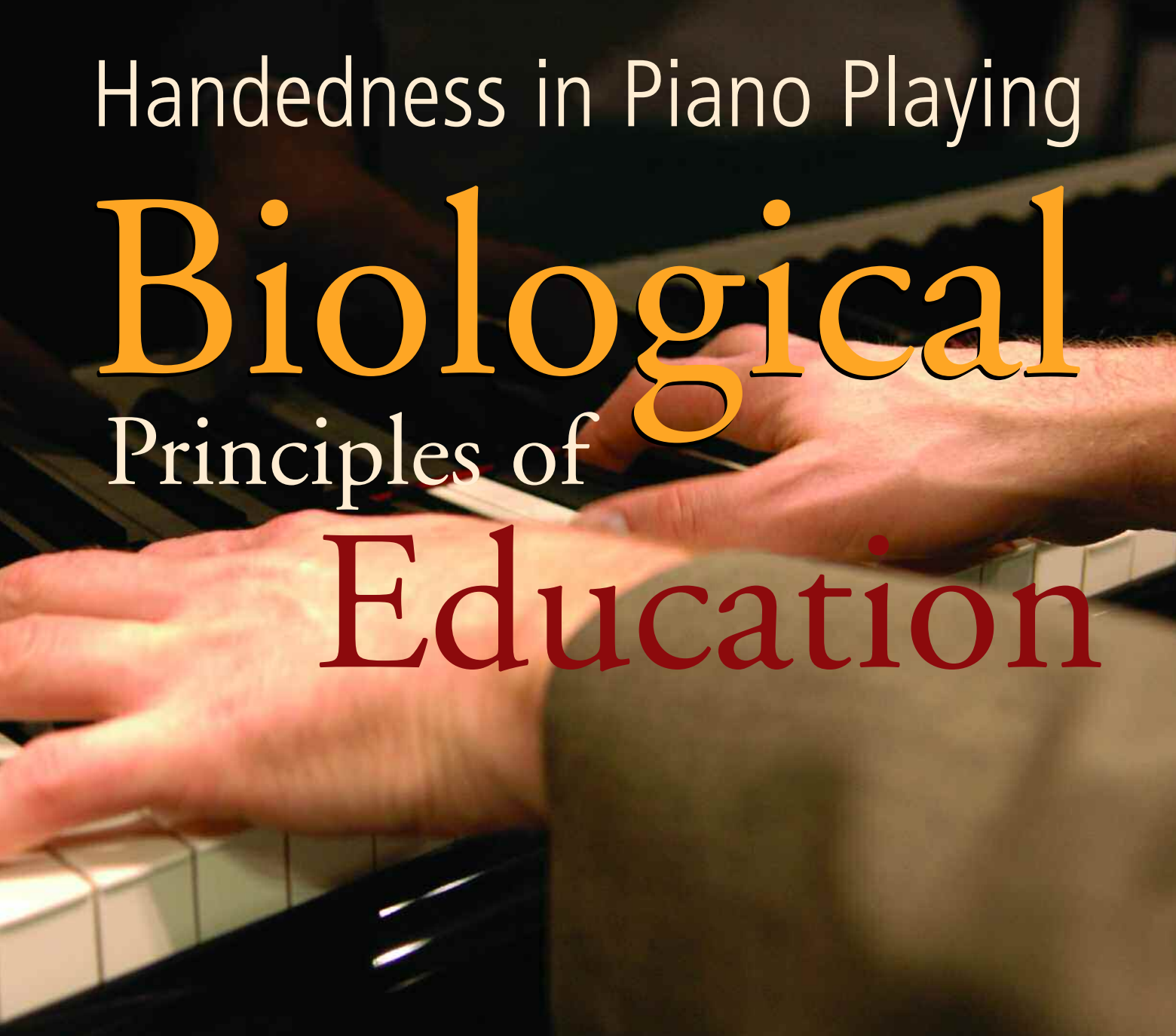


Handedness in Piano Playing

Biological

Principles of

Education



by Linda Minasian

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It is quite amazing that, at least to my knowledge, no studies or research have yet been done regarding the handedness of piano students, a study that can show whether approaches to teaching a left-handed child will be more beneficial to the child's progress in piano playing.

At one point, I had seven left-handed piano students: ambitious, intelligent and all with a wonderful sense of humor. The remaining 20-some students in my studio consisted of right-handed pupils. Being right-handed myself, I needed to understand the fascinating brain function of my left-handed students to help them achieve the best results in their studies, without imposing the same learning techniques used for the right-handed students. More importantly, I needed to bring out their strengths: their superior memory, their ability to see the whole concept at once, their courage to always take up the most difficult challenges and their sense of perfectionism, among others.

The one similarity that all seven students shared was the difficulty feeling a steady beat and understanding the concept of rhythm. Of course, rhythm is a difficult issue for all students: young and old, beginner or advanced, or in individual or group lessons. However, it took me a few months to make a connection and realize that all seven, who were beginning students at the time, truly struggled though the concept, much more than the others. Keeping a steady beat seemed to be very difficult. Playing or clapping with the metronome was almost impossible. After speaking with their parents, I found that some had quit their dance lessons prior to taking up piano, specifically because they were unable to keep a beat or coordinate the dance moves with the rhythm of the music.

The frustration on their faces initiated my quest for some answers. It was apparent that using the same teaching methods as I did for right-handed students did not provide the same results. My research led to some behavioral studies and then to the causes for handedness, which, in turn, led to the dominance and the specific function of the brain hemispheres. The left hemisphere, dominant in the right-handed person, is strong in logical reasoning and counting; whereas the right hemisphere, dominant in the left-handed person, is strong in creativity and artistry.

Keeping track of time and sequenc-

ing one thing after another is left-*brain* thinking, and not suitable for left-*handed* students. I learned not to ask students to try to *feel* the pulse; using the metronome is also not recommended. Not only is the sound painful to the supersensitive ears of left-handed children, but it is meaningless. Instead, have them close their eyes, relax and listen as you play through the piece a few times. Ask students to visualize themselves walking to the beat of the music. Then ask them to literally walk around in your studio to the beat as you play. Then, ask them to repeat what they heard on the piano.

I was determined to make rhythm second nature to these left-handed students. Without cutting down on other activities, our main focus and concentration became rhythm. Knowing that patience, more attention and a different approach was required, made the lessons much more enjoyable. Also, the pacing of the lesson time was now predetermined. I knew, for example, that a rhythmic game that usually takes five minutes of lesson time can take up to 20 minutes, if not more, with the left-handed child. I learned, for example, not to use counting. Instead, I improvised with colorful beads, using different shapes and sizes to demonstrate rhythmic values.

The frustration was replaced with fun rhythmic assignments and games, and both my students and I gained a healthy sense of accomplishment. All seven are now lower-advanced students and rhythm “experts.” Rhythm and meter have now become second nature to them, as I had planned, and I don’t believe even one remembers the early frustrations with counting.

In *Right-Brained Children in a Left-Brained World*, Jeffrey Freed writes, “The best curriculum for the right-brained (left-handed) child includes hands-on and experiential activities.”¹¹ Piano playing is a hands-on activity and requires creativity and imagination, all of which are strong points in left-handed children. Later in the book, it is recommended that music, and more

specifically piano playing, can dramatically affect the left-handed child’s spatial-temporal reasoning. Gordon Shaw, at the University of California, Irvine, explains, “when playing the piano, you are seeing how patterns work in space and time.” For example, his ongoing research shows that within only a few months, students who take piano lessons score 34 percent above average on reasoning skill tests.

However, we need to apply a different teaching technique for left-handed students to better suit their learning style. Through the years, I have experimented with several approaches and the following methods have led to positive results.

- One way to expand the student’s interpretive expression is by having her write a story about the piece, starting with a title (if it’s not program music), then sentences for each phrase, sometimes even words for each note or chord. I tried the same with my left-handed students, nothing happened. Although they all possess vivid imaginations, they responded with a surprised, “What do you mean?” or “I can’t think of a story.” Instead, ask them to draw a picture or simple sketches and they will gladly comply. Their greatest virtue is drawing and creating, not writing and talking, according to Linda Silverman, the pioneer of the Visual Spatial Learner concept. Remember that they may be naturals at art, music or problem solving, but not in story telling. Coloring is also extremely effective when teaching musical phrases and expression. Not only does it make the written music beautiful and fun to look at, but is immensely beneficial for both right- and left-handed students.
- A left-handed student responds better to visual, rather than oral directions. He will learn easier once an idea is demonstrated. Instead of giving a logical explanation, play an idea, phrase, rhythm or so on, and left-handed students will respond better to your expectation. Avoid long oral directions. If, however, you

need to give directions, keep them less than three steps. Then remember to wait a few seconds before asking the student to demonstrate. The left-handed student needs time to visualize the concept in her head. In his above-mentioned book, Freed indicates: "Your words shape as pictures in their head, before they process and retrieve the information."² If you need to know how much time is required for this process, Freed suggests looking at a picture on a wall and explaining it to someone in words. Think about the amount of time it takes for you to complete the task, then give the same amount of time to your student to process the information.

- For the same reason, flash cards are, to an extent, useful for the visual learner because they help him see and memorize concepts. But, they could also be a nightmare because the student is expected to give the answers quickly. Left-handed visual learners cannot be rushed. Give them ample time to think, that is, to visualize the question then the answer in their heads.
- **Avoid repetitions and drills.** Not only do left-handed students detest repetition, but also no improvement is achieved through reiteration of the same passage. Frustration and embarrassment are the only two results. This becomes extremely hindering, since the major ingredient in learning to play a piece is repetition. But, we need to respect and act upon each learning style positively.
- **The left-handed student is a whole-to-part learner, whereas the right-handed student is part-to-whole learner.** Traditional teaching encourages the latter. We like to teach in steps, but this approach will work for only right-handed students who learn and digest information sequentially. Logically, they need to understand step 1, before going to step 2. We also learn to play pieces in steps; we learn each hand separately, work on the rhythm, coordinate hands and work on small sections until the piece

begins to shape up. This approach should not be imposed on left-handed students, who are considered holistic learners. It means they prefer mastering large concepts first, then going back and working on the details.

- **Left-handed students thrive on complexity.** More than once, I have given an easy piece, which to my utter astonishment, they struggled through. Yet, they prepare a difficult piece with a grin on their face, and take pride in telling me, "Oh, this was easy." What a treat!
- **Left-handed students' dreamy demeanor can easily be misunderstood as inattentiveness, their frustration as carelessness.** They are perfectionists with an enormous desire to succeed, and be the absolute best at everything. Do not force the left-handed student to try a new piece in front of you. The concept of trial and error is unacceptable to them. For the same reason, the student might refuse to play a piece, mainly because she knows she will not do it perfectly.
- **The supersensitive left-handed student needs encouragement.** Be generous when praising your student. Instead of pointing out a mistake, simply play the passage in two or three different manners; the correct way, then incorporate the student's error *without pointing it out*, then play a third option incorporating a different mistake. Let the student solve the problem by finding the correct interpretation.

The first question I now ask during the initial meeting is the student's handedness. This clarifies the strengths and weaknesses of the child, which in turn helps plan the lessons better and determines the possibilities of expectations.

Scientific facts have clarified quite a few issues for me; however, I still have many unanswered questions, including the concept of technical finger exercises, such as Hanon or Czerny, which I start during the upper-intermediate level. Besides discussing the proper hand/arm/wrist movements, I insist that students practice each hand sepa-

rately, since, if the exercise is always practiced hands together, the left hand merely imitates the right hand movement in the right-handed players. Therefore, to gain independence and strength, the left hand needs to be practiced alone. So, my logic anticipated the reverse in the left-handed students. That the right hand would imitate the left if practiced hands together, and the left hand would be the strong hand. But, to my utter surprise and disbelief, it was again the right hand that dominated in the technical exercises, and it was the left hand that showed weakness and submission to the right hand. Although it is believed that in extreme right-brained children neural circuitry does not establish a good connection between the brain and hand, creating difficulties with fine motor skills and problems with handwriting, in time, these brilliant students develop incredible finger dexterity. Both Howard Gardner³ and Jan Ehrenwald⁴ confirm that through experience and advanced musical training, musical skills gradually shift from the right to the left hemisphere.

Piano pedagogy is a complex science. Yet, the pedagogical approach often times is focused only on generalizations. There are not two students that can be taught alike, progress at the same pace or react similarly to a stimulus. What makes pedagogy a challenging and fascinating field is the differences between children. As piano instructors, we have the luxury to spend one-on-one time with students, boost their self-confidence and custom design our teaching strategies, to create a unique setting for each child. ☺

NOTES

1. Jeffrey Freed, *Right-Brained Children in a Left-Brained World* (New York: Simon & Schuster, 1997).

2. Ibid.

3. Howard Gardner, *Artful Scribbles* (New York: Basic Books, 1980).

4. Jan Ehrenwald, *Anatomy of Genius* (New York: Human Sciences Press, Inc., 1984).

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