

One-to-one piano lessons for young beginners: Exploring lesson components through the lens of musical scaffolding

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Abstract

Research on one-to-one piano instrumental lessons, focusing on teaching and learning processes such as scaffolding, has been conducted extensively abroad. However, empirical investigation in West Malaysia is lacking. To fill this gap, the current study examined one-to-one piano instruction in West Malaysia by specifically exploring lesson components and scaffolding strategies for young beginners. Through an exploratory case study involving 10 teacher-student dyads and analysing 40 lessons, the findings revealed a strong emphasis on rhythm and physical technique, with less attention given to aural and creativity aspects. Modelling was the primary scaffolding strategy observed, and contingent and consistent scaffolding processes were identified. These results highlight the need for further research on the impact of scaffolding in piano instruction.

Keywords: Lesson Components, Young Beginner, Piano Pedagogy, One-to-one Piano Instruction

Introduction

The early stages of teaching young beginners set the tone for future undertakings; hence, effective piano education from the very beginning is important (Isekeeva et al., 2016). Thomas-Lee (2003) explained that a child's musical experiences during the developmental years (0 – 6 years) influence their later musical development. Due to the necessity of collaborative effort, piano lessons can be a complex process for both the

teacher and the student. A balance must be found whereby the teachers can administer information in a way that is compatible with the student's learning style (Maldjian, 2015; Scott et al., 2016). Acquiring instrumental skills is a multifaceted endeavour that requires a gradual accumulation of knowledge, and the personalized guidance from a dedicated teacher is invaluable in establishing foundational aspects (Hallam, 1998). The teacher holds significant influence over the learner's musical journey, acting as a central figure in shaping their development and progress (Davidson & Jordan, 2007).

Empirical Research on Private Piano Instruction

Private lessons are a common mode of instruction in instrumental and piano lessons, from beginners all the way to advanced level (Carey et al, 2013). There has been significant interest in the study of piano-teaching practices for several decades (Dumlavwalla, 2019). Earlier studies in the 2000s investigated studio music teaching through a socio-constructivist or socio-positivist perspective and uncovered ideas about studio music teaching as reflective practice (Triantafyllaki, 2010), social practice (Nielsen, 2006), through the concept of scaffolding and strategies used to scaffold (Kennell, 2002), as well as in terms of interactions between teacher and student (Rostvall & West, 2003). Various later studies in piano instruction looked into technical work/studies (Abdumutalibovich, 2020), online instructions (Kaleli, 2021), memorisation (Khudoykulova, 2022), improvisation (de Vries, 2014), as well as lessons for beginners centring around play (Andrus, 2021; Gouzouasis & Ryu, 2015).

Ang, Panebianco and Odendaal (2023) highlighted the lack of research on music education in West Malaysia (WM), especially in the context of individual lessons. Despite a significant number of students engaging in individual piano lessons (Abdullah, 2021), there is scarcity of the empirical literary sources covering private piano instruction in WM (Ang et al., 2023). Ang (2013) also stated that there has been concern that piano lessons in WM were not carried out appropriately for the students.

Literature on Lesson Components in Piano Pedagogy

In the past, piano pedagogy emphasised technique, which could make the execution of lessons tedious and mundane (Laor, 2016). Similarly, based on the studies by modern piano pedagogues, attention was

paid to develop fundamental skills, such as finger control, rhythm, aural skills, autonomy, and improvisational skills, at the initial stage of learning piano (Arshinova, 2022; Oorzhak, 2015). This is because initial learning laid the groundwork for future undertakings (Isekeeva et al., 2016).

Therefore, having lesson components that are relevant to the development of fundamental technical and musical skills is important for effective teaching of musical instruments, especially at the initial stage (Zhukov, 2008). In this study, lesson components refer to the fundamental technical and musical skills that are important to the student's development in learning a musical instrument. While reviewing relevant literatures on lesson components in the context of music and instrumental lessons, the researcher discovered a substantial information covering various terms used in lesson components. Therefore, this study aims to be more precise in definitions of specific categories while providing a broad perspective of lesson components in piano lessons by categorising them into Aural (Landis & Carder, 1990; Suzuki, 1969; Thomas-Lee, 2003), Rhythm (Campbell & Scott-Kassner, 2006; Maldjian, 2015; Zhukov, 2008), Creativity (Bischoff, 2009; Burton, 1989; Colwell & Goolsby, 2002; Landis & Carder, 1990; Thomas-Lee, 2003), Physical Technique (Dorothy Taubman, 1994; Thomas-Lee, 2003) and Practice (Hallam et al., 2012; Pitts & Davidson, 2000).

Aural

Aural involves listening and singing; hence, it is essential to piano study for a young student (Reitan, 2009). The fourth Content Standard in the National Music Standards, *Understanding Music*, stated that singing and verbalising is essential for children to demonstrate their awareness of the elements of music and changes in their usage (Thomas-Lee, 2003). Suzuki (1969) propounded that listening allows children to absorb the language of music and thus, it is the optimal way for children to begin music education. Ear training activities for young piano students develops their aural skills. Additionally, singing should be included from the beginning of piano instruction as it contributes to the development of aural skills (Landis & Carder, 1990). Furthermore, early childhood educators, such as Dalcroze, Orff and Kodaly, advocate for singing from the commencement of the learning process (Thomas-Lee, 2003). Singing allows children to develop inner hearing – the student's ability to identify

rhythm patterns, melodic intervals, and phrasing as they look at a score (Landis & Carder, 1990).

Rhythm

Rhythm is an important element as it is linked to timing, expression, musical synchronisation, and tempo in performance (Zhukov, 2008). Learning a new piece as a beginner also involves learning correct pitches and the appropriate rhythm. Therefore, rhythmic concepts should be introduced during lessons in an age-appropriate manner (Maldjian, 2015). Rhythm involves the understanding and internalisation of a steady beat. Therefore, students need to develop an inner pulse before they can use rhythmic devices, such as the metronome, in the latter stages (Maldjian, 2015). Chanting, rhythmic clapping, imitating short patterns, and tapping to a steady beat are some examples of activities that could be implemented to develop a child's rhythmic ability (Campbell and Scott-Kassner, 2006).

Creativity

Creativity should be nurtured early on in piano instruction (Bischoff, 2009). Burton (1989) defines creativity as the intertwining of theory and practice in novel ways to create something unique – be it a product, an ideology or even a performance. Carl Orff underlined the importance of creativity, even stating that the main objective of music study is to cultivate the child's creativity. Incorporating activities that stimulate the students' creativity in early piano programs could encourage a child's drive to explore the endless musical possibilities (Bischoff, 2009). According to Thomas-Lee (2003), children should not be taught to merely reproduce, but instead, they should find an outlet that allows them to express themselves. Improvisation is one such method of introducing students to the freedom of exploration in playing the piano. Encouraging free improvisation during lessons should instil the habit of creative thinking and students should not strive to imitate perfect performances (Landis and Carder, 1990).

Creating music allows children to explore sounds and the expression of ideas through a new medium (Bischoff, 2009). In the Kodaly curriculum, the creation of music is incorporated into each stage of learning. The Orff Schulwerk and Dalcroze Eurhythmics further emphasized the importance of improvisation activities for children. It has been found that as

elementary music students develop improvisational skills, their musical achievements may increase (Bischoff, 2009). Children who were exposed to improvisational music activities reported feeling more autonomy and agency over their instrument (Thomas-Lee, 2003).

A variety of music skills have to be instilled into music students from the very start, including improvisation (Colwell & Goolsby, 2002). Hence, music teaching materials should be formulated to enrich the young pianists' improvisational skills.

Physical Technique

Piano technique refers to the physical process of playing the piano fluidly (Thomas-Lee, 2003). According to Dorothy Taubman (1994), who is a strong advocate for injury prevention in pianists, proper technique should be cultivated from a young age to prevent injuries. Correct physiological placement of the body is crucial in the student's development of proper technique at the piano. Proper posture ensures that the student is in a relaxed yet prepared position to play the piano. Therefore, the development of proper technique to prevent formation of bad habits is critical in the early stages of piano learning since most young children require guidance in honing their fine motor skills at this age (Thomas-Lee, 2003).

Practice

There is a consensus within the musical profession: effective practice drives positive learning outcomes and successful performances (Hallam et al., 2012). However, students at beginner levels have yet to develop the understanding of how to assimilate the various practice strategies that they could use to self-evaluate and monitor their progress (Hallam et al., 2012). Therefore, from the commencement of piano study, students need guidance from the teacher to address errors and direct them on proper practice (Hallam et al., 2012). Educators have been advocating for teachers to promote autonomy amongst their students, so that they self-regulate and practice music independently outside of the lesson (Hallam et al., 2012; Pitts & Davidson, 2000).

Piano pedagogy has evolved (Laor, 2016), and it is important to identify the aspects that help to shape the students at the beginning of their journey.

Scaffolding in Music Education and Instrumental Learning

One of the fundamental principles of teaching is that the teacher must adapt their instruction and support to the student's needs. Based on Vygotsky's theory (1978), scaffolding in learning refers to temporary support from the teacher that assists the student in a task that is a degree beyond their current level. Upon successful scaffolding, the support should be scaled back to allow the child to function independently. This illustrates how the student and teacher function symbiotically during one-to-one piano lessons; hence, scaffolding is a useful concept for understanding the processes in piano lessons (Kupers et al., 2014).

Van De Pol, Volman and Beishuizen (2010) conceptualised the model of scaffolding based on three characteristics – contingency, fading of support and transfer of responsibility. The first characteristic is contingency, which refers to the teacher's adaptation of their lesson according to the performance of the student, resulting in an increase in the student's level (Van Geert & Steenbeek, 2005). Studies have shown that contingent scaffolding leads to improved metacognitive skills, amongst other positive learning outcomes (Van de Pol et al., 2010). When providing contingent support, the teacher must ascertain the student's current level of competence so that the support matches the student's level of learning (Van Geert & Steenbeek, 2005).

The second characteristic is fading of support, where the teacher's level of support gradually fades depending on the student's competence. This is strongly related to the third characteristic – transfer of responsibility. Through the fading of contingency, the responsibility of performing the task is gradually transferred to the student. This third characteristic appears when the learning responsibility is transferred to the student, i.e., the student takes the learner control (Van de Pol et al., 2010).

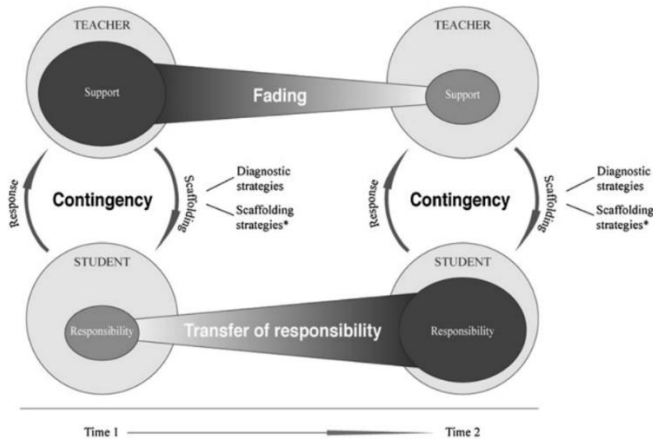


Fig. 1: Conceptual model of scaffolding (adopted from “Scaffolding in Teacher-Student Interaction: A decade of Research” by Van de Pol, Volman & Beishuizen, 2010)

In sum, scaffolding is a dynamic process that involves adaptive interactions between music teacher and student (Kupers et al, 2014). Effective scaffolding requires contingency with gradual reduction of support to allow progressive transfer of responsibility and foster independence in the learner.

Instrumental lessons are a logical context to study scaffolding as a complex skillset is required, which necessitates scaffolding during the learning process (Kupers et al., 2014). Initially, the teacher provides explicit guidance on how the student should play a certain musical phrase, adapted to the student’s level. The resultant process involves the teacher and student playing together with the end goal of the student being able to play the phrase on their own (Kupers et al., 2014). Scaffolding is most crucial for a young child who has just begun learning a musical instrument because most children below the age of six have yet to achieve a level of competence that allows independent or self-directed study on an instrument (Lehmann et al., 2007).

Modelling is an effective teaching strategy in instrumental music lessons that results in improved student performance (Meissner & Timmers, 2020; Zhukov, 2012). Teachers’ demonstration involves the

teacher performing for the student to observe and learn from, which is integral to piano study and other instrumental pedagogical contexts (Meissner & Timmers, 2020). Demonstrations have been identified as one of the preferred teaching strategies (Zhukov, 2012). When demonstrating, teachers may incorporate singing, humming, clapping rhythmical patterns or musical phrases, while highlighting the critical features of the task at hand, such as specific gestures that are required to achieve the intended degree of sound quality. When modelling is combined with verbal instructions, it promotes a deeper understanding for the student (Sweller et al., 2021).

Although numerous studies address importance of particular lesson components as well as the interaction and behaviour of teacher and students during the lesson, no extant study analysed the scaffolding strategies directly associated with each lesson component. Kupers, Dijk & Geert (2014) also addressed the scarcity of literary information on how scaffolding processes actually takes place.

Purpose and Research Questions

The review of previous research reveals an empirical and population gap in piano teaching instruction in WM. Ang, Panebianco and Odendaal (2023) have also highlighted the scarcity in prior literature on this aspect. Therefore, the purpose of this exploratory case study was to gain a general overview of lesson components and investigate the scaffolding process in the young beginner's private piano instruction scenes in WM. A distinctive feature of this study is its emphasis on the WM context, which encompasses exclusive attributes in terms of teaching dynamics and cultural practices that may diverge from those observed in Western contexts (Ang, 2013). This study seeks to address the following questions: To what extent are each lesson components emphasised during beginner piano lessons? What are the scaffolding strategies used for the lesson components? What are the scaffolding strategies executed during each characteristic of scaffolding?

Methodology

Participants

Mixed sampling (a combination of purposeful and snowball sampling) was employed in the selection of participants for this research.

Purposeful sampling was carried out in the form of preliminary survey to determine the student's inclusion criteria. A simple Google survey form was distributed to piano teachers to investigate the age range of their beginner students. According to the survey result, the common age range for beginners was from 5 to 7 years old. Therefore, this age range was selected as one of the inclusion criteria for student participants to ensure the relevance of this study at the time of research. Hence, the inclusion criteria were as follows: beginner students, aged 5-7 years old, who have been learning for less than a year. Next, 10 piano teacher-student pairs from West Malaysia were recruited as participants through snowball sampling. The selected teachers were based on the student's inclusion criteria and were typical representatives of the Malaysian piano teaching contexts, i.e., teachers teaching in music centres, in studios or from home. Teaching experience ranged from 3 to 14 years, with an average of 9.5 years of experience in teaching. Selecting teachers with wide range of years in teaching experiences helped the study attain diverse information to see how one-to-one piano teaching unfolded in real time. All teachers, except three, had obtained an undergraduate degree in music, with five of the ten having completed a graduate degree in music.

Procedure

Naturalistic observation was conducted to ensure authentic lessons were being recorded to be analysed. Video recordings were chosen for data collection to minimise the participants' self-consciousness, which may inhibit genuine behaviour. The 10 teacher participants video-recorded their weekly lessons with the beginner students over the span of 4 weeks. A total of 40 video recordings were collected in this study: 4 videos per teacher-student dyad. To observe the teaching process in its natural state, neither the teachers nor the students received any instructions prior to making the recordings. Ethics clearance (Ref: UM.TNC2/UMREC – 675) and written consent was obtained before the recording began.

Analysis

An excel sheet titled, *Domain Indicator Analysis*, was created for data documentation of the video observation and content analysis. To analyse the video recordings, indicators observed from the video were

documented into the excel sheet. The indicators were initially based on some of the teaching behaviours and gestures from Simones et al. (2015) and was then further categorised in this study based on each lesson component. The researcher's assessment was then tested through Cronbach's Alpha (>0.7) with two other assessors to ensure reliability of the assessment. The Cronbach's Alpha value was 0.977, indicating that researcher's assessment is reliable. Following that, a thematic analysis on the data was conducted by extracting the indicators from videos and converting them into numbers which were then analysed through a systematic semi-quantitative approach via the SPSS software. The indicators were then categorised into scaffolding strategies for each lesson component and were analysed based on the three characteristics of scaffolding from the conceptual model of scaffolding by Van de Pol, Volman and Beishuizen (2010).

Table 1: Description of terms

Terms	Description
Physical Technique (PT)	Any physiological demands of playing the piano. It includes activities that involve mentioning, executing, or manoeuvring of the body parts; particularly those involving sitting and hand posture, tone control for achieving articulation and dynamics, and fingering.
Rhythm (R)	Any activities or process of learning note durations and patterns through activities such as writing, playing, clapping, and chanting.
Aural (A)	Any activities that involve focused listening and singing to instil tonal memory.
Practice (P)	Indicators of rehearsing, which could range from teacher's instructions on how to practice and the planning of the practice process. For example, the segmentation of rehearsing, specific practicing strategies or cultivation on practice habits.
Creativity (Cr)	Any activities that require students to improvise, be it rhythm, melody or even accompaniment. This could be conducted through question-and-answer drills, variation techniques, harmonization, accompanying patterns, transposition, or composition.
Physical Support (PS)	Physical aid and direct contact from the teacher in execution of physical movements

Physical Modelling (PM)	Teacher’s verbal instruction and physical demonstration of physical technique
Rhythmic Modelling (RM)	Rhythmic demonstration and explanation by the teacher (teacher only)
Rhythmic Reinforcement (RR)	Teacher demonstrating and/or instructing, while conducting the activity along with the student (teacher & student)
Singing	Students singing vocally as directed by teacher
Listening	Focused listening activities directed by the teacher
Directive practice	Practice led by teacher's instructions

Results

Emphasis of lesson components

To ascertain which lesson components were being emphasised in beginner piano lessons, the lesson component categories were compared proportionally in this study. Each teacher’s verbal utterance and physical action was classified into five lesson components. The results were presented in percentages of the total lesson content categories per lesson.

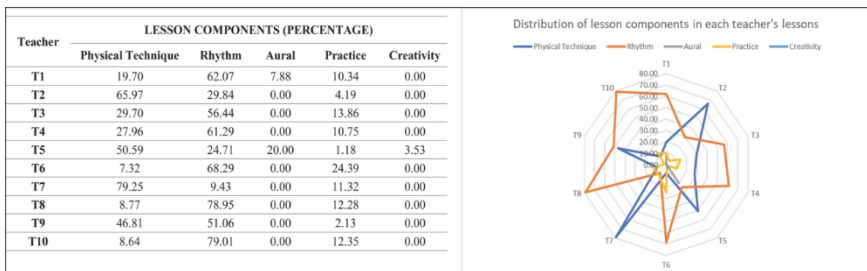


Fig. 2: Distribution of lesson components in each teacher’s lessons

The highest percentage was in the area of Rhythm, followed by Technique, Practice, Aural and lastly, Creativity. Results showed an

emphasis on Rhythm and Physical Technique. Practice was addressed to a certain extent, but Aural and Creativity were lacking.

Analysis on the scaffolding for each lesson component

The scaffolding strategies for each lesson component was first analysed between teachers, and then across the 40 videos.

Physical Technique

Two categories of scaffolding strategies were observed – Physical Support (PS) and Physical Modelling (PM).

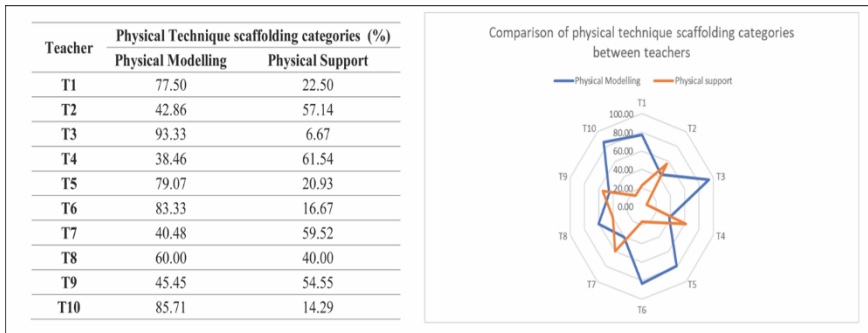


Fig. 3: Comparison of scaffolding strategies (Physical Technique) between 10 teachers

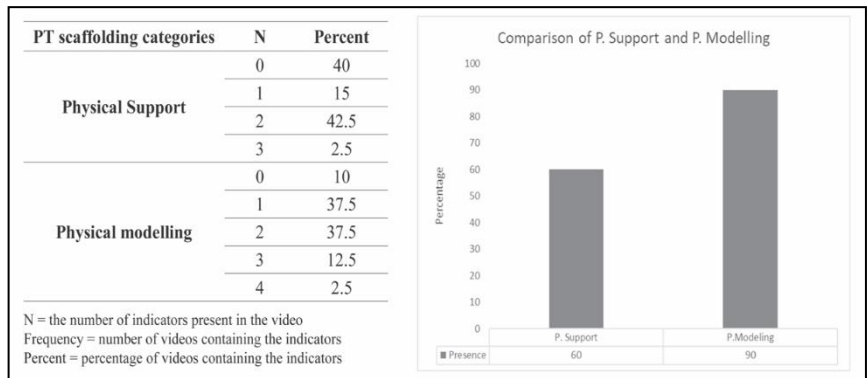


Fig. 4: Comparison of scaffolding strategies (Physical Technique) across 40 videos

Analysis showed that physical modelling was the most utilised scaffolding strategy between 10 teachers as well as across 40 lessons. Results also showed that most of the teachers utilised 2 types of contingencies for each scaffolding strategy.

Results showed that Modelling was the most used strategy, not only within the teachers individually, but also across the 40 videos. It was observed that most teacher used modelling as their first scaffolding strategy. Only two teachers exhibited the use of support as their first strategy while scaffolding the techniques.

Rhythm

The observed scaffolding strategies of Rhythm were grouped into two categories – Rhythmic Modelling (RM) and Rhythmic Reinforcement (RR).

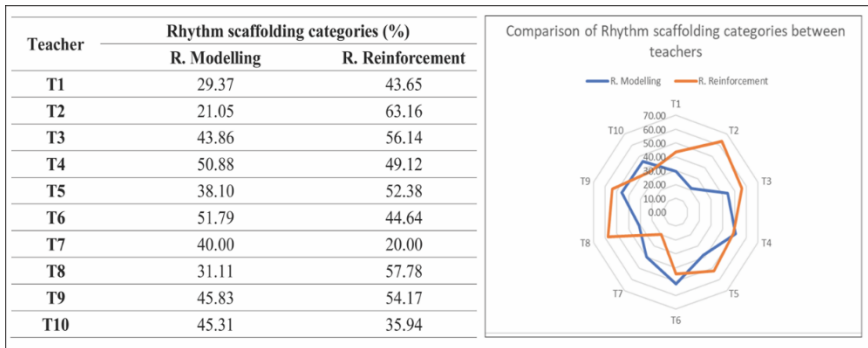


Fig. 5: Comparison of scaffolding strategies (Rhythm) between 10 teachers

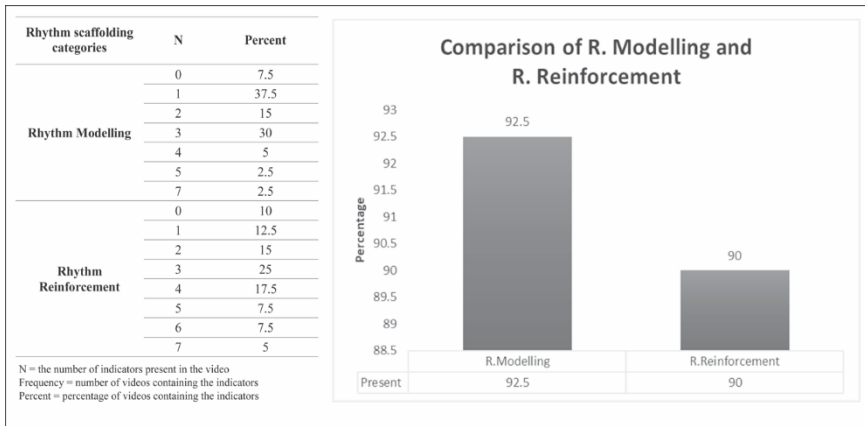


Fig. 6: Comparison of scaffolding strategies (Rhythm) across 40 videos

While the analysis between the 10 teachers showed Reinforcement as the prevailing scaffolding strategy, analysis across the 40 videos displayed a contradictory result, whereby Modelling was observed to be the prevalent strategy. The variety of contingency steps used in Reinforcement strategy was also wider compared to Modelling.

Aural

The scaffolding strategy for Aural was grouped into two categories – listening and singing. Aural was only observed in two of the teachers’ (T1 and T5) lessons.

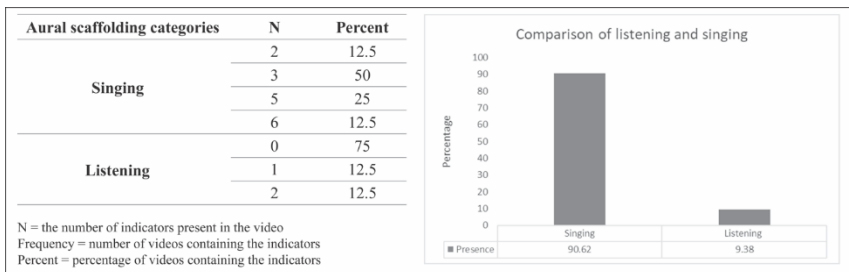


Fig. 7: Comparison of scaffolding strategies (Aural) between two teachers

In the videos, it was observed that both teachers conducted a significantly higher percentage of singing compared to listening. Notably, more variety of contingencies were also conducted for singing compared to listening.

Practice

All the indicators observed from the videos led to one type of practice – directive practice.

Table 2: Presence of directive practice indicators in 40 videos

Practice	
N	Percentage
0	27.5
1	32.5
2	25
3	10
5	5

N = the number of indicators present in the video
Frequency = number of videos containing the indicators
Percent = percentage of videos containing the indicators

Creativity

The use of creativity was only observed in the videos of Teacher 5, specifically the improvisation of melody which was scaffolded through modelling.

Discussion

Emphasis of lesson components

The empirical evidence from this study showed that lesson components have different emphasis in real-life piano lessons. Results

showed that Rhythm was the most frequently addressed lesson component, followed by Physical Technique and Practice, with Aural and Creativity being the least addressed during lessons. In line with previous findings in the West (Karlsson & Juslin, 2008; Rostvall and West, 2003), this study in WM also revealed that playing by ear (Aural) and improvisation (Creativity) rarely occurred, if at all.

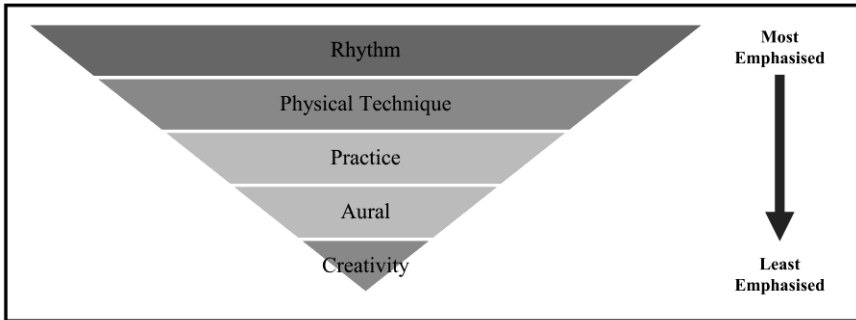


Fig. 8: Findings on the emphasis of lesson components

Despite scholars advocating for the inclusion of music-creating activities that enhance students' creativity in piano lessons (Colwell & Goolsby, 2002), this study showed that most teachers did not incorporate that into their lessons.

Scaffolding strategies for lesson components

Modelling prevailed as the main scaffolding strategy in Physical Technique and Rhythm during piano lessons. However, it is of note that despite Rhythm Reinforcement being the most used strategy among teachers, analysis across 40 lessons still showed Modelling as the prevalent strategy. For Aural, it was observed that the scaffolding process began with singing (echo), followed by listening to identify what was being sung or played. As for Practice, all indicators led to one type of contingency strategy: directive practice. Teachers mainly gave instructions to the students on what and where to practice instead of guiding them towards understanding what they needed to improve on. Lastly, creativity was only observed briefly in one of the teachers' lessons, with Modelling used as a scaffolding strategy.

Findings indicate that the teachers applied various Modelling strategies in the scaffolding process, including modelling with explanation, demonstration of the correct and wrong versions, or modelling without any verbal explanation. It was also observed that modelling, in the form of tapping the pulse, singing or gestures, is used as a type of support while the student is playing. Studies in instrumental music lessons discovered that modelling positively influences student performance (Meissner & Timmers, 2020; Zhukov, 2012).

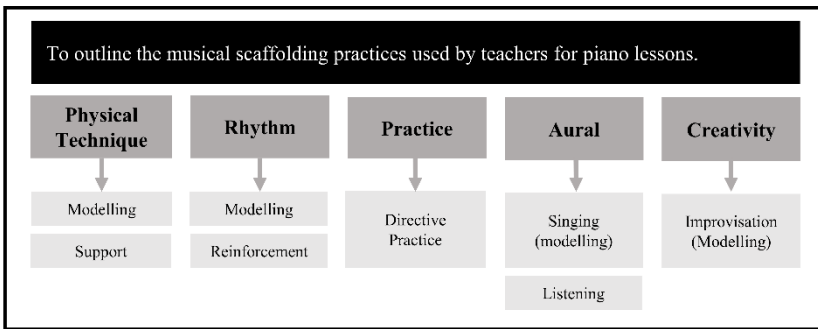


Fig. 9: Scaffolding outline of each lesson component

Contingency, fading of support and transfer of responsibility

From the observations, most teachers used modelling as their first contingency in scaffolding physical technique. According to Single (1991), teacher modelling hones the student’s ability to differentiate between an ideal performance and their own performance by providing a frame of reference.

However, some teachers utilised physical support as the first contingency, before withdrawing to modelling with verbal instructions, and then to exclusively modelling. The modelling was usually paired with verbal instructions at the first contingency step. Research has shown that modelling is most effective when paired with verbal explanation (Sweller et al., 2021). In fading of support, modelling without verbal instruction (physical technique) and Reinforcement (rhythm) were observed. This was due to the gradual withdrawal of the teacher’s support as the student takes over the responsibility of learning. At the transfer of responsibility,

scaffolding strategies were not required anymore and occasionally, students just needed some verbal prompts from the teacher.

The next observation revealed that not all the three characteristics of scaffolding emerged simultaneously within a lesson, but instead, it happened across several lessons. Sometimes, only contingency and/or fading of support occurred, and transfer of responsibility happened in the next or over a few lessons. This study revealed that this is affected by an external factor – student's readiness/practice. As observed in the videos, when the students failed to practice or present proper learning outcomes, it took more lessons for the transfer of responsibility to occur.

Furthermore, two forms of scaffolding process were observed through this study. The researcher coined these as consistent (long-term) scaffolding and contingent scaffolding. Contingent scaffolding, which was most prevalent amongst the teachers, is a short-term contingency based upon student's response during lesson and relies primarily on teacher's intuition and experience. Consistent scaffolding is when teachers planned the scaffolding process with systematic activities across a period to attain specific goals. This was only observed from two teachers' videos and conducted in the context of Aural and Rhythm.

An example to illustrate the difference between these two scaffolding processes is the teaching of rhythm. Contingency scaffolding involved the steps taken by the teacher when the student encountered a rhythm difficulty with quaver in the piece. Based on the student's response, teacher modelled and tapped the rhythm to work with the student. Consistent scaffolding occurred when the teacher planned a series of systematic activities with sub-goals over the course of a few lessons that were intended to introduce the quaver rhythm so that when the student comes across quaver rhythm (main goal) in the future, they would be able to play it naturally (transfer of responsibility).

Conclusion and Future Suggestions

This study offers new insight into piano education for beginners by providing an exploratory inquiry of the lesson components and scaffolding strategies within the individual piano instruction in West Malaysia. The findings from this research were presented to enrich teacher knowledge and provide insight into which lesson components are incorporated and

how they are currently implemented during beginner piano lessons in West Malaysia. By identifying the individual components of effective teaching, it can help teachers to be aware and understand the interrelationships among them as they assist beginners in their musical journey. This study also identified areas of aural and creativity that were neglected in terms of the lesson components at the early stage of teaching. By identifying what was lacking at the beginning stage of teaching, measures can be taken to ensure that the lesson components were equally delivered to develop a strong music foundation.

The issues raised here should be studied further and generalised to a larger population to enhance the beginner piano teaching/learning process. Longitudinal studies and differences in teacher's teaching background and experience could also be studied to observe the impact of the scaffolding process in students.

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