



# NEWSLETTER

Gordon Institute for Music Learning

## Summer Seminars a 'Hit'

*GIML to Sponsor Three in '92*

by Mitch Haverly

In response to such a successful debut, this coming summer GIML will sponsor three summer seminars over a two week period. The sessions will again be held at the Conference Center in Rensselaerville, New York. This truly unique facility is located on a farm and nature preserve near an historic village twenty five miles southwest of Albany, the capital of New York State.

The opening Seminar on Music Learning Theory will again be taught by Dr. Edwin Gordon and will run from Sunday, August 2nd through Friday, August 7th. The second week (August 9th through 14th) will consist of two seminars focusing on the application of Music Learning Theory. Beth Bolton and Robert Harper will present a five day session on Classroom Techniques, while Richard Grunow and Christopher Azzara will conduct a seminar on Instrumental Techniques.

In August of 1991 the Gordon Institute for Music Learning sponsored its first Summer Seminar on Music Learning Theory. Held on the grounds of the Conference Center in Rensselaerville, New York, the five day seminar was taught by Dr. Edwin Gordon. The seminar followed the format of the successful series of Music Learning Theory Seminars held at the Sugarloaf Conference Center in Philadelphia during the 1980's. A total of twenty five participants were in attendance, twelve of which were commuters from the Albany-Schenectady area of New York State.

When surveyed, seminar participants gave exceptionally high praise to the instruction and course content. Accolades were also received for the Conference Center accommodations, especially the meals. If anything was wrong, it was the fact that the food was too good and that there was too much of it.

Since both of these second week seminars will meet simultaneously, no one will be able to attend both. All of the clinicians are certified by the Gordon Institute for Music Learning, a fact that may not always be the case nationwide (see "President's Corner" in this issue).

The registration fee for each seminar will be \$150. Additional expenses will be in the form of room and board. Both on campus and commuter packages are available. Limited scholarships have also been made available through GIML. If you are interested in more information about the Summer Seminar Series, please contact:

Mitch Haverly, GIML Summer Seminars  
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### Dr. Edwin E. Gordon *Mapping The Evolution*

by Harry Semerjian

If you were continually short of breath and consulted a physician who suggested a session of bloodletting, wouldn't you leave immediately and consult another? If you were planning the shortest trip over the best roads, would you use a map dated 1950? The work of Edwin Gordon is helping us, as music educators, to avoid the educational equivalent of processes such as ancient bloodletting and the use of outdated maps. Edwin Gordon has spent most of his adult life researching

what the process of learning music entails. This body of knowledge is neither cast in concrete nor etched in steel. Rather, it is knowledge that is continually evolving, developing, enlarging, and extending. Dr. Gordon has made his recommendations to music educators based on the best evidence at a particular time. Let us examine the landmarks in Gordon's remarkable journey to date.

Sid Weiss was one of Gordon's first string bass teachers who encouraged

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### Implementing Music Learning Theory In the William Floyd School District

by Robert Harper

Knowing that it was probably a common reaction did not make it less frustrating. After being introduced to Dr. Gordon's Music Learning Theory (MLT) at a summer seminar, I was confronted at the seminar's conclusion with what many others face—how to actualize MLT in the classroom. It was like being given the proverbial keys to the kingdom and having no idea where to find those golden gates to unlock, through which I might lead my students to greater music understanding.

When I returned home, I immersed myself in reading, for a thorough knowledge of MLT is essential before attempt-

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## ...toward the new millennium

The Gordon Institute for Music Learning will celebrate its fifth birthday in June of 1992. I guess that places us in the latter stages of "toddlerism." It would appear that we have survived the first three years of our existence fighting the disease of "hyper-impetuosity" (otherwise known as "washed out bridge syndrome"). We knew where we wanted to go, and we wanted to get there yesterday. However, we were unsure of just how to get there.

In the past two years we have gained strength in our young legs and have begun to travel a different road. Armed with a new sense of purpose, we have redefined our focus and outlined what we believe are realistic goals consistent with that focus.

We must now begin to look beyond ourselves and beyond the present. We must chart a course for the future. GIML can point with pride to its recent accomplishments. But we can not stand still while the train pulls out of the station. Our efforts must become part of a larger vision - one that will take us to the next century and beyond

Your Board of Directors has begun a

campaign to focus more attention on GIML and Music Learning Theory. We have also begun, in earnest, the project of establishing a school. We are investigating the purchase of an existing structure with renovation potential.

Why a building? With a building, GIML will have the opportunity to teach seminars year round, including weekend sessions. The extension of this is to one day be in a position to "license" music teachers as Music Learning Theory specialists. The Institute is also interested in teaching children's music classes afternoons and weekends; as well as sponsoring continued research in Music Learning Theory and related fields. A building would greatly enhance the realization of these goals.

How do we get there? We will need your help. There are several ways in which you, as members of GIML can assist us in our mission. As members, let me encourage you to renew your membership when it comes due. Also, actively seek new members to join us. It amazes me to find out how many interested persons are attending conference sessions

and attempting to use Music Learning Theory in one way or another, and yet are not members of GIML, the organization that can help them the most. If everyone would sign up one new member, we would instantly double our membership. The increased membership would provide an important increase in our operating revenue. As members, you can also encourage colleagues to attend our seminars. Increased attendance not only provides more revenue, but it also provides even greater justification for the building itself.

In addition to "spreading the good news," there will eventually come a time when we ask for your increased financial support more directly. We can not say for certain when this may occur. Much ground work still needs to be done. However, this is an exciting time for us at GIML. We believe that we have the vision and the resolve. We hope you "catch the spirit" and continue to be a part of this wonderful journey into tomorrow!

-Mitch Haverly

## The Case For Certification

This needs to be said again and again! It can not be said enough! It has come to my attention on numerous occasions that there are people who are using and EVEN TEACHING Music Learning Theory who have never been to a seminar taught by a certified clinician from the Gordon Institute for Music Learning! Perhaps these persons are doing an excellent job, but one can not be sure without some method to verify their knowledge and skill.

Two years ago, the Board of Directors voted to certify teacher/clinicians who use Music Learning Theory and present seminars on the subject. If a seminar clinician has been certified by GIML, it can be reasonably assumed that the person at least has a good working knowledge of Music Learning Theory and possesses the skills to teach it. This is an area that we at GIML feel is crucial to the success of Music Learning Theory. One

of our goals for the future is to develop a definite licensing procedure to try to maintain quality and consistency of instruction.

If you have ideas or comments about the subject of certification and/or licensing, please let us know. You can write to our main office at Temple University or directly to me. We would appreciate your input.

-Mitch Haverly

**T**he Gordon Institute for Music Learning is a non-profit organization dedicated to advancing the research in music education pioneered by Edwin E. Gordon. The broad purpose of this Institute is to ensure that Dr. Gordon's work realizes its potential to serve as the foundation for future research and to revitalize music education for generations to come. The Institute supports research into how individuals learn music through research in teaching teachers, in teaching parents, and in teaching students of all ages.

The newsletter is published biannually and is sent to all members of the Gordon Institute for Music Learning. The basic membership (which is tax-deductible) is \$20 per year. For further information, contact the Gordon Institute for Music Learning, Temple University, 298-00, 1934 Park Mall #320, Philadelphia, PA 19122. (215) 787-6783

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# Do Music & Math Mix?

by Richard McCrystal

When I meet adults for the first time and they learn that I am a music teacher, they often tell me about a common experience. That is, they once took music lessons, but had no "talent" and so they dropped it. I don't just smile or make clucking noises. Instead I tell them that the fault lies not within themselves (or in the stars), but in how they were taught.

When I ask the instrumental music drop outs if they were taught rhythm using mathematical concepts, or more precisely as arithmetic, without exception the answer is yes. It is true that music was a part of the medieval mathematics curriculum along with astronomy, arithmetic, and geometry, but that was a long time ago. After all, the medieval musicians were academics first, and not necessarily very good musicians. No doubt solving the problem of how to notate rhythm gave mensural notation considerable stature. However, that leaves us with a problem. Why is rhythm still so often taught as arithmetic, and not aurally as patterns?

Following is the typical arithmetic sequence. First you are taught that paragon of rhythm- the whole note. Next you are taught how the whole note can be divided into two half notes, or four quarter notes. In fact, you can keep on dividing the whole note for as long as you have the flags to spare. I was taught to read rhythm this way over fifty years ago. My teacher was taught that way over one hundred years ago. Today I observe beginners still being taught in the same way. No doubt many of them will teach this way well into the 21st century. It's an enduring curriculum of international scope.

Is this arithmetic based curriculum related to how our brains function, and how we naturally learn rhythm? The answer is no. There is a neurobiological theory that describes how the brain is structured, and consequently how the brain functions. It seems to bring into question the teaching of rhythm reading as arithmetic. It is the "Theory of Neuronal Group Selection" (1987) by Gerald M. Edelman (a Nobel Laureate), published under the title Neu-

ral Darwinism.

A lack of time, space, and expertise won't permit a detailed description of such a complex theory. Consequently this discussion will be brief and somewhat distorted. But some discussion can help us begin to think about how we teach rhythm reading in a new light. When reading, remember that the word theory has more in common with theater than with theology! With that in mind, and at the risk of appearing glib, here's an attempt to introduce you to the Theory of Neuronal Group Selection.

First, we need to become acquainted with a few of the concepts contained in

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## **"Why is rhythm still so often taught as arithmetic, and not aurally as patterns?"**

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the theory. Edelman's theory describes the brain's structure as consisting of hundreds of thousands of relatively independent neuronal groups. It's as if the brain was organized as a "confederacy" of neuronal groups (each with hundreds of thousands of neurons). It is important to note that neuronal groups are structurally somewhat differently from each other. That is, although each group contains basic neurons, the "wiring" of neurons is unique to each group. I think of the brain as not one single organ but as a community of interconnected and specialized "mini" brains (neuronal groups). Because neuronal groups are structurally different, they will function differently. The biologist is usually concerned with both structure and function.

Edelman wrote that the central problem of neurobiology is to understand the neural bases of perceptual categorization. Perception is the discrimination of an object or event through one or more of

the senses. Categorization is what is done with perceptions. The organism develops a taxonomy, or classifies what it has perceived. In addition, the organism will generalize (infer) based upon only a few instances of a particular category. That is, based upon a few encounters with a category, one can recognize or identify a great number of related but novel instances of the same category. For example, we all have perceptually categorized dogs from a few early encounters with dogs. When we see a dog we have never seen before, we have no difficulty in recognizing it as a dog. Or, when we see a dog coming towards us and then going away from us, we have no difficulty in recognizing it as the same dog. That's generalizing based upon perceptual categorizations. Edelman added, "This ability of individuals in a species to categorize novel objects in classes is a stunning reflection of the adaptive generalizing power of neural network."

So far we have two major concepts. One is the brain has hundreds of thousands of structurally different neuronal groups that also subtly function differently. The second is perceptual categorization, in which we perceive and classify objects or events that permit us to generalize when we encounter novel instances of the same category.

There is a third concept of importance. It is the process of how structurally different neuronal groups are chosen to categorize perceptions. They are selected in competition with each other by various stimuli. Those that are chosen by particular stimuli become specialized in responding to that specific stimulus. It seems odd, but it's the stimulus that selects the neuronal groups as that particular stimulus brings the neuronal groups into action.

Only a part of brain functions when presented with just a few stimuli. In fact, only those neuronal groups chosen by the stimuli are functioning. That's probably why we use only a small portion of our brains at any one time. This may explain why we all have so many different aptitudes, and why some aptitudes are strong

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# Iowa Tests of Music Literacy

## What is it For? What is Next?

by Edwin E. Gordon

The Iowa Tests of Music Literacy were originally published by the University of Iowa in 1970. At that time, nothing like them existed in the world. To this day, they are unique. Due to financial circumstances, however, about two years ago, the University of Iowa decided not to continue their publication. Because, among other reasons, GIA thought that educators should continue to have access to the tests, a republication and revision became a reality.

The recently completed revision of the Iowa Tests of Music Literacy is different from the original edition in several ways. The reel-to-reel tapes were converted to cassettes, and in the process, technical advances in recording procedures were incorporated; the answer sheets and scoring masks were re-designed for easy reading and use; and the manual was completely re-written and brought up to date.

Each of the six sequential levels of the Iowa Tests of Music Literacy includes two subparts: "Tonal Concepts" and "Rhythm Concepts." Each part includes three subtests: "Audiation Listening," "Audiation Reading," and "Audiation Writing." Norms for Levels 1, 2, and 3 are provided for grades 4 through 12, and norms for Levels 4, 5, and 6 are provided for grades 7 through 12.

Because there are different levels of the battery, the same test need not be administered repeatedly to the same students in order to evaluate growth or periodic standing in music achievement. That increases the reliability of the tests and the validity is enhanced.

All six subtests in one level, including

recorded directions and practice exercises, can be administered in two 45 minute periods on the same or different days. There are two separate answer sheets and one cassette recording, all color-coded, for each level.

Though each teacher and school district will find unique uses for the battery, the Iowa Tests of Music Literacy were specifically designed for the following purposes:

1. To diagnose a student's comparative strengths and weaknesses in six dimensions of tonal and rhythm audiation and notational audiation.

2. To compare a student's achievement in tonal and rhythm audiation and notational audiation with his or her music aptitude as indicated by results on the Intermediate Measures of Music Audiation, Advanced Measures of Music Audiation, and Musical Aptitude Profile.

3. To evaluate a student's continuous growth and sequential achievement in tonal and rhythm audiation and notational audiation.

4. To determine a student's relative standing among other students in tonal and rhythm achievement.

The national norms reported in the Manual for the Iowa Tests of Music Literacy were derived more than twenty years ago when the tests were originally standardized. That was considered not to be a major problem in the revision because experience has shown that school districts prefer to create and use local norms. Interpretations of test results seem to be more

ideographic than normative in nature. Nonetheless, although the differences between 1970 and 1991 norms would probably be found to be insignificant, the development of current national norms might prove to be welcome by some school districts. One reason has to do with state mandated testing programs. Further, an objective music test with standard scores and percentile ranks might offer some credibility to music as belonging to the "basic core" of academic subjects.

One of the purposes of GIML is to conduct and report the findings of relevant and practical research. Thus it is anticipated that the Board will be supporting and directing a national standardization of the Iowa Tests of Music Literacy in 1992. That undertaking will be large, considering that six levels will need to be administered in nine grades.

Anyone interested in contributing to and participating in the research program should contact either Mitch Haverly or Edwin Gordon as soon as possible. Music curriculums in a school do not need to necessarily include music learning sequence activities in order for students to understand and take the tests.

It is anticipated that the development of cross sectional norms will not be the only outcome of the research. Correlations with Iowa Tests of Music Literacy scores with a number of other factors will be investigated. With cooperation and fortunate conditions, longitudinal norms might become a reality. That will truly be a first in music education.

## Understanding Individual Differences Through Improvisation

by Christopher D. Azzara

Much has been written about teaching "the basics" in education. However, perhaps the most fundamental mission of educators is to teach to individual differences, regardless of the subject matter. One of our goals as music educators, therefore, should be to foster the development of independently thinking music makers and active listeners to the extent

that each individual's potential will allow. Improvisation is an important aspect of understanding our students' individual differences and should be at the heart of all music instruction at every level.

Improvisation is to music what speaking and conversation are to language. Individuals improvise daily with language when engaging in conversation. When we speak in language, we express thoughts. Developing improvisation skills in music can be as natural and interactive

as stimulating conversation. Like an individual's contribution to conversation, improvisation in music is generated from an internal source. When conversing, one is thinking about what is being said and about what to say. To understand music, one must think musically. Improvisation skill allows students to express musical thoughts and ideas from that internal source, with meaning. When improvisation is considered in this manner,

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