

Essential Skills

for Promoting a Lifelong Love of Music and Music Making

PART 2 OF 4

Introduction

BY GAIL BERENSON, NCTM

Consider the feelings you have when a performance has gone well and you've really connected with the audience. Successful at projecting your excitement and love of a composition to the audience, your face is flushed, your heart is beating fast and every inch of you feels alive. Those same emotions also can result from giving an exhilarating lesson. We teach and perform because the love of music has transformed our lives.

We all wish our students a lifetime of joyous music making, yet, in spite of our best efforts, countless students suffer injuries that prevent them from reaching this goal. A medical subspecialty has arisen in recent years to help performers in all disciplines regain the ability to practice their craft. Performing arts medicine is a growing field with, sadly, more than enough injured performers to fill the practice.

Although medical professionals can be very helpful, there is even better news. Musicians also are getting onboard, taking control of their destiny by becoming better educated about ergonomics and injury preventive techniques.

The National Association of Schools of Music (the national accrediting body for music schools) now is mandating the inclusion of wellness information into the music curriculum of music majors. Music schools have begun to include information to help music students learn how to maintain their physical and psychological well-being. As students begin their careers, they will pass this information on to their students, creating a vital link for wellness.

In technique, as in most things, an ounce of prevention is worth a pound of cure. For music teachers, this means teaching ergonomically correct, pain-free movement techniques from the very beginning of study. Developing a healthy technique has been the passion and life work of Barbara Lister-Sink, the author of this article. She offers *AMT* readers invaluable information we hope you will find beneficial enough to integrate into your own teaching and performing. Barbara lists some wonderful resources in her article for further investigation.

Developing the Fundamental Skill: Healthful, Injury-Preventive Technique

BY BARBARA LISTER-SINK

As I write, a colossal earthquake has disturbed the earth's rotation; a tsunami, as well as war, bizarre weather, famine and disease, has destroyed untold lives. Our planet, this resplendent blue, green and white sphere, is traveling in a vast universe while tragic events unfold, impossible to ignore.

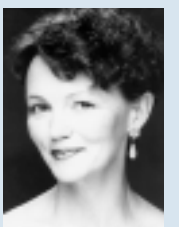
In the face of global chaos, why even write about such a relatively insignificant topic as a healthful, injury-preventive technique? Why, indeed. Because music has sustained us through the worst—and best—of times, since the dawn of humankind. Members of a global community, musicians have always been citizens of the world, peacemakers, bridge builders and healers. Technique is the absolute foundation upon which our music-making rests. Lacking that essential foundation, one risks losing the ability to make music freely and to serve humanity effectively. We also suffer the devastating effects of losing our own musical "voice," as one keyboardist poignantly describes:

"As a young child, I was forced to pull my fingers apart to develop a bigger span and to raise high, curled and tight fingers to develop independence. Technique was just about fingers. When I

started practicing more in music school, I developed an injury and couldn't even do daily activities. Not being able to play the piano was devastating. The loneliness and sense of isolation and defeat were overwhelming. I thought of quitting school and the music profession altogether."

This should never have happened, but it does happen to musicians on a daily basis. Surveys consistently reveal that 50 to 75 percent of musicians have suffered playing-related discomfort, pain, injury or dysfunction at some point in their musical lives. That rate of injury is equaled only by misconceptions, ignorance and misinformation regarding

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technique. As a result, numerous talented and dedicated musicians collide with a wall of pain, injury and dysfunction. Many who never will suffer injury may diminish their potential as fully expressive musicians for lack of a healthful technique.

The good news is that the information and knowledge needed to build a healthful technique, and even eradicate injuries, are available. The fields of music medicine and technology have added scientific validation to successful pedagogical approaches, past and present. Articles, books, videos, websites and workshops on injury-preventive technique abound. However, it is a daunting task to sift through and organize this information for one's own teaching and to discover the commonalities among so many sources.

Someday soon, this formidable challenge may be met, I believe, through a collective, national effort to define the principles of healthful technique; to develop reliable methods for producing replicable, consistent technical results; and to disseminate this information in an understandable, appropriate manner to all musicians.

■ TECHNICAL TRUTHS

Collective technical wisdom from teachers and methods, both past and present, can be summarized in certain fundamental “truths.”

- **Technique is the means by which we make music, and the very foundation on which we build our music making.** It is not *what* we play or sing, but *how*.
- **Healthful technique is the best coordination of the whole body, directed by the mind, with the instrument.**
- **Healthful technique must be based on sound biomechanical principles.** This will eliminate confusion or disagreement and ensure accurate, reliable and consistent principles for future generations of musicians.
- **Technique based on sound biomechanics serves individual artistry and all stylistic requirements.** Historically, musicians have believed that a standardized technical approach would dull artistry and not serve all styles. Sound biomechanics facilitate style and enhance individual musicianship.
- **Technique, as physical coordination, must be taught through the senses—kinesthetic, tactile, aural and visual—in a hands-on manner, from the simplest to the most complex coordinations.** Athletes are taught their technique, or “basic form,” in such a way.
- **Healthful technique is injury-preventive.** Discomfort, fatigue, pain and injury are unnecessary and result from inefficient body use and mal-coordination. As injury-preventive technique becomes more widespread, the need for medical intervention will diminish.
- **Healthful technique is a skill, not a talent, and all musicians have a right to acquire it.** Conceivably,

future students and their parents will be aware of this truth and request such a technique.

- **Healthful technique is greatly influenced by holistic health**—physical, mental and emotional, as well as ergonomics—the condition of one's instrument and the comfort and safety of one's work environment. Teachers must educate students, parents, administrators and vendors about the importance of quality instruments, ergonomically sound chairs, adjustable benches and pleasant, acoustically healthful practice areas.

■ FUNDAMENTAL COMPONENTS OF A HEALTHFUL TECHNIQUE

The following are some general guidelines and exercises for developing healthful, well-coordinated technique in all instruments, as well as information and resources to aid in the quest. These guidelines are not specific to every instrument, but are a starting point for building the subtle and complex coordinations appropriate to every instrument.

Playing an instrument or singing should be an exhilarating, not a debilitating, physical experience. Developing such a healthful, injury-preventive technique for any instrument requires the following:

- Kinesthetic awareness
- Efficient muscle use
- Optimal skeletal balance and alignment

Kinesthetic Awareness

Kinesthetic awareness is the key to a free, healthful technique. It is the sixth, and largely forgotten, sense. It informs a person of movement and the state of his or her muscles. Traditionally, technique emphasizes movement alone. But equally important is the ability to sense the degree of muscular contraction. Kinesthetic awareness gives one this ability.

Efficient Muscle Use

Every instrument has certain muscular requirements. One must determine the minimum amount of muscular use needed to achieve the maximum artistic result. Efficient muscle use—using the right muscles at the right time with the right amount of contraction—allows one constantly to refresh the muscles, avoid fatigue, listen to oneself and be in control of the entire experience. It also allows the joints to be sufficiently stable when supporting weight and free while moving.

Optimal Skeletal Alignment and Balance

Optimal skeletal alignment and balance are essential in allowing the various systems of the body to function well. A human's skeletal design balances strength of support with flexibility of movement. The head/neck/spine relationship is especially important for healthy neuromuscular functioning. There is a global epidemic of head, neck and back imbalances. These create chronic muscular tension and pain and lead to numerous debilitating neuromuscular and

musculoskeletal conditions. Given the enormous demands on musicians, any skeletal imbalance or excess muscular tension depletes energy and undermines the ability to function at one's best.

■ FOUNDATIONAL STEPS

A step-by-step approach is sound pedagogy. If a student's technical development is sequenced and sufficient time is allowed to master every coordination, from simplest to most complex, he or she will build a strong, reliable foundation. The following steps will:

- Increase kinesthetic awareness, help release unnecessary tension and prevent the accumulation of chronic tension
 - Promote balance, good alignment and flexibility
 - Help lay the groundwork for the more complex and subtle coordinations required of each specific instrument
- Every step can be adapted to all levels and ages.

Step 1. Develop Kinesthetic Awareness—The Key to Technical Freedom

Healthful technique requires mastering movements and sensations in increasing complexity. Kinesthetic awareness is the most powerful tool we have for mastering any coordination. Without it, a musician cannot progress well technically and inevitably will develop harmful, unnatural body-use habits. Animals, babies and very small children are especially kinesthetically sensitive, but we begin to ignore this essential sense even by the kindergarten years. The results are chronic muscular tension and skeletal imbalances. Kinesthetic awareness helps release unnecessary tension and restores skeletal balance throughout the body.

Exercise for Developing Kinesthetic Awareness

1. Allow the world to become your practice room.
2. Be aware of your body throughout the day in all activities—eating, driving, talking, typing, walking and so forth.
3. Pay attention throughout the day to your breathing and allow it to deepen.
4. Pause frequently and simply ask: how little muscle tension and movement do I need to do this activity well?

Step 2. Understand the Whole Body Mechanism—How it is Constructed and How it Works Most Efficiently

A rudimentary understanding of basic biomechanics, even for younger students, is enormously helpful for developing good coordination. We play our instrument with the whole body, not just the hands, fingers, arms, mouth or vocal chords. Each beautifully fine-tuned system—sensory-motor, musculoskeletal, cardiovascular, neuromuscular and so on—is related to all others. Appreciation and knowledge of this interdependence is the critical first step towards building a healthful technique.

For the busy teacher, performer or older student, attending Alexander Technique, Feldenkrais and Body Mapping workshops or taking lessons given by certified instructors, is the most efficient route to kinesthetic awareness and healthy functioning. They stress both the sensations and feelings of good coordination, as well as the biomechanical information. If that is not possible, the next best alternatives are the following resources. These books are especially helpful, succinct and engaging for the musician:

- *What Every Musician Needs to Know About the Body: The Practical Application of Body Mapping & the Alexander Technique to Making Music* by Barbara and Benjamin Conable (Andover, 1998). This is a charming but powerfully informative book with humorous and helpful cartoon illustrations and is easy to understand and readable for young musicians.
- *What Every Pianist Needs to Know About the Body* by Thomas Mark (GIA Publications, Inc., 2003). This book and video are excellent for all musicians, but are most appropriate for serious students and adult keyboardists.
- *Somatics: Reawakening the Mind's Control of Movement, Flexibility and Health* by Thomas Hanna (Harper Collins Publishers, 1988). This gives specific, effective exercises for understanding, releasing and relieving chronic muscle tension throughout the body. This book is suitable only for teachers, performers and mature students.
- *How to Learn the Alexander Technique: A Manual for Students* by Barbara Conable (Andover Press, 1995). This is one of the best books for self-instruction in Body Mapping, as well as the Alexander Technique. It is appropriate for mature students, teachers and performers.
- *The Body Atlas* by Steve Parker (Dorling Kindersley Publishing, 1993). A big, beautifully illustrated guide to the human anatomy, it includes colorful drawings that are large, clear and interesting. Explanations are simple and nontechnical. This is a powerful visual tool in building awareness of the “body map” that is suitable for all ages and levels, but especially enjoyable for children.

Step 3. Develop Awareness of Breathing

Breathing is essential to life. Efficient breathing is the musician's foundation for freedom of movement, tone production and natural phrasing. Developing breathing awareness is the first step in establishing that foundation.

Exercise for Efficient Breathing

1. Lie comfortably on your back or sit in a chair.
2. Place a small pillow on your abdomen.
3. Close your eyes and simply focus your attention on your breathing.
4. Be aware of the coolness of the air as it enters your nostrils.

- Notice the gentle rise and fall of the chest wall.
- Notice that as chest wall muscles release air, breathing will slow and deepen.

Step 4. Develop Awareness and Control of the State of the Muscles

Muscle “tension” is defined by some as excess muscular contraction and by others as simply muscular contraction. So, to “play without tension” can be a very confusing phrase. In this context, “tension” means any degree of muscular contraction.

Inefficient technique consistently uses too much muscular contraction of both the appropriate and inappropriate muscles and creates chronic muscular tension. We often erroneously believe that excess tension and movement create and reflect musical intensity and motion. Unfortunately, excess tension and movement can prevent one from truly listening and controlling coordination, sound and musical results.

Exercise for Developing Muscular Awareness and Control

A simple five-minute relaxation exercise can effectively heighten muscular awareness, calm the nervous system, release unnecessary tension and restore balance.

- Lie comfortably on your back, neck supported, in a quiet place.
- Close your eyes.
- Notice your breathing.
- Listen to sounds around you.
- Feel the texture and temperature of fabric against your skin.
- Envision your quiet body as a flowing underground river system.
- Slowly “scan” the body, from the toes to the head, one section at a time.
- Discover the “debris” of unnecessary muscular tension and release it.
- Envision space and eliminate compression within the body.
- Feel the gentle pull of gravity as you release into the earth.

- *The Relaxation & Stress Reduction Workbook* by Davis, Eshelman and McKay (New Harbinger Publications, Inc. 1995). This is a comprehensive and practical guide to various relaxation and stress-reduction techniques. Clearly written and well formatted, it is a valuable resource for all performing and teaching musicians.

Step 5. Understand Healthy Joint Function

Bones spiral and taper to form joints, the basic components of movement. Muscles, tendons and ligaments

surround joints, both to determine direction, speed and intensity of movement, as well as hold joints in place for bones to support weight. Many musicians stress joints through misalignment and excess pressure. Knowing how and when to release these joints is critical to facility, ease of movement and speed.

Exercise for Joint Exploration and Liberation

- Stand balanced, legs shoulder width apart with knees in a “soft” position.
- Notice your breathing.
- Gently explore the range of mobility of each joint, beginning with the toes.
- Count the joints while enjoying their free, unhampered movement.
- Close your eyes and become kinesthetically aware of your joints, where nerve endings are more numerous.
- Discover your “neutral zone” of the wrists and knees. This is the most natural alignment of bones and joints from which we can both support weight and move with the greatest freedom.

Step 6. Develop a Sense of the Spine, Sitting Bones and Core Support

Whether we sit or stand, the spine, with its four natural curves, is the center of our body and comprises, with the brain, the central nervous system. As we breathe, it lengthens and gathers. If we do not have a sense of our core support, we continually compromise our body use. Developing this sense, however, is best accomplished through hands-on work with a certified Alexander Technique teacher. Yoga, pilates, tai chi and dance also can promote core support, but might encourage excessive muscle contraction if improperly taught.

Exercise for Core Support

- Sit on a supportive, slightly padded bench or chair with eyes closed.
- Become aware of your “sitting bones” by gently tilting to each side and feeling the bony “rockers” at the base of the pelvis.
- Center your torso weight over the sitting bones.
- As you breathe, sense the spine lengthening and gathering.
- Free the neck, shoulders, face and jaw of any unnecessary tension.
- Balance the head like a helium balloon on top of the torso.
- Repeat this exercise with your instrument.

Step 7. Understand the Mechanics of Your Instrument

Understanding the instrument you play—how it is constructed, how it functions, how it feels—is often a gateway

to increasing ease and good coordination. If you sense, for example, that a piano key takes only several ounces to stay depressed, you immediately release excess arm tension. If a flutist or trumpet player explores and senses the weight of the instrument or the friction of the keys or valves, then he will realize he does not have to hold his shoulders up to support the instrument, or squeeze and press unnecessarily. When a pianist actually looks at the damper action while pedaling, or watches the hammers strike the string for only a split second, her body will shift to a more kinesthetic, intuitive and efficient mode. It is not only essential that musicians of all ages explore their instruments; it is a lot of fun.

Step 8. Understand How Your Body and the Instrument Work Best Together

At this point in developing a well-coordinated technique, there still remains an enormous gap to be filled between understanding the principles of good, whole-body use and applying those principles to the specific, highly complex and refined coordinations of playing our instruments. Until consistently reliable, easily communicable technical methods are developed for every instrument, we will need to seek a reputable teacher specifically trained in sound biomechanical technique, to lead us step by step through this process. Once we have mastered our own coordination, we can begin to teach it step by step, in enjoyable ways, to our students.

Step 9. Take Time to Master Each Level of Coordination and Awareness

In these hurried and competitive times, one often feels pressured to learn or teach repertoire too quickly, or beyond one’s current level of coordinative skill. Taking time to absorb, digest and master each level of technique, and the music it serves, builds a firm, unshakable and injury-preventive foundation. If this is done, the musician will not bump into a coordinative ceiling or stumble over technical obstacles. And everyone will benefit from the music that flows from such physical ease and command.

BENEFITS OF HEALTHFUL, WELL-COORDINATED TECHNIQUE

Healthful, well-coordinated technique yields numerous benefits. Such a technique:

- Prevents discomfort, fatigue, strain and injury
- Promotes a sense of physical well-being while playing
- Enhances suppleness, speed and facility
- Increases tonal power
- Broadens dynamic range and tonal palette
- Promotes greater concentration
- Reduces performance anxiety
- Keeps us fully available for listening and music making

KINESTHETIC CUES FOR ALL MUSICIANS

Before Playing

- Be aware of breathing.
- Feel balanced on feet or sitting bones.
- Allow spine subtly to lengthen and gather.
- Release unnecessary shoulder and neck tension.
- Release unnecessary arm, hand and finger tension.
- Balance head like a helium balloon on torso.

While Playing

- Use kinesthetic awareness to monitor whole body continually.
- Allow muscles to release at every opportunity.
- Maintain balance and flexibility.
- Be aware of breathing.

Most importantly, healthful, well-coordinated technique allows musicians to realize their full potential as artists. Such a technique will not create artistry, but it will allow whatever artistry exists to flow freely from the musician into the music.

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Resources

Playing (less) Hurt: An Injury-Prevention Guide for Musicians, by Janet Horvath (Janet Horvath, 2002).

The Athletic Musician, by Barbara Paull and Christine Harrison (Scarecrow Press, 1999).

The Musicians’ Survival Manual: A Guide to Preventing and Treating Injuries in Instrumentalists, by Richard Norris, M.D. (MMB Music, 1993).

The Musician as Athlete: Alternative Approaches to Healthy Performance, by Dorothy Bishop and Jude Carlson (Kava Publications, 1992).

BONUS BYTE

Part 1 of the Essential Skills series can be found online at www.mtna.org. Click on “American Music Teacher,” then “Bonus Bytes.”