases to learn the sound of the rhythm or musical phrase. This is both in common with and in contrast to those used in other global music forms: "...These "mnemonic devices," short formulas that assist the student in remembering particular aspects of the music, abound in aural traditions of world music..." (Schippers: 2010, 78).

In this salient example:

Respondent MN "... it's all kinda like words and things like that... that you'll use... it's kind..."

Interviewer MI "... Right..."

Respondent MN "...of cool. Like when we were playing the Alfaias ... eh... I always remember it that he ... he kind of describes it with like sounds and he...he'll do a thing where like it goes like boom...boom...ga...boom...ga...boom... boom...boom...ga...boom...boom..."

When internationally renowned Brazilian percussionist Naná Vasconcelos [1944 – 2016] came to work with the group, orality came to the fore as a vital technique in imparting Brazilian rhythms:

Respondent WH "...My favourite was when Naná [Vasconcelos] came over and we tried to get that funny fill in Maracatu and he just told us to put all the drums down and we just sat there and just spoke it..."

Interviewer "... Yeah..."

Respondent WH "...For about forty minutes and within two attempts everybody had it ... Once you pick that up! I'd say that I get all my students to say stuff ... you know if they can't... get the rhythm..."

#### 4.1.2. Listening

In terms of listening, PL an alumna, who is now a professional educator, performer and percussion ensemble leader, remembers that this was a challenge in the Rhythm Wave percussion group:

Interviewer RG "...I'm really interested in this idea of aural learning by ear. I mean how did you find that ... in that situation in Rhythm Wave where there was no score for instance? How did...how did...what was your impression of that? I mean did that work for you or what do you think..."

Respondent PL "... mm ..."

Interviewer "... is there a value in that...?"

Respondent PL "...I think there's loads of value in it. Sort of like having come from more of the orchestral background..."

Interviewer "... Mm... mm..."

Respondent PL "...where I'm having to read and then I find it quite challenging having to then go in and just try and pick things up by ear because you're used to seeing it written down..."

#### 4.1.3. Reading Music Notation and Rhythm Learning

VA, a female 1st study vocalist, viewed the social or peer learning as a way of getting into the rhythm by bringing it to life concerning how it sounds in practice. She composed material for and directed her own ensemble in her final academic year, and was observed to use this approach in working with other students i.e., notation first then aural learning towards memorising her compositions:

Interviewer RG "... Eh do you find it easier to learn rhythm in a group than on your own...?"

Respondent VA "...If I need to read from a sheet I would probably just take



some time on my own ... and like really get into it aurally with a group..."

Interviewer "... With a group if it's learning by ear...?"

Respondent VA "...Yeah..."

Vis-a-vis Rhythm Wave, the inverse situation appears to be the case where listening is often 'the way in' to learning rhythm, without the pressure of having to read notation. PA who has been in the band since a student in 1995, and is now a UHI Perth staff member and co-leader, does not wish notation to be a barrier to membership and GV, an alumnus, long-term member and former staff mentor concurred:

Respondent PA "... We have... students who can read music and they're really good at it..."

Interviewer RG "... Ok..."

Respondent PA "...But mm...we also have students who would never achieve that..."

Respondent GV "...Mm..."

Respondent PA "...And, and they can be just as musical as the people that can..."

Respondent GV "...Yeah, I back up what you're saying there, it's true..."

In practice, the group has utilised score and parts when necessary, working with external concert hall events such as with percussionist Trilok Gurtu and with Galician Piper, Carlos Nunez. "... A curriculum should involve both notation and playing by ear, ... the question of how you actually facilitate that as a teacher is not simple, obviously, ... but it is the ideal aim for what everybody should be doing..." (Green: 2014). A balanced approach employing aural inclusion (for those who are not good readers) and using notation for learning musical arrangements is employed by the group; potentially easier to implement in an extra-curricular, non-formal context.

#### 4.1.4. Embodiment in Rhythm Learning

When we talk of 'feel' or embodiment then we may speak of how an individual or indeed a group copies what they see, hear and feel or sense in their body; in effect an act of '*mimesis*'. Further to this process of *mimesis*, individuals usually develop their own varied expression otherwise known as '*alterity*':

HM a Rhythm Wave alumnus and now a rhythm workshop facilitator for the international corporate sector, remembers the challenge of embodying the pulse by stepping on the beat whilst playing his snare part:

Interviewer RG "... Mm...did you have any sense of embodiment when you were in the band [R Wave] many years ago...?"

Respondent HM "... yes it was funny, mm...because one of the first things eh...you taught us of course was you know the step ... you know the walking and I found that incredibly difficult whilst playing. That was ... but of course and even when we've watched recently the videos [of when he was in the group] of like last night, it makes such a huge difference seeing that pulsating ...because it conveys confidence. It ... the audience begin to mirror it. It's wonderful so it's and it's ... but I found it incredibly hard ... yeah..."

Interviewer "... That's an interesting word you used, mirroring, because that seems to be a key part of this non-formal style..."  
Respondent HM "...Of course yeah...". [my added comments in brackets].

Here he uses the term 'mirror', and I suggest this as being synonymous with *mimesis*.

This 'learning from bodily experience' approach brings together the actual embodiment of rhythm, utilising gesture and bodily motion with aurality. And what is fascinating is the concept that not only does musical listening affect bodily movement but also that rhythmic movements of the body may affect listening per se:

"... In the bodily exploration of music, movement is spontaneous and joined to cognitive conceptual responses involving locomotion and gesture. Exercises bring awareness to students' physical responses to music so that the body and the ear form a dynamic partnership. In this partnership, listening inspires movement, while moving guides and informs listening ..." (Juntunen & Westerlund in Elliot: 2009, 11).

#### 4.1.5. Visual Copying

When speaking of learning by visual copying in the R Wave group, a student responds to whether he gets bored with this way of learning:

Respondent DJ "... No, I like it ...I think it's a better way to learn...cos I'm constantly watching someone next to me whose playing and sort of learning as they play, and I think learning that way you seem to get a better feel for it ...". [Author's italics added for emphasis]

And student AJ follows a similar method of learning:

Respondent AJ "...just because the way I've been learning is like ...I'll just ... either I've *watched the person next to me play the beat and then I'll copy it or I'll watch you at the front* and then I'll play the beat from there...it's not like I've got a score in front of me that I need to follow that ...". [Author's italics added for emphasis]

In this manner, "...watching someone next to me..." in this percussion group correlates closely with Lucy Green's (2001) analysis of informal popular music practices, that learning by listening and copying and furthermore "...close watching..." (2001, 186) of peers where recordings are unavailable, are central activities in popular musical enculturation. The practice of close watching along with those of listening and embodying, are common in many traditional musics across the globe and not just those of an Afro-Brazilian origin. Tim Rice's account of informal music learning affirms this process from an ethnomusicological standpoint of how traditional music is: "... 'learned but not taught' in a process of what might be called aural-visual-tactile ..." (Rice: 2003, 9).

#### 4.1.6. Temporal Immersion in the Rhythmic 'Feel' or 'Flow'

This aspect, drawn from analysis of the interview data, reveals that the quality and duration of time that participants spend immersed in learning a rhythm pattern, is

important to their learning. In fact, the continuous temporal experience of rhythm learning in a first study instrumental individual or group lessons, without verbal interruption from an instructor or the actual lesson time expiring, is significantly less than the experience in Rhythm Wave learning a specific rhythmic pattern or subsequent variations:

Respondent VA "...mm...personally I think the long sessions when we have just like *running hypnotic rhythms* for like 10 or 15 or maybe even 20 minutes..."

Interviewer RG "... Mm..."

Respondent VA "...Mm... are making ... like they are locking the tempos and locking each part to each other very efficiently..."

Interviewer "... Mm... mm..."

Respondent VA "...Mm ... they are very intense but it's very rewarding to do like long sessions to ... ah..."

Interviewer "... Ok..."

Respondent VA "... *allow me to do mistakes but after that, like correct myself as well* ... so like ... long..."

Interviewer "... Ok..."

Respondent VA "... practice ..."

Interviewer "... So, it's having that duration..."

Respondent VA "...Yeah...". [Author's italics added for emphasis].

Here VA mentions the quality of 'hypnotic' in terms of the number of repetitions and the long timescale but more importantly that this allows her to make mistakes and to 'correct herself'. Having this temporal musical space within which, to make mistakes and eventually correct these, echoes some of the findings of Green's (2008), *Music, Informal Learning and the School*:

"... unlike an ensemble of classical musicians, the groups did not stop to correct problems, but would carry on playing either oblivious to or regardless of the fact that one or more group members might be totally out of time or playing the wrong pitches..." (Green: 2008, 56).

This strategy of 'carrying on' despite problems lies in contrast to formal curricular instrumental lessons in this research context, where it is more usual to stop the student and correct a mistake in the moment, particularly whilst reading notation (this was evident in my own drum kit classes). And in Green's research she discusses musical continuity within school instrumental lessons, where children often keep stopping when, "...stumbling over notes that are read..." (Green: 2008, 56) despite usually being encouraged by their tutors to carry on playing.

#### **4.1.7. Peer Group Learning and Teaching**

Peer group learning and teaching are activities emerged as intrinsic to the mode of non-formal learning. The term "peer directed learning" that Green (2001) uses to describe explicit peer teaching as distinct from "group learning", where informal peer interaction takes place without actual teaching occurring, is an important one. Furthermore, peer learning has been well researched in relation to informal popular music making practices in a formal context (Green: 2001, 2008, 2014),

(Green & Walmsey: 2006), (Woody: 2007), (Lebler: 2008), (Mans: 2009), (Feichas: 2010).

MN a first study guitarist and student composer uses orality to communicate to his peers when learning from others and 'helping them out' in the group:

Interviewer MI "...Do you find it easier to learn rhythm in a group or on your own...?"

Respondent MN "...Ehm ...".

Interviewer "...Generally ... in terms of your music...?"

Respondent MN "...If it's by score ... hands down ... on my own. If it's ...if I am doing it like with the group, I'll listen to someone else 'n' my Rhythm Wave sort of budgie<sup>2</sup> imitation comes in ... *an' I'll just whistle it back to them.* But if it's like copying it from some [one]... like ... being in Rhythm Wave *you all help each other out. If someone's not gettin' something 100% you all just help each other. It's a good bonding sort of exercise...*"

Interviewer: "...Mm ... so if your ..."

Respondent MN "...You get a lot of peer learning in it and such..."

(MN, 2014) [My added comment in brackets] [Author's italics added for emphasis].

This appears to be a two-way dynamic process in that, "...you all just help each other out ...", and that participants are both learning from and teaching others whilst immersed in playing the rhythm:

Respondent GA "...eh...but it felt like we're...we're more close-knit because there [at Glastonbury Festival] the..."

Interviewer RG "... Yeah..."

Respondent GA "...the veterans [experienced peers] were..."

Interviewer "... Yes..."

Respondent GA "...helping us ... and now it feels like when new people join this year, we can help them..." [My additional comments in brackets].

As Higgins (2012) puts it in relation to the PCSB (Peterborough Community Samba Band): "...the play between the facilitator and the group can lead to effective teamwork, and this is strengthened through the encouragement of peer teaching ...". (Higgins: 2012, 20).

#### 4.1.8. Enhancement of Formal Instrumental Learning (First Study)

In terms of technical development, learning in the Rhythm Wave group clearly had a positive impact:

Interviewer RG "... do you think that learning rhythm in Rhythm Wave has affected your first study at Perth College. In other words, how you are learning Rhythm in your first study...?"

Respondent VA "...Oh, *it's just helped me a lot.* It, it's helping a lot *with obviously syncopation and vocal phrasing.* ...How I ... *adapt the rhythmic in, in vocal pieces* it's very much related ...". [Author's italics added for emphasis].

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<sup>2</sup> 'Budgie' is vernacular term for mimicry and comes from the 'Budgerigar' or 'Shell Parakeet' – a bird that mimics sounds and speech that it hears.

In the following salient comments, MR makes the difference in the type of practice session she experiences with Rhythm Wave as “...the fun practice session...” compared to the formal work she does.

Interviewer MI "...How do you think that learning rhythm in Rhythm Wave has affected your ...your drum lessons...?"

Respondent MR "...it's almost like I'm practicing for the drums anyway at Rhythm Wave..."

Interviewer "... Yeah..."

Respondent MR "...So it's just improved everything...technique...my speed...just general ability to play the drums has definitely improved since I started..."

Interviewer "... Ehm...so do you kind of consider it as like eh...sort of practice session..."

Respondent MR "...Yeah kind of...it's like (...) *the fun...the fun practice session...*" [Author's italics added for emphasis].

In terms of popular music learning, PP4 CH feels his song writing has been positively affected by his Rhythm Wave experience:

Interviewer RG "...So would you say Rhythm Wave enhanced your first study...?"

Respondent CH "...Yeah definitely...absolutely..."

Interviewer "... How...?"

Respondent CH "...Ehm...it gave me a completely different concept of layers within song writing ..."

Interviewer "... Rhythm layers...?"

Respondent CH "...Any kind of layers I mean..."

What is interesting here, is that in his experience, learning about rhythmic layers or counterpoint can be applied equally to harmony and song writing:

Respondent CH "...you can apply these two layers working together to melody as well..."

Interviewer "... Like the cross rhythm...?"

Respondent CH "...Yeah ... and kind of contrapuntal melodies..."

Interviewer "... And was there anything else in the college [course] like that...?"

Respondent CH "...No ..." [My additional comment in brackets].

## Conclusion

This research study into learning rhythms, based on three reflective questions regarding non-formal learning in a formal popular music education setting, not surprisingly, has revealed several correlations with popular musicians' learning practices in its findings. Most notably, *peer directed learning* (Green: 2001) has emerged as a key learning support in the Rhythm Wave ensemble that also entails copying peers in the moment of playing by “close watching” (Green: 2001, 186) and listening. *Aurality* per se, is of course a crucial part of the learners' experience and the ability to discern layers of rhythm (known as *cross rhythms* or *polyrhythms*) is seen as a key benefit of how patterns can eventually ‘lock’ for an individual playing within the rhythmic flow by their relating aurally to other players' parts. As Chernoff puts it regarding afro-centric rhythm learning that includes the Afro-Brazilian rhythms of this ensemble: “... Only through the combined rhythms does

the music emerge, and the only way to hear the music properly, to find the beat, and to develop and exercise “metronome sense,” is to *listen to at least two rhythms at once ...*” (Chernoff, 1979, 51) (Italics in the original text).

Nurturing this aspect had implications in developing a broader musical understanding for some students regarding their compositional abilities and aiding their formal *first study* instrumental development, as the opportunity to learn complex rhythmic interplay was not common in the formal curricula. In the furtherance of this cross rhythmic learning *oral mnemonics* proved to be effective for students to aurally grasp their part and aid their overall listening to others. Furthermore, *immersion* in playing the rhythms over a substantial period surfaced as a distinct learning enhancement regarding both aurally perceiving the rhythms and importantly, by allowing learners’ mistakes to occur but carrying on<sup>3</sup>, then gradually to be rectified ‘without stopping the flow’ of the music. *Embodiment* as a distinct feature of musical gesture and moving on-the-pulse while playing, proved to be challenging but intrinsic to communicating *feel* and *pulse* to not only others in the group but in exhibiting confidence to an audience. In terms of *reading music notation*, although the group did not utilise this on a regular basis to develop the repertoire, learners could when required to, work with written arrangements (particularly with external collaborations) but would not be excluded through an inability to sight read rhythms. A proportionate approach to non-formal rhythm learning was therefore employed between aural and notation.

The key question of whether enhancement of the formal curricular instrumental learning of rhythms took place is evident not only in the development of technical skills but in changing students’ perceptions of rhythmic counterpoint and syncopation that as previously mentioned can be applied to their compositional work. Finally, in terms of enhancing formal curricular learning, non-formal extra-curricular social groupings in a musical context are a potential asset and a place where peer teaching and learning can be implemented by a musical leader. By giving ground to students to feel supported by peers and learn from them, the fear of making mistakes whilst reading and passing formal assessments can be put to one side in that social sphere, and musicality promoted that amplifies orality, aural, embodiment and listening balanced with the ability to read score when required.

## References

- Caldana, A. C., Eustachio, J. H., Lespinasse Sampaio, B., Gianotto, M. L., Talarico, A. C., & Batalhão, A. C. (2023). A hybrid approach to sustainable development competencies: The role of formal, informal and non-formal learning experiences. *International Journal of Sustainability in Higher Education*, 24(2), 235–258. <https://doi.org/10.1108/ijshe-10-2020-0420>
- CEDEFOP. (2009). (rep.). European guidelines for validating non-formal and informal learning. Retrieved from <https://www.cedefop.europa.eu/en/publications/4054>
- Chernoff, J. M. (1979). *African rhythm and African sensibility* (1st ed.). Chicago: University of Chicago Press.
- Colardyn, D., & Bjornavold, J. (2004). Validation of Formal, Non-Formal and Informal Learning: policy and practices in EU Member States<sup>1</sup>. *Eur J Education*, 39(1), 69–89. doi:10.1111/j.0141-8211.2004.00167.x
- D’Amore, A. (Ed.). (2008). *Musical Futures: An Approach To Teaching and Learning*

<sup>3</sup> In common with Green’s (2008, 56) observations.

- 2nd Edition Teacher Pack (2nd ed.). London, England, UK: Paul Hamlyn Foundation. Retrieved from <https://www.musicalfutures.org/about/resources/>
- Elliott, D. J., Juntunen, M.-L., & Westerlund, H. (2009). Music and Knowledge in Bodily Experience. In *Praxial Music Education: Reflections and Dialogues* (1st ed.). Oxford Academic Online.  
<https://doi.org/10.1093/acprof:oso/9780195385076.003.06>
- Elliott, David J. (ed.), 'Music and Knowledge in Bodily Experience', in David J Elliott (ed.), *Praxial Music Education: Reflections and Dialogues* (New York, 2009; online edn, Oxford Academic, 1 Jan. 2010),  
<https://doi.org/10.1093/acprof:oso/9780195385076.003.06>, accessed 12 Oct. 2023.
- Eshach, H. (2007). Bridging in-school and out-of-school learning: Formal, non-formal, and informal education. *Journal of Science Education and Technology*, 16(2), 171. Retrieved from <http://www.jstor.org/stable/40188686>
- Feichas, H. (2010). Bridging the gap: Informal learning practices as a pedagogy of integration. *British Journal of Music Education*, 27(01), 47.  
doi:10.1017/s0265051709990192
- Folkestad, G. (2006). Formal and informal learning situations or practices vs formal and informal ways of learning. *British Journal of Music Education*, 23(02), 135–145. <https://doi.org/10.1017/s0265051706006887>
- Green, Lucy. (2001). *How popular musicians learn* (1st ed.). Aldershot, Hants: Ashgate.
- Green, Lucy, & Walmsey, A. (2006). Classroom Resources for Informal Music Learning at Key Stage 3. In *Musical futures 1st Edition Teacher Pack*. London: Paul Hamlyn Foundation. Retrieved from <https://www.musicalfutures.org/about/resources/>
- Green, Lucy. (2008). *Music, informal learning and the school* (1st ed.). Aldershot, Hampshire, England: Ashgate.
- Green, L. (2010). Musical “learning styles” and “learning strategies” in the instrumental lesson: Some emergent findings from a pilot study. *Psychology of Music*, 40(1), 42–65. doi:10.1177/0305735610385510
- Green, Lucy. (2014a). *Hear, listen, play!* (1st ed.). Oxford: OUP.
- Green, L. (2014b) 'Interview with Professor Lucy Green', by *Author*. Skype.
- Higgins, L. (2012). The Peterborough Community Samba Band. *Community Music*, 55–79. doi:10.1093/acprof:oso/9780199777839.003.0004
- Higgins, L. (2015). *My Voice is important too: Non-formal musical experiences and young people*. In G. McPherson (Ed.), *The child as musician: a handbook of musical development* (2nd ed., p. Chapt. 32). essay, New York: Oxford University Press.
- Juntunen, M. and Westerlund, H. (2009). Music and Knowledge in Bodily Experience. In: D. Elliott, ed., *Praxial Music Education: Reflections and Dialogues*, 1st ed. [online] Oxford Scholarship Online. Available at: <https://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780195385076.001.0001/acprof-9780195385076>
- Kacane, I. (2020). Music as a tool of human development: An intergenerational perspective. *ICERI Proceedings*. <https://doi.org/10.21125/iceri.2020.0941>
- Lebler, D. (2008). Popular music pedagogy: peer learning in practice. *Music Education Research*, 10(2), 193–213. doi:10.1080/14613800802079056
- Lonie, D., & Dickens, L. (2015). Becoming musicians: situating young people’s experiences of musical learning between formal, informal and non-formal spheres. *Cultural Geographies*, 23(1), 87–101. doi:10.1177/1474474015587477
- Mak, P. (2006). In *European Forum for Music Education and Training (EFMET)*, Hanzehogeschool Groningen. Retrieved from

- <https://research.hanze.nl/en/publications/learning-music-in-formal-non-formal-and-informal-contexts>
- Mans, M. (2009). Informal Learning and Values. Action, Criticism, and Theory for Music Education, 8, 79–93. Retrieved from [http://act.maydaygroup.org/articles/Mans8\\_2.pdf](http://act.maydaygroup.org/articles/Mans8_2.pdf)
- Mok, Annie On Nei. (2011). Non-Formal Learning: Clarification of the Concept and Its Application in Music Learning. Australian Journal of Music Education, 1(1), p11-15. Retrieved from <http://eric.ed.gov/?id=EJ952003>
- Musical Futures (Ed.). (2015). Non Formal Teaching | Musical Futures. Retrieved from <https://www.musicalfutures.org/about/resources/>
- Price, D. (2005a). An Emerging Vision - Shaping Music Education | Musical Futures. London: Paul Hamlyn Foundation. Retrieved from <https://www.musicalfutures.org/history/>
- Renshaw, P. (2005a). Lifelong Learning for Musicians: Critical issues arising from a case study of connect. Lectorate Lifelong Learning in Music, Prince Claus Conservatoire, Groningen and Royal Conservatoire. Retrieved from <https://research.hanze.nl/en/publications/lifelong-learning-for-musicians-critical-issues-arising-from-a-ca>
- Renshaw, P. (2005b). (rep.). Simply Connect - 'Next Practice' in Group Music Making and Musical Leadership. Retrieved from <https://www.musicalfutures.org/history/>
- Rice, T. (2003). The Ethnomusicology of Music Learning and Teaching. Retrieved from <https://www.jstor.org/stable/40374471>
- Rogers, A. (2014a). The Base of the Iceberg: Informal Learning and Its Impact on Formal and Non-formal Learning. Barbara Budrich. September 14, 2023, <https://shop.budrich.de/en/product/the-base-of-the-iceberg/>
- Rogers, A. (2014b). The classroom and the everyday: The importance of informal learning for formal learning. 1Library PT. <https://1library.org/document/y494rkvz-classroom-everyday-importance-informal-learning-formal-learning.html>
- Saunders, J., & Welch, G. (2012). Communities of music education (1st ed.). London: International Music Education Research Centre (iMerc). Retrieved from [https://www.researchgate.net/publication/273453827\\_Communities\\_of\\_Music\\_Education\\_A\\_Pilot\\_Study](https://www.researchgate.net/publication/273453827_Communities_of_Music_Education_A_Pilot_Study)
- Varvarigou, M., Willingham, L., Abad, V., & Poon, J. (2021). Music facilitation for promoting well being through the lifecourse. International Journal of Community Music, 14(1), 81–101. [https://doi.org/10.1386/ijcm\\_00039\\_1](https://doi.org/10.1386/ijcm_00039_1)
- Woody, R. H. (2007). Popular Music in School: Remixing the Issues. Music Educators Journal, 93(4), 32–37. doi:10.1177/002743210709300415
- Wright, R., Beynon, C., & Younker, B. A. (Eds.). (2016). *21st century music education: Informal Learning and Non-Formal Teaching* (Version Kindle) (1st ed.). Waterloo, ON: Canadian Music Educators Association. Retrieved from <https://www.amazon.co.uk/dp/B0744NY6NG>