Free Musical Play and Children's Musical Development

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Introduction

Children's play has been defined in various ways by play theorists. These theorists "agree on very little about the play phenomenon," yet, they all "agree that for little ones play is voluntary, self-initiated pleasure" (Littleton, 1998, p. 8). Gray describes free play as "activity that is freely chosen and directed by the participants and undertaken for its own sake, not consciously pursued to achieve ends that are distinct from the activity itself" (Gray, 2011, p. 444). Many have described children's play as including "free choice, enjoyment, self-motivation, and a focus on process rather than on product" (Niland, 2009, p. 18). Children's play is an intrinsically motivated activity. While playing freely, "children do what they want to do, and the learning and psychological growth that result are byproducts, not conscious goals of the activity" (Gray, 2011, p. 454). By incorporating free play into children's learning environments, and thereby encouraging children's free choice, exploration, and agency, teachers can provide children with opportunities to learn and acquire various skills which children may be unable to learn outside of play.

Children "develop intrinsic interests and competencies" in their free play (Gray, 2011, p. 454). In children's free play, music is an intrinsic component, naturally interwoven into its fabric; music is "a part of children's play" (Niland, 2009, p.19). When playing, children often spontaneously burst into song, explore sounds in their environment, and dance (Niland, 2009, p. 18). For example, when children play with dolls, they sing soft and thoughtful lullabies. When children play with trucks, they create a whole sound world, a composition of honks, beeps, rumbles, and crashes. Children create instrumental and vocal music for their running, marching, dancing, and other physical activity. This musical play is "unpremeditated," and has an

"improvisational character" (Marsh & Young, 2015, p. 463). Furthermore, children typically use music socially, as "a means for playing with others" (Marsh & Young, 2015, p. 463). Children's exploration of and experimentation with sound are inseparable from their free play, and in their play, they develop musical interests and competencies, whether on their own or with others.

When children's free play occurs within a musically supportive environment (i.e., a space with musical instruments and freedom to make sound), children can develop musically in unique ways; ways in which they may be unable to develop in other traditional learning environments, such as in the hierarchical, master-apprentice model which frames many teacher-student relationships in music learning. In such a hierarchical educational model, in which the teacher chooses and is expected to enforce the curriculum, restrictions, and goals for each lesson, children are not often given the agency, time, and freedom to explore music learning in a way that is natural to them, through their play. While the role of the teacher is necessary for scaffolding students' music learning, if possible, teachers should create time for musical free play in lessons to nurture their students' holistic musical development. Littleton believes that "the emerging musical mind of the child is dependent on free-play music-making opportunities within a specific music-making environment" (1998, p. 14). Free musical play opportunities can provide children with the freedom to develop their technical and physical approach to their instrument, their rhythmic ability and understanding, their vocalization skills, their creativity and ingenuity, their listening skills and analysis of sound, and, in social musical play, their ability to develop and maintain collaborative partnerships.

Children's Technical and Physical Approach to the Instrument in Free Play

Free musical play can positively influence the development of children's technical and physical approach to their instrument. Promoting playfulness can reduce children's stress, and "the child at play is not afraid of failure" (Gray, 2013, p. 154). For many, the fear of failure, or, in the case of a music lesson, the fear of playing a wrong note or rhythm, can create tension in the body. This fear-response can become habitual, and such tension can go unnoticed, over time hampering the students' fluid and natural approach to their instrument. If in play children are not afraid of failure, there is a higher chance they will approach their musical instrument with a relaxed and natural body position. For example, when children play freely and experiment with instruments such as the marimba, they progress fluidly "from one bar to another, by large leaps, by means of glissandos and, later, scalewise" (Moorhead & Pond, 1942, p. 44). They are not yet worried about precision, and therefore are likely more relaxed and natural in their physical approach to the instrument.

Studies in children's free musical play, such as the Pillsbury Foundation Studies of children 1.5 to 8.5 years old, provide us with a glimpse into children's natural physical approach to their instruments. For example, the Pillsbury Foundation Studies found that, in their musical play, children would typically play instruments while focusing their attention on either rhythm *or* pitch (Moorhead & Pond, 1942, p. 44). What was concluded from this was that, while children can have complex understandings of both rhythm and pitch, they may not yet have the physical capabilities and muscular control to express their understanding of both at the same time (Moorhead & Pond, 1942, p. 44). The predominant teaching practice of expecting children to convey pitch precision and rhythmic accuracy at the same time could cause children to force their body to play the instrument in an unnatural way.

As noted above, a child's unnatural and forced physical approach at the instrument could cause tension and strain, impacting their technique in the moment and over time. For example, when a young piano student plays with very hard or forced articulation, causing the fingers to straighten in an unnatural way, it is possible that "they have not yet the muscular co-ordination which would enable them to play with precision and at the same time maintain an uninhibited rhythmic flow to their music" (Moorhead & Pond, 1942, p. 44). For this reason, opportunities to play freely with musical instruments would allow the student to more frequently experience and become accustomed to a relaxed and natural physical approach to their instrument. Furthermore, while the child is playing freely, the facilitator can observe the child's natural physical approach (i.e., a piano teacher can observe a child's natural hand position), in turn enabling the teacher to have a better understanding of that child's physical proportions and resulting technical needs.

Children's Rhythmic Capacity in Free Play

Free musical play can provide children with the time and freedom to develop their rhythmic understanding and their physical connection to rhythm and pulse. The Pillsbury Foundation Studies found that "free use of varied instruments" led to the development of children's understanding of timbre, vibration, and rhythm (Littleton, 1998, p. 10). When observed in their musical free play, children are naturally interested in rhythm and pulsation, and their rhythmic exploration "is a continual source of pleasure for them" (Pond, 2014, 47), indicating that the child is truly engaged and learning from his rhythmic exploration. In free play with rhythmic instruments, children exhibit rhythmic inventiveness and complexity. This could be because "when children are free to play, they play naturally at the ever-advancing edges of their mental or physical abilities" (Gray, 2013, p. 155). For example, in the Pillsbury Foundation Studies, "the children exhibited an instinctive and ingenious faculty for devising and sustaining spontaneous polyrhythms of sometimes baffling complexity and for enjoying their seemingly effortless repetition" (Pond, 2014, p. 48). One teacher at the Pillsbury Foundation School observed that a child was able to execute "a very complicated pattern with several changes of rhythm and direction," and she was even "able to repeat it exactly a second time" (Moorhead & Pond, 1942, p. 37). Studies of children's free musical play have shown that children's rhythmic understanding far exceeds most adult expectations, and that free play opportunities in a musically supportive environment would allow children to develop their rhythmic capabilities further.

Children's faculty for rhythmic complexity and expression is not typically something that can be seen in the traditional educational model in which children are expected to learn and produce only the rhythms which they can see on paper, describe in words, and play along with pitch precision. Teachers could influence students' musical development by allowing children to play freely with music and by observing children's natural and innate rhythmic drive and interests. Teachers may join in on students' free rhythmic experimentation as a co-player, in a way similar to that of another child, stimulating their students' musical imagination and interest. For example, at the Pillsbury Foundation School, "when the children were playing instruments," Donald Pond often "imitated and at times varied their rhythm patterns on another instrument" (Kierstead, 1994, p. 195). Such musical play and mimicry between the teacher and student can provide teachers with the opportunity to scaffold their students' learning, affording students the freedom to lead their own musical interaction in a stimulating environment and the option to pursue new rhythmical ideas when they are ready and interested.

Children's Vocalization Skills in Free Play

In their free play, children often spontaneously vocalize and experiment vocally, exploring and listening to the sounds that they can create. While children's vocalizations are musical experiments, they may not always sound musical to the adult ear. For example, in his studies of children's free play, Donald Pond found that "the children's melodies were not based on or even suggestive of classical harmonies or scales. The melodies did not progress or end predictably. Nor did they conform to pre-existent metric contrivances" (Pond, 2014, p. 47). Pond divided the children's vocalizations into two categories: chant, in which the "melody was based on a descending minor third," often used in communal singing; and songs, which are "personal, unpremeditated, and evanescent," featuring "capricious" melodies and "abrupt, leaping changes of tessitura" (Pond, 2014, p. 47). With both vocalization types, it was clear that children were enjoying their singing and their own inventiveness, and that the children enjoyed imitating each other, varying the songs, and experimenting with structure and form, as in "the spontaneous singing of embryonic canons" (Pond, 2014, p. 48). The children's sound play in their vocalizations was uninhibited, "but not at random; the games they played were concerned, however tentatively or primitively, with the structuring of sounds" (Pond, 2014, p. 48). Through their experimental and spontaneous vocalizations, children freely practice and develop musical skills related to listening, phonation, creativity, and inventiveness.

According to Donald Pond, such spontaneous vocalization and inventiveness were only possible "because the children had been encouraged to be musical and creative, close to the roots of their own being, without inhibition" (Pond, 2014, p. 47). At the Pillsbury Foundation School, "the children were free to make music with instruments or voices at any time, except during lunch or nap time" (Wilson, 1981, p. 18). It is important to note that, here, "music" refers to any of the children's sound creation and exploration. Pond observed children's inner compulsion "for being a maker, an inventor of sound shapes, and for creating linear movement and enjoying the patterns that simultaneously moving lines of sounds could produce" (Pond, 2014, p. 48). In a similar way, as observed by Smithrim, "the range, variety, and complexity of the children's musical activity when left to free-play" can "far [exceed] anything they would have been able to achieve in a teacher-led class" (Marsh & Young, 2015, p. 468). Smithrim notes, however, that

"noise was a consideration, and she acknowledges that the changes in practice it implies would be difficult in many settings" (Marsh & Young, 2015, p. 468).

Noise is not the only consideration holding teachers back from providing their child students with the freedom to experiment with spontaneous, uninhibited vocalization. Curriculum deadlines, parental expectations, and fear of potential chaos could be included in other reasons for teacher hesitation. However, according to Pond, "It is up to us as teachers to nurture rather than repress the deeply rooted natural musicality that young children inherit and to use our intelligence and creative imagination to foster its healthy growth from those roots" (Pond, 2014, p. 48). In this vein, music teachers can and should strive to find the time and freedom for children to vocalize freely, by themselves and with one another, enabling them to explore, experiment, invent with, and develop the voice, their very first instrument.

Children's Musical Creativity and Ingenuity in Free Play

Similarly, free play offers children the time and freedom to act creatively, to create sound shapes, sound scapes, and other music, spontaneously and without restrictive parameters. In the Pillsbury Foundation Studies, Donald Pond specifically wanted to observe "the spontaneous creativity of unindoctrinated normality" (Pond, 2014, p. 45). Adults may be surprised to know that "the small child's music making contains in embryo a surprising number of techniques of composition which are found universally in the work of adult composers" (Moorhead & Pond, 1942, p. 47). In their free play at the Pillsbury Foundation School, students created music featuring:

"rhythmic variation, vocal and instrumental; sequential progression; adaptations of rhythmic passages to verbal forms and vice versa; rhythmic counterpoint; melodic and rhythmic augmentation and diminution; antiphony; recurrent refrains—a primitive rondo form; instrumentation—especially in group performances; [and] transference of a rhythm from one instrument to another." (Moorhead & Pond, 1942, p. 47)

Children's musical creativity and inventiveness result from their free, uninhibited, and unrestricted play.

Furthermore, "the creation of their own music and learning to improvise" are "two crucial aspects of a students' journey towards becoming musical," enabling students "to find their musical 'voice'" (Beal 2017, quoted in Creech, et al., 2020, p. 49). One's creative self-expression is directly related to the growth of one's musical possible selves, which provide much-needed "coherence in our musical lives, functioning as a link between cognition and motivation by pulling us towards (or propelling us away from) future experiences of musicking" (Creech et al., 2020, p. 14). Moorhead and Pond observed that, "If we do not force the child to confine himself within an arbitrary system he produces with great rhythmic, melodic and imaginative fluidity" (1942, p. 47). In such "a rich and unregimented environment [the child] habituates himself to the free exercise of creative musicality" (Moorhead & Pond, 1942, p. 48). Such opportunities "to be creative enhance children's agency and ownership in their music learning and participation" (Creech, et al., 2020, p. 49). For this reason, there is a strong argument for a balanced approach to music teaching, which includes free play for the application and development of children's creativity and individual ingenuity.

It seems likely that most music teachers would be thrilled to have students who desired to freely make music, improvise, and compose; in other words, to act creatively. However, for children to create their own music, they need "freedom—freedom to move about in pursuit of [their] own interests and purposes, and freedom to make the sounds appropriate to them" (1942, p. 33). Creech et. al argue that activities in which "students' experiences, knowledge and interests" serve as a "starting point" form the conditions in which "creative activity becomes

connected to students' evolving musical self-stories" (2020, p. 49). In other words, for children to express their intrinsic creativity, they need the freedom to guide their own engagement and pursue their own interests. In general, children's creativity has been shown to diminish when the teacher or facilitator explicitly states incentives for and emphasizes goals of creativity and quality (Gray, 2013, p. 135). Beyond teachers' stated goals and incentives, Moorhead and Pond found that "needless inhibition of the child's living experience is likely to dam up the flow of his creative vitality and hence to inhibit musical creativity" (1942, p. 48). They observed how "enforced conformity with our conventions, before the child has sufficient background to see them in proper perspective, is therefore likely to hinder the growth of vital musical conceptual patterns" (1942, p. 47). In one particular instance at the Pillsbury Foundation School, a teacher observed how the "creative expressions" of one student, "a child who was especially creative musically," had "ceased for a time immediately after his first [formal] piano lesson" (Kierstead, 1994, p. 209). The teacher noted that the student "became 'tone conscious and scale minded' and exchanged his own songs for 'Jingle Bells'" (Kierstead, 1994, p. 209). If not carefully timed and implemented, formal teaching can impede children's creativity.

As another example of teacher intervention inhibiting child creativity, Donald Pond writes about attempting to teach the Pillsbury Foundation School children musical notation. During this project, Pond observed that the children's "creative musical activity diminished, an outcome he considered both unnecessary and undesirable" (Kierstead, 1994, p. 203). After incorporating more structure into the children's days, "both Moorhead and Pond indicated they were aware that the imposition of structure was affecting creative play, and that the children also were conscious of 'rules'" (Kierstead, 1994, p. 205). While children's creativity is nurtured most in a free and uninhibited play environment, such creativity can also be diminished if a child's

practical knowledge or technique does not support their developing creative exploration. For this reason, the teacher must maintain an observant and perceptive role to support the child's creativity; certain musical facts and techniques "must be taught," but "when and how depends upon the teacher's sensitiveness" to both "the child's need for the knowledge and readiness to learn" (Moorhead & Pond, 1942, p. 48). Teachers must maintain a difficult balance: on the one hand, they must scaffold their students' learning, providing them with new information and approaches, while on the other hand, they must provide enough space and freedom for their students to play, discover, and experiment.

Children's Listening Skills and Analysis of Sound in Free Play

In free musical play, children have time to listen to and analyse the sounds that they discover. In such play environments, children have been observed creating sound and listening intently, focusing on their sound creations, even for relatively long periods of time. For example, a boy at the Pillsbury Foundation School "discovered that a stick would rattle when dropped inside a large vibrating bowl-shaped gong," and he "repeated the operation over and over again, putting his head inside to listen" (Moorhead & Pond, 1942, p. 42). Children are interested not just in the rhythms and melodies that they can create, but also the varied timbres, and they "will listen with considerable concentration to the sounds [they produce], especially when [they have] been able to transform them in some way" (Moorhead & Pond, 1942, p. 42). Such sound creation, along with its deep listening, "is carried on as a thing in itself, and is not connected necessarily with any other activity" in the free play environment (Moorhead & Pond, 1942, p. 42). Children's listening to and analysis (in their own terms) of discovered sound is best enabled in a free play environment, where the child can choose to stay at one instrument for however long he may like, or he may choose to go between two instruments of interest, and so on. Within

such free play, the lack of time restraints, parameters, and production goals can enable the child to enjoy listening to his creations, influencing the child's natural listening and aural development.

While children's free exploration of sound, in which they repetitiously and intently listen, can seem arbitrary or even useless to observing adults, such listening and experimentation is fundamental for children's understanding of the depth and variety of sounds that they can use for their creativity and inventing. When a child starts to choose instruments for creating music, as in a pretend play scenario, "he chooses the instrument whose timbre he considers most suitable" (Moorhead & Pond, 1942, p. 45). The child uses his listening experiences, by which he has explored tone and colour, to make his choices. For example, "When he makes music for a boat game he does not make water music; he tries to portray instrumentally his concept of the *sound* of water" (Moorhead & Pond, 1942, p. 45, emphasis theirs). For such activities, it is not the words that are important, as in adults' musical songs for children (in which "water music" would be music *about* water).

For children, "It is the *sound* that is important" (Moorhead & Pond, 1942, p. 45, emphasis mine). As observed in the Pillsbury Foundation Studies, "Music is, for young children, primarily the discovery of sound. Their deepest interest is in tone color" (Moorhead & Pond, 1942, p. 45). For this reason, children's listening skills will develop if they are provided with a supportive environment in which they can freely play with a variety of instruments, "when and how they wish as long as no harm is done to them" (Moorhead & Pond, 1942, p. 45). In this environment, it is the role of the teacher to stand back and observe the child's free musical play, even with objects that may not be seen by adults as musical instruments. Moorhead and Pond argue that "no restrictions other than those absolutely necessary should be placed in the child's way to

hinder him from using any of the potentially soniferous materials in [the child's] everyday environment" (1942, p. 45). For example, a child may find the sounds of kitchen utensils to be particularly pleasing, or a child may enjoy the sounds of drum mallets on various objects, such as on books, chairs, or desks. Such sound exploration would develop children's listening and aural skills which could be applied to various musical roles, such as performing, analysing, and creating.

Developing and Maintaining Collaborative Musical Relationships in Free Play

Children's free play with other children is often musical, and they frequently work together to create music for their enjoyment and pleasure. In this collaborative work, children share musical discoveries with one another, such as new sounds, rhythms, and methods of holding an instrument or orienting oneself to an instrument. In the Pillsbury Foundation School, children's spontaneous music-making "invited participation from all who would collaborate actively or would form an audience" (Moorhead & Pond, 1942, p. 48). For example, a child would spontaneously begin to sing a chant melody (a melody characterized by the interval of a minor third), and "other children soon joined in, either in imitation, or, more often, by inventing individual verbal and rhythmic variations" (Pond, 2014, p. 47). Such singing games "were a favorite form of spontaneous, communal music-making at the school" (Pond, 2014, p. 47). In these singing games, children acquire and practice various musical skills, such as listening to, imitating, and developing another child's song, as well as singing in (or out of) time with one another.

In social play with instruments and vocalization, children frequently teach one another and implement their newly developed skills into group performances. Pond believed that children learned music primarily through their social play and interactions with one another, as children would discover sounds and show other children how to recreate them (Kierstead, 1994, p. 200). By teaching others how to recreate a certain sound, children are not only sharing their knowledge and understanding with others, but they are also integrating their own knowledge on a deeper level, solidifying the musical concepts within themselves. In the Pillsbury Foundation School, such sound discoveries would often be incorporated into group improvisations, which included children of varying musical experience and age (Kierstead, 1994, p. 200). Such group improvisations represented "not only capacity to develop and maintain the social form but also ability for prolonged concentration and production" (Moorhead & Pond, 1942, p. 34). Children's prolonged concentration in play is a sign of their interest, a sign that they are learning from their playful investigation.

Group improvisation in free play also allows for students to guide their own learning, since "in an improvisation the participant can find the level of challenge appropriate for them" (Mullen, 2022, p. 184). In such circumstances, "techniques, and creative ideas of the community" would accumulate "through cooperative interaction between and among the children" (Kierstead, 1994, p. 200). In their free social play, children collaborate musically by creating music with, listening to, sharing ideas with, and teaching one another. In this way, in a free play musical environment with others, children are regularly and naturally scaffolding one another's musical development and practicing the implementation of newly acquired skills.

Children's social play in a musically supportive environment also provides opportunities for them to develop and maintain the social skills necessary for sustaining collaborative musical relationships. In the Pillsbury Foundation School, children were "encouraged to form and maintain their own groups (Wilson, 1981, p. 18). These groups, formed by the children themselves in their free play, produced different results than would a group of children formed by the teacher. Moorhead and Pond use the term "group" not to "mean several children gathered together, but rather several children who have gathered themselves together and are engaged in common or related activity, developing awareness of each other and of the group as a whole" (1942, p. 34). This group is different from an arbitrarily imposed grouping of children, since "This sort of group is marked by the very close yet free relationship of each child with each of his companions and with the entire group" (Moorhead & Pond, 1942, p. 34). Voluntary participation, as in children's naturally formed groups, is a key component of free play. In order for play to be truly free, one must be able to exit at any time, to leave the group, and to discontinue involvement in the play activity. Within such a group, mutual respect and understanding develops naturally, and children take turns leading and following others. Such a natural group "seems to result from continued past experience in voluntary activities, and is characterized by the great sensitiveness of each child to the abilities and characteristics of the others, as well as an understanding of his relationship to them" (Moorhead & Pond, 1942, p. 34).

In naturally formed groups, children learn gradually that their participation will "contribute to a group purpose with appreciation of the benefits of co-operation" (Moorhead & Pond, 1942, p. 34). In the Pillsbury Foundation School, communal and collaborative musicmaking was marked by group decisions, including "demands for the elimination of unwanted timbres, for unanimity of volume and for beginning and ending together" (Moorhead & Pond, 1942, p. 44). When a child was granted leadership in musical play, the leader would direct the others, often giving "preperformance instructions" (Moorhead & Pond, 1942, p. 44). As in any group, if participants want to keep working toward a common goal, members must work together for group cohesion and satisfaction. As has been observed, in their musical play, children often create their own groupings, working together to manage themselves toward the common goal of creating an enjoyable music-making event. Such collaborative musical skills cannot be taught; they can only be developed through experience with others. For children, these experiences are found in their free play with one another, where they can acquire and practice the skills necessary for the maintenance of musical relationships.

Conclusion

The child's world of play, when free, is innately connected to their exploration of music (Moorhead & Pond, 1942). In children's musical play, they can develop and acquire skills through their intrinsic motivation and related to their musical interests. In studies of children's play, it has been observed that the child's world of music is so wide "that the commonly accepted concept of music in the Western world is too small and exclusive to contain it" (Moorhead & Pond, 1942, p. 47). This could be because, for the child, music is any sound "that is used for expressive purposes. His use of it is governed by his own dynamic laws" (Moorhead & Pond, 1942, p. 47). Children's exploration of music in their play does not typically resemble adults' exploration of music, yet this exploration is fundamental to their music development. Children's musical development may be unnecessarily impeded if children's only music learning experiences exist in the predominant formal, hierarchical, master-apprentice model of music education, in which adult teachers choose the curriculum, restrictions, and goals of each lesson. Free play in an environment in which children can play instruments and make sound without arbitrary restrictions placed upon them can provide children with opportunities to develop their technique and physical approach to instruments, their rhythmic understanding and ability, their vocal capabilities, their creativity and ingenuity, their listening and aural aptitude, and their collaborative and social skills.

Unfortunately, play-based education, in which children are free to explore their environment, is typically reserved for only very young children. Once children reach age 5 or 6, formal schooling begins, and "the play-based educational provision gradually changes in favor of a more product-oriented, skills-based approach to education" (Marsh & Young, 2015, p. 463). As a result, children's time to play freely typically occurs outside of education environments, moving "out into the spaces and times between formal classroom learning activities," such as during recess and on the playground (Marsh & Young, 2015, p. 463). While children's play is still musical on the playground (Marsh & Young, 2015), children have far fewer opportunities to explore, experiment with, and create sound due to the lack of musical instruments. Marsh and Young argue that play is "an essential vehicle for children's musical expression" and should therefore "be acknowledged and encouraged within and beyond educational settings" (Marsh & Young, 2015, p. 478). While music educators have long been skilled at teaching through structured, rule-based games, as in the Kodaly method (Niland, 2009, p. 19), strictly speaking, "adult-directed [...] games for children do not fall into the category of free play" (Gray, 2011, p. 444). Given the understanding "of the characteristics of children's play and of the role of play in learning and development, music educators can now encourage children to play with music in a broader sense than just through structured games" (Niland, 2009, p. 19). Music teachers can and should reserve time for children's free play in their classrooms and lesson spaces, enabling children to have the freedom, time, and agency to follow their natural musical interests and inclinations, guide their own learning, and acquire a more well-rounded and holistic music education.

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