Flexible Purposing

in Early Childhood String Instruction



Discovery Learning Strategies that are Developmentally Appropriate and Cognitively Challenging

by Karin Hendricks

few months ago I introduced myself to a group of general educators as a string teacher. In our conversation, I told them about my three-year-old cello student, who had come for a lesson earlier that day. I was taken aback as one well-meaning gentleman muttered under his breath, "Some parents need serious help." As our worldviews clashed for a moment, I strove to understand his perspective. I concluded that he, with the best interest of the child in mind, believed that the poor little boy was being forced to participate in an activity that was neither appropriate for his age nor for his level of development.

A number of pedagogical approaches exist to address the specific needs of early childhood music instruction. These approaches often differ in such issues as starting age, scope and sequence of instruction, repertoire, and opinions of developmental appropriateness. One author (Flohr, 2005) has suggested that there are as many pedagogical methods as there are teachers. It might be said that there are as many opinions regarding child learning and development as there are people who care about children. One common feature that these varying opinions appear to share is a claim to "want what is best for the child." However, the question remains: What constitutes "best" and for what child?

This article presents two existing theoretical approaches to early childhood string instruction. The first is the developmental approach, where learning activities are selected according to a child's age and level of physical, emotional, and social development. In this stance, development is considered to precede learning. The second position, called the cognitive-constructivist approach, supports learning activities that provide cognitive and developmental challenges in order to promote growth. In this case, learning precedes development. After a description of each of these positions, this article then presents a synergistic flexible purposing approach, in which salient ideas from both camps are merged in order to propose individualized pedagogical strategies for early childhood string instruction that are both developmentally sensitive and cognitively engaging. In this third instance, development and learning occur simultaneously.

Developmental Approach: Development Precedes Learning

The developmentally appropriate practice position considers age-related traits and behaviors in order to determine particular activities, resources, and experiences that will be safe, manageable, achievable, and stimulating to children (Bredekamp & Copple, 1997; Jordan-Decarbo & Nelson, 2002). In this pedagogical approach, teachers are expected to understand, and accommodate the developmental level of their students. They should also consider the long-term effects of chosen activities upon a student's life (Katz, 1995; Schweinhart & Weikart, 1997).

More than sixty years ago, the Pillsbury Foundation sponsored research to determine what activities might foster and encourage the positive musical engagement of children ranging in ages from one to eight and a half years (Moorhead & Pond, 1941; 1942; 1944; Moorhead, Sandvick, & Wight, 1951). Among their findings, the researchers determined that free play, exploration, and experimentation were crucial for a young child's creative and expressive musical development. Whenever music learning became organized or externally imposed by adults, the students' own creative patterning ceased. Additionally, the researchers found that a child's first musical interest tends to be tone quality, and that musical play frequently equates with sound exploration. Therefore, the researchers suggest that students should be exposed to a wide variety of musical materials with which they can experiment (Moorhead & Pond, 1942).

The Pillsbury Foundation studies propose that children cannot separate musical experience from lived experience; music occurs in the present for them and is perceived in a holistic manner. They posit that music must first be felt and experienced by children according to their own development and life experience, because music is an expression of a child's personal history. A child's musical experience is in many ways more complex than we might imagine, and the researchers suggest that the imposition of rules and norms can limit a child's musical exploration, creativity, and expression. They, therefore, claim that the early childhood musical environment should be free, flexible, full, and varied. If a preschool-aged child is given too many rhythmic and technical restrictions, this may take the "music" out of their "musical experiences" (Moorhead & Pond, 1942). Educators are encouraged to consider the child's own developing and natural musical instincts before imposing preconceived and adult-centered pedagogical strategies upon them.

Some within the developmentalist paradigm shun the idea of childhood involvement in activities that are more traditionally associated with adults. David Elkind (1987) criticizes contemporary society's apparent need to push children to achieve at faster and higher levels, claiming that such driving toward prodigiousness can cause undue short-term stress on children as well as long-term damage to personality and self-esteem. Similarly, Katz (1987) warns of premature or extreme exposure to learning in particular skills or domains, at the expense of more well-rounded experiences that may better foster the development of dispositions and feelings.

Cognitive-Constructivist Approach: Learning Precedes Development

While developmentalists propose that certain musical activities are appropriate at certain ages of instruction, others suggest that such determinations of age-appropriateness only serve to limit the potential of children. Rogoff (1990, 2003), for instance, points at the cultural factors involved in human development to suggest that developmental appropriateness is itself a social construct. Her ethnographic research has taken her to various parts of the world where children display very different skills and abilities than western cultures might expect. For example, her depiction of an 11-month-old Efe baby successfully cutting a piece of fruit with a machete (Rogoff, 2003) places in question western conceptions of a child's necessarily slow development of fine motor skills. This consideration invites a discussion of the cognitive-constructivist paradigm, where it is believed that students actively construct knowledge and skills based on their interactions with the environment and with others. This position, therefore, asserts that students can learn and develop at faster rates when their educational experiences are carefully guided by adults or more able peers.

Jerome Bruner has stated that "any subject could be taught to any child at any age in some form that is honest" (1960, p. ix; 1996, p. xii). It was in this spirit that he proposed his "spiral curriculum," where various fundamental ideas are taught from the beginning of instruction and then revisited at progressively more advanced and complex levels throughout a student's life. In string education, this might mean that a cello student's first lesson should be a natural catalyst toward the eventual performance of the Dvorak Cello Concerto, with basic techniques setting the stage for increasingly more advanced instruction over time. A cognitive-constructivist theorist would suggest that such carefully-planned focus on fundamentals from the beginning greatly reduces the need for remediation later on.

Similarly, Lev Vygotsky's (1978) Zone of Proximal Development theory proposes that teachers can help children reach seemingly insurmountable educational heights by "scaffolding" their learning experiences and guiding them along the way. In this context, a beginning student will not be capable of playing the Dvorak Concerto but will be guided through various proximal goals, which gradually increase in difficulty, until the distal goal is met.

A Practical Example: A Brief Look at Suzuki

In order to provide an example of how these two approaches apply to string education, the above two theories are demonstrated within the well-known Suzuki approach (1981; 1983; Suzuki Association of the Americas, 2003). Many of the principles taught by Shinichi Suzuki fit into the cognitive-constructivist paradigm. The concept of reviewing literature, for instance, runs parallel with Bruner's "spiral curriculum," as students are taught progressively more challenging techniques that they develop on more basic repertoire. In addition, the emphasis placed on close guidance from teacher and parent is reminiscent of the scaffolding experiences in Vygotsky's proximal development approach. Suzuki pedagogy also satisfies many developmental issues, such as delaying note reading (McPherson & Davidson, 2006; Moorhead & Pond, 1944) and using size-appropriate instruments (Andress, 1980). On the other hand, developmentalists would take issue with much of Suzuki's teaching approach, including the heavy adult involvement, structured learning activities, and standard repertoire written by adults. They might suggest that these practices leave children without an opportunity for free exploration of their own music, thus potentially stifling natural creativity and expressiveness (Moorhead & Pond, 1944).

Flexible Purposing: Learning and Development Together

Admittedly, this description of the developmental and cognitiveconstructivist approaches might present a false dichotomization of two stances that are, in reality, not so readily polarized. Most adherents to either philosophy will likely find themselves somewhere on the continuum between the two extremes posed here. Contemporary developmentalists, in fact, point to the interaction between learning and development, giving credence to the importance of teacher-assisted learning – when it is sensitive to the child's development level (Jordan-Decarbo & Nelson, 2002). At the same time, constructivist theorists have long held to the importance of self-directed instruction, where children are allowed the freedom to experiment and explore in order to construct their own knowledge – but with some level of guidance from a more able teacher or mentor (Dewey, 1938; Brooks & Brooks, 2000).

The works of early childhood music theorist Barbara Andress (1980, 1989) represent a synthesis of the developmental and cognitive-constructivist approaches. Andress points to the importance of approaching education from the perspective of the child, catering to the child's individual pedagogical needs, instead of what we might assume will work for all children. This kind of child-centered understanding can only come through careful observation and our attempts to follow the student's lead. At the same time, Andress does not promote play for play's sake. She states that many past approaches have "promoted play experiences rather than learning through play" (1980, p. 131; emphasis in the original). She proposes that teachers can turn play into meaningful learning experiences, where the adult facilitates but does not enforce – the child's musical experimentation and exploration. This is accomplished as teachers provide cognitively engaging and developmentally challenging experiences for children by placing them in situations that encourage them to ask "why" questions.

Research supports Andress's self-directed learning approach. Individuals are more likely to be motivated when they are given more choice, control, and responsibility over their learning experiences (Bransford, Brown, & Cocking, 2001; McPherson & Davidson, 2006; O'Neill, 2001, 2005, 2006; Renwick & McPherson, 2002). At the same time, however, they are also motivated when mastery of a task is met by increasing challenge (Bandura, 1997; Csikszentmihalyi, 1990; O'Neill, 1999). Stated simply, motivational experiences are not only self-directed, but they are also learning experiences. Individuals are not motivated merely by the ability to play freely, but by an appropriate balance of mastery and challenge, where they have an opportunity to reap the rewards of diligent effort and to become increasingly more capable.

Flexible Purposing in Early Childhood String Instruction

In early childhood string instruction, teachers can create a synthesis between challenge and fun, between structure and self-directed learning, by engaging in "flexible purposing" with their students (Dewey, 1938; Eisner, 2002). Here, teachers take an improvisatory approach, using their technical expertise to guide students in discovering various musical experiences where students can experiment and explore for themselves. The instruction is often in a state of flux, with teachers "reflecting in action" (Bamberger & Schön, 1991), and regularly shifting direction toward new activities that support the student's own creative intentions. A necessary element of this approach is the teaching of string technique in individually appropriate ways, with the intent that these techniques will be used by the students in order to best express themselves. The next section provides two examples of early childhood string instruction that can promote learning and development simultaneously, through activities that are reflective, flexible, and purposeful.

Tone Experiments: An Example of Exploration

As cited above, early childhood developmental research suggests that tone quality is one of a young child's first musical interests (Miller, 1987; Moorhead & Pond, 1941, 1942, 1944; Moorhead, Sandvik, & Wight, 1951). Students and teachers can engage in "flexible purposing" together as they explore various ways to create sound on a string instrument. The possibilities are infinite: bowing near the bridge, near the fingerboard, or even below the bridge; plucking in the middle of the string or above the nut; plucking with left fingers down firmly or lightly; swiping the palm of the hand on the back of the instrument to produce a swishing sound; knocking lightly on the shoulder or on the bout; playing with a fast bow or light bow; etc.

In the middle of this exploration lie the fundamentals for bow placement, speed, and contact point; left finger weight; and other essential technical skills that will later give the student the discriminating edge in producing a resonant sound. Such guided yet imaginative exploration encourages early attention to variations in tone quality while still allowing the child meaningful, engaging, and personal musical experiences.

Composition and Improvisation

The creativity inherent in young children allows them to be remarkable composers and improvisers – of their own kind of music. Such creative moments can occur when students are allowed moments of free play, both on their instrument as well as on other instruments, such as piano or percussion. Such play opportunities might come during lessons as an incentive for attending to specific technical fundamentals on their instrument, or simply as an opportunity they are given to explore sounds on their own.

This kind of free-play "composition" or "improvisation" may not resemble western art music and might appear cacophonous to a disinterested observer. However, these activities allow students to experiment with some of the techniques they have learned in lessons, in a nonthreatening and creative environment that they are able to produce for themselves. Therefore, adults might merely sit back at these moments and enjoy the "show" without interfering, providing themselves an opportunity to hear "music" through fresh ears.

This free-composition approach encourages students toward improvisation, a skill found to be more evident in students who are taught by ear or rote from the beginning of their instruction (McPherson, Bailey, & Sinclair, 1997; McPherson & Gabrielsson, 2002), or who are allowed to play their own musical creations from the beginning of instruction (Moorhead & Pond, 1944). Such improvisation and free composition opportunities facilitate uninhibited expressiveness and a sense of musical ownership.

Conclusion

As discussed above, children who are rushed or forced into adultimposed activities may experience stress and loss of self-esteem (Elkind, 1987). However, equal frustration may come through the need for remediation of poorly learned techniques and by the subsequent loss of potential mastery experiences (Bandura, 1997). The balance is struck with student-selected and teacher-guided exploration activities, where students can take responsibility to maintain particular fundamental techniques, yet, also enjoy the opportunity for personal creativity and expression.

Returning to the opening theme of this article, Flohr (2005) asserts that there are as many pedagogical methods as there are teachers. It may be that there are as many pedagogical methods as there are students, with each child receiving an individualized learning experience that is both developmentally appropriate as well as cognitively stimulating. In the "flexible purposing" approach to string instruction, the goal is to provide students with challenging, yet, personally meaningful experiences by letting them take the creative lead in teacher-guided educational activities. Bruner states: "If you treat people, young kids included, as responsible, contributing parties, ... as having a job to do, they will grow into it" (1996, p. 77). An educational environment that allows children to merge their creative genius with the teacher's expertise invites limitless possibilities for engagement and growth.

Bibliography

- Andress, B. (1980). Music experiences in early childhood. New York: Holt, Rinehart, and Winston.
- Bamberger, J. (1991) The mind behind the musical ear: How children develop musical intelligence. Cambridge, MA: Harvard University Press.
- Bamberger, J., & Schön, D. (1991). Learning as reflective conversation with materials. In F. Steier (Ed.), *Research and reflexivity*. London: Sage.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: W. H. Freeman. Bransford, J. D., Brown, A. L., & Cocking, R. R. (2001). How people learn: Brain, mind, experience, and school. (Expanded edition). Washington, D.C.: National Academy Press.
- Bredekamp, S., & Copple, C. (Eds.). (1997). Developmentally appropriate practice in early childhood programs (Rev. ed.). Washington, DC: National Association for the Education of Young Children.
- Brooks, J. G., & Brooks, M. (2000). In search of understanding: The case for constructivist classrooms (Rev. ed). Upper Saddle River, NJ: Prentice Hall.
- Bruner, J. (1960). The process of education. Cambridge, MA: Harvard University Press. Bruner, J. (1996). The culture of education. Cambridge, MA: Harvard University Press. Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. New York: Harper & Row. Dewey, J. (1938). Experience and education. New York: Macmillan.
- Eisner, E. W. (2002). *The arts and the creation of mind*. New Haven, CT: Yale University Press. Elkind, D. (1987). *Miseducation, preschoolers at risk.* New York: Alfred A. Knopf.
- Flohr, J. W. (2005). The musical lives of young children. Upper Saddle River, NJ: Prentice Hall. Jordan-Decarbo, J., & Nelson, J. (2002). Music and early childhood education. In R. Colwell
- & C. Richardson (Eds.), The new handbook of research on music teaching and learning: A project of the Music Educators National Conference (pp. 210-242). New York: Oxford University Press.
- Katz, L. G. (1987). Early education: What should young children be doing? In L. Kagan & E. Zigler (Eds.), *Early schooling: The national debate* (pp. 151-167). New Haven, CT: Yale University Press.
- Katz, L. G. (1995). Talks with teachers of young children. Norwood, NJ: Ablex.

- McPherson, G. E., & Davidson, J. (2006). Playing an instrument. In G. E. McPherson (Ed.), *The child as musician: A handbook of musical development* (pp. 331-351). New York: Oxford University Press.
- McPherson, G. E., Balley, M., & Sinclair, K. (1997). Path analysis of a model to describe the relationship among five types of musical performance. *Journal of Research in Music Education*, 45, 103-129.
- McPherson, G. E., & Gabrielsson, A. (2002). From sound to sign. In R. Parncutt & G. E. McPherson (Eds.), The science and psychology of music performance: Creative strategies for teaching and learning. New York: Oxford University Press.
- Miller, L. B. (1987). Children's musical behaviors in the natural environment. In J. Peery, I. Peery, & T. Draper (Eds.), *Music and child development* (pp. 206-224). New York: Springer-Verlag.
- Moorhead, G. E., & Pond, D. (1941). Music of young children I: Chant. Santa Barbara, CA: Pillsbury Foundation for Advancement of Music Education.
- Moorhead, G. E., & Pond, D. (1942). Music of young children II: General observations. Santa Barbara, CA: Pillsbury Foundation for Advancement of Music Education.
- Moorhead, G. E., & Pond, D. (1944). *Music of young children III: Musical notation*. Santa Barbara, CA: Pillsbury Foundation for Advancement of Music Education.
- Moorhead, G. E., Sandvik, F., & Wight, D. (1951). Music of young children IV: Free use of instruments for musical growth. Santa Barbara, CA: Pillsbury Foundation for Advancement of Music Education.
- O'Neill, S. A. (1999). Flow theory and the development of musical performance skills. Bulletin of the Council for Research in Music Education, 141, 129-134.
- O'Neill, S. A. (2001). Young people and music participation project: Practitioner report and summary of findings. Unit for the Study of Musical Skill and Development, Keele University, UK. Retrieved February 3, 2007, from http:// www.keele.ac.uk/depts/ps/ESRC/Practitionerimp.doc
- O'Neill, S. A. (2005). Youth music engagement in diverse contexts. In J. L. Mahoney, R. W. Larson, & J. S. Eccles (Eds.), Organized activities as context of development: Extracurricular activities, after-school, and community programs (pp. 255-273). Mahwah, NJ: Lawrence Erlbaum Associates.
- O'Neill, S. A. (2006). Positive youth musical engagement. In G. E. McPherson (Ed.), The child as musician: A handbook of musical development (pp. 461–474). New York: Oxford University Press.
- Renwick, J., & McPherson, G. E. (2002). Interest and choice: Student-selected repertoire and its effect on practising behaviour. *British Journal of Music Education*, 19, 173-188.
- Rogoff, B. (1990). Apprenticeship in thinking. New York: Oxford University Press. Rogoff, B. (2003). The cultural nature of human development. New York: Oxford University
- Press.
- Schweinhart, L., & Weikart, D. (1997). The High/Scope preschool curriculum comparison study through age 23. Early Childhood Research Quarterly, 12(2), 117-143.
- Slone, K. C. (1985). They're rarely too young and never too old to twinkle. Ann Arbor, MI: Shar Products.
- Suzuki Association of the Americas. (2003). Every child can: An introduction to Suzuki education. Boulder, CO: Author.
- Suzuki, S. (1981). Ability development from age zero (M.L. Nagata, Trans.). Miami, FL: Summy-Birchard. (Original work published 1969).
- Suzuki, S. (1983). Nurtured by love: A new approach to talent education (W. Suzuki, Trans.). Miami, FL: Summy-Birchard. (Original work published 1969)
- Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.



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