

# How Can the Skills and Knowledge Called for in the National Standards Best Be Taught?

*Commission Author: Paul Lehman*

Paul R. Lehman is professor emeritus of music in the School of Music of the University of Michigan.

Commission Members:

William Anderson

Ronald Brandt

Kimberly Burns

Willie Hill

Will Schmid

Regina Zakrajsek

Response: Jane Walters

Music makes a difference in kids' lives. It exalts the human spirit. It enhances the quality of life. Since the 1930s it has been taught in almost every school in the nation. Although the quantity and quality of music instruction vary widely, generations of young people have learned a basic repertoire of music and have learned to understand and appreciate music in school. Many students have learned to sing and play instruments, sometimes at a very high level.

Still, the music program that was acceptable in the twentieth century will be inadequate in the twenty-first. Both the nature of society and its expectations for its schools are changing. This chapter will describe a vision for music education in the year 2020. It is not a prediction of what will happen but a summary of what educators should aim for.

Defining a music program for the future involves describing not only the curriculum but also the learners, the teaching staff, the preparation of teachers, and teaching materials and strategies. The expectations expressed here are intended to apply to all students and all schools. They are intended to ensure both equity and quality in music education. Although they may be unattainable in the short term, these expectations are appropriate for a democratic society and, with the necessary political will and public support, are in fact attainable eventually. The auxiliary verb "will" is used throughout rather than "should" to emphasize that this description represents a clear and distinct vision for the future and that these expectations are feasible. The expectations are intended to suggest opportunities and not rigidity or authoritarianism.

## **Background**

The program described here is based on the National Standards for Music Education<sup>1</sup> and on those state and local standards that are themselves based on the National

Standards. These standards seek to ensure that the music curriculum in every school is grounded in high expectations and an optimal learning environment for all students. They reflect the best practices found in current schools. It is these practices that should provide the models for schools in 2020.

The National Standards for Arts Education,<sup>2</sup> which include the National Standards for Music Education, were published in 1994 by the Music Educators National Conference. Developed under the guidance of the National Committee for Standards in the Arts, they were designed to represent a national consensus of the views of organizations and individuals representing educators, parents, artists, professional associations in education and in the arts, public and private education institutions, philanthropic organizations, and leaders from government, business, and labor. The standards specify what every student should know and be able to do in music at the end of grades 4, 8, and 12. They provide a coherent vision of what it means to be educated in music; a foundation for building a balanced, comprehensive, and sequential curriculum in music; and specific assistance in improving the music program. They apply to every student through grade 8 and to every student enrolled in music beyond grade 8.

The National Standards include nine content standards in music:

1. Singing, alone and with others, a varied repertoire of music
2. Performing on instruments, alone and with others, a varied repertoire of music
3. Improvising melodies, variations, and accompaniments
4. Composing and arranging music within specified guidelines
5. Reading and notating music
6. Listening to, analyzing, and describing music
7. Evaluating music and music performances
8. Understanding relationships between music, the other arts, and disciplines outside the arts
9. Understanding music in relation to history and culture

The National Standards were intended as models for states and local districts, and almost every state has now developed standards, frameworks, or statements of expectations in the arts. Although the terminology may vary from state to state and year to year, the concept of standards, expressed as statements of what students should know and be able to do as a result of instruction, will likely continue to exert a strong and positive influence on education in the United States. The term "standards" in this chapter

refers to whatever standards—national, state, or local—provide the basis for the music program in a particular state or school district.

*Sarah, age 14, is beginning her first year at Kennedy High School. Since age 5 she has studied violin and played in school and community youth orchestras. As she enters her new high school, she is fascinated by the variety of small ensemble options that are part of the school's music program. In addition to playing violin in the high school orchestra, she will, at various points along the way, have the option of playing acoustic or electric violin in a mariachi ensemble, a small jazz combo, a string quartet, a rock group, a bluegrass band, a Cajun group, and a blues band. She also likes to sing and looks forward to using that talent either as a soloist or a backup singer in some of these groups. A year ago, when she was in the eighth grade, she had been thinking about dropping out of the music program, but after attending a concert at Kennedy she decided to continue because these options were just too attractive to pass up.*

## **The Nature of Society**

The social conditions that can be expected to shape or influence education in 2020 are described in greater detail elsewhere in this publication. The following conditions are considered of particular relevance to this chapter:

1. The settings in which music instruction is delivered will be more numerous and more varied than ever before, including, for example, charter schools, home schools, for-profit schools, other alternative schools, and distance or distributed learning centers. There will be more opportunities within the community for both students and adults to make music and study music. There will be greater cooperation between schools and other community agencies in coordinating these offerings in order to increase the range of opportunities available and to broaden access to those offerings.

2. The demands placed on schools for improved and expanded services will exceed the availability of financial resources. There will continue to exist a serious mismatch between the expectations of both legislators and the public and their willingness to provide the necessary fiscal support. Because new responsibilities will continually be placed on schools while none are removed, it will become increasingly necessary for schools to set priorities, and the competition for resources will be intense.

3. Although the availability of technology may be uneven and inequitable, its role will be increasingly prominent in every aspect of education. Technology can make virtually unlimited quantities of information available to every student. The dramatic effect it will have on the delivery of instruction will parallel the effect it will have on the nature of music making.

4. There will be great emphasis on interactive and collaborative learning. Ways will be sought for students to work together on group projects to reflect the ways in which

much work is accomplished in the adult world. The important contributions of music instruction to the skills and knowledge valued in business, industry, and the professions will be recognized and emphasized as valuable ancillary outcomes.

5. The student population will be more diverse than ever before in many respects, particularly in the ethnic and cultural backgrounds represented. Each of these groups will seek to ensure that its own cultural traditions, including its own music, have a place in the school curriculum. Schools will be recognized increasingly as microcosms of the society they serve.

Many of these conditions reflect external influences over which music educators will exercise relatively little control. All will affect the content and methodology of music teaching. Music educators must be prepared to meet these challenges and to take advantage of the opportunities they represent.

The teaching/learning process is a complex, interactive process heavily dependent on the context in which it occurs. Good schools require the understanding and support of all segments of society. Education is important to everyone because no other institution has more impact than the school on the economic, personal, and social well-being of our nation and its inhabitants.

*Terrell, age 12, and his mother are selecting his course options for the seventh grade. Although he has always loved music, he didn't choose to begin the study of a band or orchestra instrument in the fifth grade, when the opportunity was offered in school. But now he has found several six-week music modules available in seventh grade that interest him very much. One option is Guitar. He has heard that the students in that class can learn to play both acoustic and electric guitars, and even electric basses. (A neighbor who took the class last year even started his own band with some other students.) Another interesting option is Computers and Music. Terrell had a taste of this in sixth grade and discovered that he could write his own songs and carry out cool multimedia projects. Another option is World Music Drumming. He tried drumming recently with a group at the Boys and Girls Club and did well enough that he was asked to play a solo over the other kids' rhythms. One of his girlfriends has studied African dance, and he hopes that she might take the course with him. Still another option is Keyboard. Terrell admires his church organist as well as some of the keyboard players he sees on TV. Last month a friend taught him how to play the bass line to "Heart and Soul." He thinks that he could learn to play with both hands, and he can picture himself as the center of attention at parties.*

### **The Nature of the Music Program**

The program described here for 2020 will require many changes from typical current practice. Some of these changes can be undertaken by music educators acting individually or collectively. Others will require initiatives for which music educators must depend on other decision-makers. In every such case the need and rationale for

change must be stated clearly and concisely. Music educators must participate actively in the public and professional forums in which education reform is debated, and they must act positively and constructively to preserve and enhance the opportunities for music learning available to the nation's youth.

*Diana, age 8, loves to sing. When she was a baby, her parents sang to her every day. Later they taught her the songs and musical games they learned in their parenting classes. There was an electronic keyboard and a ukulele in their house, and she quickly learned to play her favorite songs on both instruments. Since she was three she has participated in various programs at the Sunrise Valley Child Care Center, where she has regular opportunities to sing, listen to music, and play instruments. People in the area have donated a variety of instruments to the center, and she has recently been teaching herself to play the xylophone with only a little help. When she was seven she enrolled for keyboard lessons with a woman who has a studio in her home. When Diana practices, her performances are uploaded automatically onto her personal Web page, which her parents, her piano teacher, and her school music teacher can access. She is sometimes surprised that her teachers and parents seem to know so much about what she is doing, and she occasionally longs for the "good old days" when, she has heard, parents and teachers didn't talk with each other nearly so much. The man from Keyboards R Us, where her family bought its keyboard, regularly sends her information about new music and new opportunities for learning music at the store and throughout the community.*

The content of the music curriculum will reflect these principles:

### *Comprehensiveness*

The goal for the year 2020 is that every school will offer a comprehensive, balanced, and sequential program of music instruction of high quality designed to achieve the standards and to meet the needs of students. The schedule will provide sufficient time and sufficient flexibility to ensure that every student has access to instruction in music. Students in the middle and high schools will have a wide array of opportunities in addition to band, orchestra, and chorus for participation in music. Although certain music courses may carry prerequisite requirements, access to some music instruction, including performance instruction, will be available to every student in every grade without prerequisites. Small ensembles, including mixed ensembles, ethnic ensembles, and popular music ensembles, will play an important role in the music program. All students will have access to a Web-based learning environment.

Every student will be able to express himself or herself through singing, playing instruments, improvising, and composing. Every student will be able to listen to music intelligently, critically, and knowledgeably, and to understand what is heard. Every student will be able to analyze and evaluate music and to move to music with fluency and ease. Aural skills will be emphasized. Every student will demonstrate an understanding of the relationships between music and the other arts, and between the arts and other disciplines. The best composers in each genre will be encouraged to write music for school use, and the distinction between classical, folk, and popular music will be

increasingly blurred or eliminated. Every student will be able to learn new music independently, and every adult's life will be enriched by the skills and knowledge acquired in the study of music.

Every course in music, including performance courses, will include instruction in creating, performing, listening to, and analyzing music, in addition to focusing on its specific subject matter. The balance will depend on the nature of the course, but every course will include some instruction in each of these skills. The artificial dichotomy between performing and creating music will have largely broken down and the two functions will be seen as intimately related, as they were throughout most of music history.

Technology will alter in profound and irreversible ways the manner in which music is taught and learned, just as it has altered in profound and irreversible ways the roles that music plays in the lives of human beings. Computers, electronic keyboards, synthesizers, samplers, CD-ROMs, and other MIDI devices will enable every student to be actively involved in creating, performing, listening to, and analyzing music without necessarily mastering the traditional prerequisite skills. It is especially important that the media and technology used for teaching music in the school include the media and technology used to produce and experience music outside the school.

*David, age 19, is a sophomore in music education at Reston State University. At last week's lesson he showed his trumpet professor his analysis of the Purcell Sonata for Trumpet, which he is preparing for a recital, and the professor offered a number of helpful comments. This week he asked his music history professor, who plays bass at a local supper club, to help him with the intricacies of the baroque ornamentation. Their conversation led to a stimulating comparison of baroque ornamentation with those used in jazz by legendary players such as Miles Davis. On the Internet David located some background information on the clarion trumpet, for which the Purcell piece was originally written, and he downloaded several period recordings of clarions, including one of the Bach Brandenburg Concerto no. 2. During his wind ensemble rehearsal yesterday the conductor pointed out that one of the contemporary pieces the group was working on is a concerto grosso, a form used by Bach in the Brandenburg Concerto he had just been listening to. David is finding that what he learns in one class can often help in other classes. He is interested in all kinds of music, and he is determined not to erect artificial barriers between the styles and genres of music in his professional life.*

### *Diversity*

Music education in 2020 will reflect the wide range of diversity that exists in the United States. The musical repertoire used in the schools will represent the broad spectrum of music cultures found across the nation and throughout the world. Curriculum planning will take into account the educational contributions of other institutions in the community including, for example, churches, private studios, professional organizations, commercial and for-profit institutions, youth groups, families, and self-instructional media.

Musicians and music institutions of the community will be utilized, when available, to enhance and strengthen the school music curriculum. Teachers, students, parents, studio teachers, community agencies, business leaders, and others will serve as partners in the teaching/learning process. Students in alternative schools, including home schools, will have the opportunity to acquire the skills and knowledge called for in the music standards. Students with disabilities and students with limited English proficiency will have the opportunity, to the fullest extent possible, to participate in music on the same basis as other students. Special programs and opportunities will be available to meet the needs of students who are talented in music.

### *Assessment*

Implementing the standards will require meaningful assessment of the achievement of every student. Student assessment will reflect progress toward acquiring the skills and knowledge called for in the appropriate standards.<sup>3</sup> Assessment will support, enhance, and reinforce learning. Planned before rather than after instruction, it will be viewed by both students and teachers as an integral part of the learning process rather than an intrusion or an interruption of learning. Assessment will be based not on the skills and knowledge that are easiest to assess but rather on those that are most important for students to learn. It will be authentic in that it will be built around the essential nature of the skills and knowledge being assessed.

The assessment of musical skills and knowledge will be a cumulative process continuing throughout the student's career as a learner. Assessment will be broadly conceived, to include, for example, not only assessment by the teacher but also self-assessment, peer assessment, and multiple-teacher assessment. It will include small-group projects as well as individual work, and it will reflect process as well as product. Students will be aware of what they are expected to know, how they are to be assessed, and what criteria will be used to judge their achievement. This information will also be available to parents and other interested parties.

### *The New Curriculum*

In summary, the curriculum to which music education should aspire by 2020 will differ from the traditional curriculum in several important ways, including the following:<sup>4</sup>

1. The curriculum will be conceived not as a collection of activities in which students engage but rather as a well-planned sequence of learning experiences leading to clearly defined skills and knowledge.

2. The music studied will reflect a broad range of genres, styles, and periods, including music from outside the art music tradition, music from the various cultural and ethnic groups that the United States comprises, and authentic examples from the various music cultures of the world.

3. Because of their fundamental importance in music learning, improvisation and composition will be an important part of the curriculum for every student.

4. Learning tasks will emphasize problem solving and higher-order thinking skills and will relate to the world of music as it is experienced outside the school.

5. Although music must maintain its integrity and be taught primarily for its own sake, there will be an emphasis on interdisciplinary relationships and upon the unique usefulness of music in providing a framework within which to teach a wide array of skills and knowledge, especially in language arts and social studies.

6. Electronic technology will be used to individualize and expand opportunities for music learning and to enable every student to be actively involved in creating, performing, listening to, and analyzing music.

7. Every school will develop reliable, valid, and usable techniques for assessing student learning based on explicit objectives derived from the skills and knowledge called for in the standards.

### **The Population of Learners**

Music education will encompass learners of all ages from birth to death. Schools will become community-based agencies providing a wide variety of services, including music instruction, to persons of all ages. Music-making and music study will make a major contribution to the quality of life for every individual and every community.

Recognizing the critical importance of early childhood development, parents, caregivers, and teachers will provide an abundance of high-quality music experiences from infancy through the years of early childhood.<sup>5</sup> Every adult will have opportunities to acquire the skills and knowledge called for in the standards, if not acquired earlier, or to raise those skills and that knowledge to a higher level. New music offerings will be designed to meet the special needs of aging adults.

Preliminary research has shown that music instruction in the early years can have positive effects on the brain functioning of young children, particularly on their visual-spatial ability.<sup>6</sup> Recent studies suggest also that music-making by older adults can minimize the effects of aging and exert a significant positive effect on their health and well being.<sup>7</sup>

These findings, if confirmed by further research, will have enormous impact in expanding the demand for music instruction beyond the traditional school-age population.

### **The Music Teaching Staff**

Music educators in 2020 will need a broad repertoire of skills, knowledge, and experience. They will understand the developmental processes that their students are undergoing, and they will be skilled in diagnosing student needs in music and prescribing suitable instructional remedies. They will be prepared to design and participate fully in a comprehensive and balanced music program. They will themselves possess the skills and knowledge called for in the standards, together with the ability to teach those skills and that knowledge not only to school-age students but also to the very young and to adults, including older adults.

Teachers will be aware of the stylistic differences among the various genres and periods of music. They will be able to use media and technology to compose, notate, perform, and study music; and they will be skilled in planning instruction for students. They will be able to relate music to the larger concerns of society and to teach music in a cultural and historical context.

*Maria, age 4, is enrolled in the preschool program at the Sunrise Valley Child Care Center, which she enjoys very much. She especially likes being able to sing and listen to music every day. She's enthusiastic about playing the recorder and the other instruments that are available to her. She doesn't get to see her grandparents often because they live more than 800 miles away, but she has gotten to know many of the older people who come regularly to the town's Adult Learning Center, where her father works. A group assembles once a week to sing together at the Adult Learning Center, which is near the Sunrise Valley Child Care Center and is managed by the same community agency. Maria likes very much to sing along with them. They know many songs she doesn't, but she's already learned quite a few of them. One of the ladies taught her a song about her cat, Don Gato. She especially enjoys listening to the New Horizons Band, which rehearses weekly at the Adult Learning Center, because they seem to enjoy what they are doing so much. She sings along as they play. She asks questions about the various instruments, and there's nearly always someone around who can answer her questions. She wants to learn to play as many instruments as she can.*

Teachers will have a broad knowledge of assessment techniques and materials in order to select or create the most appropriate assessment strategies for each learning task, and they will be skilled in interpreting and utilizing assessment data for the purpose of improving learning. They will have access to tools that will enable them to assess where students fall along the continuum of achievement for each learning task. Various agencies, including, for example, professional organizations and representatives of the music products industry, will collaborate in the production of assessment materials.

The population of teachers will represent a broad diversity of ethnic and cultural backgrounds. Music educators' concern for diversity will include, for example, attention to differences in learning style, cultural or ethnic background, age, gender, emotional needs, physical needs, and family structure.

Regardless of his or her field of specialization, every music teacher will be able to teach courses open to students lacking the time, background, or interest to participate in

the school's select performing groups. Because oral traditions and aural learning are key to most of the musical styles of the world, awareness of these traditions and facility in teaching them will be essential for music educators.

### *Preservice Teacher Education*

Every prospective teacher will be expected to demonstrate not only the skills and knowledge called for in the standards, including skills and knowledge in improvisation and composition, but also the ability to teach those skills and that knowledge. Teacher education institutions will provide models for integrating composition, improvisation, performance, and analysis in their theory, history, studio, and ensemble classes.

The development of musical and personal flexibility is an important goal of preservice music teacher education. Accordingly, every prospective teacher will be expected to be able to perform in at least one performance tradition in addition to the European tradition, to develop skill in teaching students with diverse learning styles, and to be receptive to new repertoire and new musical styles that reflect changes in the music cultures of the United States and the world.

### *Inservice Professional Development*

New and expanded opportunities for professional development for music educators will be increasingly necessary. Teachers will be expected to update their skills and knowledge on a regular basis to reflect changes in the philosophy and practice of music education. They will be expected to have knowledge of the current styles and genres of music that exist outside the school in order to select the best music from each genre, traditional or new, as appropriate, for use in the curriculum.

## **Materials and Strategies for Teaching Music**

It is obviously unrealistic to expect students to acquire skills and knowledge in music unless they are provided with adequate opportunities to learn. This means not only that qualified teachers and sufficient time to learn must be made available but also that the necessary instruments, materials, equipment, and facilities must be provided. Every school must offer a learning environment in which students have a reasonable opportunity to achieve the skills and knowledge called for in the standards.<sup>8</sup> In many schools this will require an increase in the time and resources allocated to music.

### *Teaching Materials*

The Standards specify what students should know and be able to do, not the methodology or specific teaching materials to be employed. Those decisions are left to school districts and individual teachers. In any given setting some materials will be more effective than others in achieving the skills and knowledge outlined in the standards.

One of the most important principles in selecting teaching materials is that only materials of high quality will be used. All teaching materials selected must be among the best of their genre at that level of difficulty. For every genre, style, and historical period some works are of better quality than others, and, while knowledgeable persons may disagree about criteria, quality is always a basic consideration.

In selecting teaching materials for use in their classrooms and rehearsal halls in 2020, teachers will be guided by the following principles:

1. Materials will be developmentally appropriate for the students. The age, background, and experience of the students are important considerations in selecting teaching materials that will be effective.

2. Materials will be appropriate for the teaching strategy employed and for the instructional setting. Even the best materials may be ineffective when used with teaching strategies for which they are unsuited or in instructional settings where they do not fit.

3. Music repertoire will be varied with respect to genre, style, historical period, and cultural or ethnic origin. This variety is important in helping students to understand the broad and basic role that music plays in the lives of human beings and to realize that there are many different but equally valid forms of music expression.

4. Music repertoire will contain both elements that are familiar to the students and elements that are new and challenging. If there is nothing in the materials that relates to music with which the students are familiar, they will have difficulty understanding the materials and will be slow to accept them with enthusiasm, while if there is nothing new or challenging, the materials are probably of little educational value in that setting.

5. While the music repertoire selected must all be of good quality, the same criteria for selection need not be applied to every work. For example, some works may be chosen because they have withstood the test of time; some may be chosen because they are particularly useful in teaching technique or musicianship; some may be chosen because of their usefulness in teaching aspects of history, geography, sociology, languages, science, or other disciplines; and some may be chosen simply because they are especially appealing to students and audiences.

### *Teaching Strategies*

Like teaching materials, teaching strategies must be developmentally appropriate and suited to both the instructional setting and the content being taught. They must be varied in recognition of the varied learning styles of individual students. Also, they must be sprinkled with new and imaginative practices on a regular basis in order to improve the teacher's effectiveness and to ensure the personal growth and development that lie at the root of professionalism in teaching.

These proposed guidelines are based on the fundamental premise that if teachers use good music, and if they teach it well, students are likely to be engaged and to learn. More important, they are likely to be motivated to continue to seek out and to learn music throughout their lives.

*The year is 2020. Jennifer, age 46, her husband, Brian, 48, and their two children, Laura, 22, and Matthew, 17, all sing in the local Community Chorus cosponsored by the school district and the Adult Learning Center. The chorus, which meets one evening a week, has sung in shopping malls and retirement homes as well as on local access TV. Jennifer played flute in the band when she was in school. She takes pride in her large and expanding collection of CDs, which features folk music from around the world and which provides background music as she works at home in her part-time job designing Web sites. Brian attended a small school that offered little music, but he studied piano privately, he still plays jazz keyboard, and he enjoys listening to a local classical music station during his forty-minute commute to and from work. Laura had been away at college but returned to the area this year to teach first grade in a nearby community. While in high school she especially enjoyed her courses in Latin American music and music technology. She became very skilled in improvising on the wind controller, and a composition of hers received a superior rating at the state festival for high school composers sponsored by the state music educators association. In the undergraduate course in music methods she was required to take, she learned to use the guitar to accompany classroom singing, and she employs that skill to good effect with her first-graders. Matthew, a senior in high school, took minicourses in recorder ensemble and keyboard in middle school and is now taking a course in American popular music. Last year he took music theatre and managed to sing in the school musical while also playing in a citywide soccer league. Although Laura and Matthew have had many more opportunities than their parents to study music in school, music plays a very important role in the lives of the entire family. The Community Chorus provides an opportunity for them to participate in music together, and they are enjoying it enormously.*

## **The Challenge**

This chapter describes a music program for 2020 characterized by universal access to instruction, a comprehensive curriculum, an adequate learning environment, utilization of community resources, and continuous inservice teacher education.

The music program outlined in the standards and described further in this chapter can play an essential role in providing a rewarding and satisfying life for every man, woman, and child in the nation. It can truly enhance the quality of life for every individual—but only if it is implemented. Implementing this program will require the cooperation and support of all who value the arts and all who share a commitment to providing a high-quality education for every young person in the United States.

## Notes

1. Contained in *National Standards for Arts Education* (Reston, VA: Music Educators National Conference, 1994) and in *The School Music Program: A New Vision* (Reston, VA: Music Educators National Conference, 1994).

2. Consortium of National Arts Education Associations, *National Standards for Arts Education* (Reston, VA: Music Educators National Conference, 1994).

3. For suggestions, see *Performance Standards for Music: Strategies and Benchmarks for Assessing Progress toward the National Standards, Grades PreK-12* (Reston, VA: Music Educators National Conference, 1996).

4. For further information, see *The School Music Program: A New Vision*, 1-7.

5. Standards for music in prekindergarten (ages 2-4) are not included in the National Standards for Arts Education but are found in *The School Music Program: A New Vision*, 9-12.

6. See John W. Flohr, Daniel C. Miller, and Diane C. Persellin, "Recent Brain Research on Young Children," *Teaching Music* 6, no. 6 (June 1999): 41-43, 54.

7. Ted Tims, "The Impact of Music on Wellness," unpublished paper, conference on "Music Medicine: Enhancing Health Through Music," sponsored by the School of Medicine and School of Music, University of Miami, Miami, Florida, 23-24 April 1999.

8. For further information see *Opportunity-to-Learn Standards for Music Instruction: Grades PreK-12* (Reston, VA: Music Educators National Conference, 1994).