Discovering Compositional Creativity

It may be true that composition cannot be taught, but it certainly can be learned, and it is learned by discovery. It is learned by discovering that musical ideas can be experienced in a variety of ways, and that new musical ideas can be created by reconfiguring learned materials in new contexts. The act of imagining, defining and communicating unique musical ideas, awakens in young people a dormant part of their brains, unlocking an awareness of the creative energy packed into every musical experience.

Creativity is not a gift bestowed on exceptionally talented individuals who then instinctively produce great works of art to amaze and entertain uncreative minds. No, creativity is a standard part of our human genetic make-up. Actually, it is more than that; it is the quality that most critically defines our humanity, and our destiny as a species. But it is also a technique, a skill that must be developed. What appears to be creative talent is really a disposition to exercise the creative ability we all have in abundance. When employed regularly, creative energy and resourcefulness can grow exponentially, but when left unused, it will fade just as dramatically. Where does this disposition to create come from? Well, in some instances it does certainly appear to be a hereditary gift from the muses, but it is almost always possible to trace it to some environmental stimulation—perhaps the success of a single project that is exciting enough to provide the kindling for a lifetime’s creative fire, but more likely a continuous series
of active encounters with creative thinking, building a cycle in which investing more and more creative energy leads to more and more engaging results.

A young mind’s potential for creative thought can be developed by application in any of the arts and sciences, but I believe it can be argued that since creativity as exercised in the art of music composition involves the highest level of freedom from implied comparisons with representational realism; it is the ideal medium for a young person to discover the delights of making something that is new and meaningful in its own terms. In music composition there is no way a creative work can be judged based on how faithfully the product reflects an object or experience in the real world; a composition can be valued only in terms of how well its ideas engage the listener in music’s own non-referential world.

When a young person invents a melody, he/she is discovering how a particular arrangement of pitches and rhythms creates a special world of relationships and feelings, and a unique way of moving through time. Our brains are hard-wired to react to music in this magical way—only music composition presents a medium for creative expression that is at the same time so simple and yet rich and mysterious. “Do-Mi-So” may be the same pattern as the numbers 1-3-5 or viewed as three ascending dots on a page. But when “Do-Mi-So” is sung or heard or even thought as music it becomes an experience that resonates deeply in some part of our soul in a way that no other medium of expression can match. Sounds that we hear as music are processed and remembered in a way that is very different from the way non-musical sounds are heard. More importantly, musical sounds are almost always perceived in their relationship to a specific articulation of the passing of time. A melody joins pitches and rhythms together in a way that creates a unique and memorable shaping of time. That little package of a “shaped time” experience is always there in the mind of the listener and performer as long as it is remembered,
to be revisited and re-experienced, independent of the events of the real-time world. So a melody ultimately only exists in the minds of its performers and listeners, and occupies a place in the brain and soul where it is embedded more deeply and distinctly than any other kind of human experience.

Music is potentially the most powerful, abstract, subliminal, portable, multi-dimensional, mercurial, and memorable form of art. But in spite of the tremendous expressive power possible in writing music, the experience of composing something meaningful and engaging is readily available to almost any young student who has had the most basic introduction to musical materials.

Music educators are very much aware of how important experiences in music composition can be for their students not only in developing an active understanding of the materials of music but also to establish an identity for themselves as unique creative individuals. Far too often, however, constraints of time pressure along with a lack of conviction about what aspects of composition can be taught and how they might be implemented and evaluated push composition activities to the back burner. I am writing this essay in the hope that with my forty years of experience as an art music composer and university composition professor I can provide some fresh insights about teaching composition and suggest strategies that will allow music teachers to find ways to ensure that experiences in music composition are a regular part of their students’ diet. In a follow-up section, I will give some observations on ways teachers can guide students who have been bitten by the composition bug, and want to continue writing and studying composition on their own.
**Classroom Commissions**

What follows are my ideas about how some experiences in music composition can be implemented in classroom and ensemble situations and the issues to be considered in designing these experiences. I would like to suggest a method of organizing these experiences that I believe could work with a little customizing for classrooms and ensembles from elementary school through high school. My suggestion is that two or three minutes of the “warm-up” period that begins every class or ensemble rehearsal (or at least once a week) use material composed by a student who has been “commissioned” to structure a 10-20 second music experience which fulfills a particular function the teacher stipulates for that warm-up. These “commissions” are made in turn so that every student has at least one opportunity in the course of a year or semester to create out of the very strict guidelines given by the teacher a musical experience that bears the imprint of her/his personal response to the materials employed. Clearly, this requires some thoughtful preparation from the teacher, tailoring the “commission” to the appropriate level of skill and initiative for each student, and previewing the exercise to be sure it functions well for the class. What appeals to me about this proposal is that it provides three basic experiences I believe are of prime importance. First, it gives every student an opportunity to exercise his or her musical imagination independently. Second, it provides a “performance”—hearing how others respond to one’s musical ideas is an essential part of composition. And, third, it involves the class or ensemble in an appreciation of how the materials used can be fashioned into a distinctive musical idea. At the very least, considering this proposal hypothetically allows me to make some observations about how basic concepts of music composition can be practiced at an introductory stage.
Three Stages of Composition

The compositional process can be divided into three steps: (1) Defining the materials and limits; (2) Exploring the possibilities; (3) Making choices and communicating the resulting music through some sort of notation.

Defining the Materials and Limits. The initial step in the composition process, large or small, is determining what materials are to be used and how they will be used. In general, the best thing a teacher can do in assigning a composition exercise is to make the student’s field of choices tightly focused by setting limits that may at first glance seem hopelessly constraining. I believe that anyone from first-graders to doctoral composition students can strengthen their compositional imagination by seeing the kind of engaging ideas and forms they can craft using virtually the same “extreme limits” assignments. To give an idea of how I have used this concept in seminars and master classes, here are some basic composition etudes I find successful with students of all ages:

- Compose and perform a minute-long work for one hand-clapper who claps a steady beat (quarter = 100), by assigning a dynamic level from pp to ff to each note. Make sure the hundred claps of this piece communicate a structure to the listener that includes identifiable patterns that are repeated and developed, some progressive motion leading to a goal, and a moment of surprise.
- Compose and perform on your instrument a one-minute piece that uses only two pitch-classes (for example, only G’s and A-flats) in any octave.
- Compose for MIDI piano playback a two-minute piece using only legato 16th notes at quarter = 120 (960 notes). The only interval permitted is a half-step. No skips, no
repeated notes, no rests. Dynamics may be used to reinforce patterns and shapes, but not to superimpose independent dynamic ideas.

Obviously, even these severely limited studies are far too ambitious to be used as models for the commissioned warm-up compositions I have suggested, but the principle of limitation can be similarly applied.

Let us suppose we are assigning a “composition commission” to a first-grader to be used as a warm-up exercise for her class. Let us also suppose that because of the class’s ability or the teacher’s instructional goals, only the sung pitches “So” and “Mi” should be used. No instruments, speaking, or movement are involved (although these might be considered as compositional elements for some other “commission”). Thus far, the limitations result from the external situation of the performance, a kind of limitation with which composers are very familiar. To limit the field of choices further, it is a good idea to impose some additional constraints specific to this composition exercise. We could say, no repeated notes, and limit the rhythms to four kinds of durations: short, long, very short, and very long. I should explain my belief that in most cases composers, even the most advanced, sophisticated ones, should think of rhythm quantitatively rather than metrically when they are in the process of intuitively feeling and creating their rhythmic ideas. Only after they have decided how their rhythmic ideas sound and feel should they begin the very tricky job of finding the best notation. (This, by the way, is the biggest drawback to using a computer notation program to compose.) Once the limits have been set, we can move on to the next step in the compositional process—discovery and exploration of the possibilities.

**Sketching—Exploring the Possibilities.** The exploration phase of composition is perhaps the most fun and the most “creative” phase of composing, but it is also a stage that rewards a disciplined,
methodical approach to the creative process. One way to get started is to randomly try out various arrays of the available materials to get a sense of their sounds and meanings. Before very long, take a moment to examine these and ask, is there anything possible within the imposed limits that is more extreme or different from what I have been doing?

Looking at the example of the “So-Mi” song commission, it soon becomes apparent that the only element that can be used to create a distinctive idea is rhythm. Rhythm can be used to create patterns that can be repeated, varied, or return after an interruption. It can also be used to create drama and suspense. Once we recognize the wide range of ideas that can be created using arrays of the four rhythmic values given us, we can begin improvising a variety of musical statements, trying out many contrasting approaches to the materials to see how they might feel in the context of a musical phrase.

This might be a good time to consider for a moment the difference between improvisation and composition. We usually think of improvisation as it occurs in jazz, adhering to prescribed chord changes and phrase structures, but improvisation as a composition tool is free from pre-ordained harmonies and phrasing. However, improvisation is rarely totally “free.” It can be very disciplined and sometimes works best when the options are severely limited, like the pitch and rhythm constraints of our “So-Mi” commissioned piece. When we are improvising, we are letting the music flow, more concerned with seeing where the music takes us than remembering where we have been. This feeling of natural flow and spontaneity is something we might want to emulate in our composed music. However, if we stumble upon an idea we would like to hear again, perhaps tweaked a bit to make it more engaging and memorable, we have passed from the world of improvisation to the world of composition. During the exploratory phase, composers spend much of the time with one foot in the improvisation world and the other in composition,
although often the improvisation is only simply imagined in the composer’s head. The composition begins when we try to capture an idea in some way, examine it, and begin to develop some notions about why it sounds the way it does and how we can use it in our piece.

Our job in the exploratory phase is more than just coming up with some good ideas. We also want to identify what things about each idea give it that certain identity, how those things might be exploited or transferred, what function an idea could have in the overall scope of the piece—is it a good ending, a good beginning, something that develops forward motion, a “hook” to establish the piece’s identity, a momentary distraction from the music’s main focus?

All of this thinking may seem far too involved to play a role in our little ten-second first-grader “commission,” but in fact, even in this microcosm some decisions will have to be made, and some criteria for making these decisions should be in place. The purpose of this exploratory phase is to develop some attitudes as a basis for these decisions. So let us try to get a handle on some ideas that might come out of our exploratory improvisations, and see if we cannot respond to them in ways that might inform the compositional choices we will make.

Remember: our “commission” stipulates that we can only use So and Mi, no repeated notes, and four rhythmic durations: long (L), short (S), very long (VL) and very short (VS). Here are “sketches” of ideas we might have discovered in our improvisation.
What kind of response might we have to these ideas? [A] gives us an insistent barrage of “shorts” driving to the long “So” and finally the very long “Mi.” These last two notes (and especially the very last one) feel very important due to their position after the approaching notes.
[B] has a gentle lilting, calling feel, although the last two notes (particularly the final VS) could be felt as a comic surprise. Maybe there are really two ideas here that can be used independently. [C] has a repeated march-like rhythmic groove that reverses the pitch emphasis; the more you repeat this, the more it sounds like the alternating pitch patterns are forming a dialog, or having an argument. [D] has more sweep in its rhythmic pattern than [B] or [C] since there are more short notes leading to the long So’s. Its basic rhythm pattern is less regular than [C]’s, but its pitch emphasis is consistently on So, making it flow more easily than [C] does. [E] is very dramatic, perhaps even a little violent. Beginning with a very long note makes us feel tension and anticipation. The very short notes give us a mini-explosion; the alternate pitch emphasis of the rhythmic repetition creates the dialog/argument feeling we heard in [C].

Making Decisions. Now we are ready for the third and final step in the composition process: Deciding which ideas will constitute the “definitive” version of the work, how they will progress, develop, and relate, and how to assemble all this in a way that most effectively involves the performers and the listeners in the composer’s vision. Although at this stage the composer is spending most of the time fashioning materials already created and developed during the exploratory phase, this stage probably requires the greatest creative energy and the strongest imaginative vision. There is a remarkable experience composers feel when they finally find the fleshed-out versions and contexts for the ideas that held their fascination during the sketching process, hammering out the details of timing, proportions, instrumentation and all the other elements of the sound fabric that bring these ideas to life. On a smaller but still significant scale, the student “commissioned” composer of the “So-Mi” piece can experience that final creative push of drawing from the resource pool of ideas, attitudes, and associations developed during the discovery sketching phase and designing their own specific musical experience.
Every composer would have his own individual way of selecting and ordering ideas from our “So-Mi” sketch inventory to build a ten-second piece. If, for example, we decide that we would like to choose the ordering of our ideas to create a certain kind of psychological structure for our piece, we might think of it in the following way: let us start out with something easy-going and flowing, throw in a little variation to make it more intense, and then end with something dramatic and fun to sing. The sketch we called [B] approaches that shape but needs a little something different in the middle to set up the ending. Borrowing a little from sketch [D] might give us the mini-masterpiece we want to create:

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\begin{array}{cccccccccccc}
So & So & So & So & So & So & So & So & - & - & - & - & - & - \\
Mi & Mi & Mi & Mi & Mi & Mi & Mi & Mi & Mi & Mi \\
\end{array}
\]

This is good, and should be easy for the class to sing while appreciating the engaging, fresh time-shaping experience it creates. The rather fuzzy rhythmic notation given here is probably enough to convey the rhythm to the class, although the teacher may want to hear if the composer is thinking the long-short relationship as 2-to-1 (halves and quarters) of 3-to-1 (dotted-halves and quarters). “Very Long” is probably a fermata--out of time--so the last note needs to be cued. (Maybe the composer would like to conduct that!) In addition, if the teacher has a moment to consult with the composer, the teacher might give the composer license to break the rules and include one of the most powerful elements in music--a moment of silence. Placing a take-a-breath-and-hold-it pause before the “very long” note is the ideal way to set up the dramatic ending.
Defining a Commission

Experienced and imaginative teachers will be able to find ways of implementing mini-commissioning composition projects that are far better suited to their classroom and ensemble situations and agendas than any specific project I could describe. The idea of “premiering” a new composition, however short, for every class or once a week may seem dauntingly unwieldy for large classes and ensembles; fortunately, the one thing that makes it logistically workable is also the thing that makes it a most effective exercise for the composer: keeping it extremely simple and elemental. The materials used in the “commissioned” pieces should be those that are already a regular part of the class or ensemble’s everyday activities, allowing to composer to focus on only one element that can be varied a limited number of ways.

Any chunk of material that the class or ensemble routinely performs as a warm-up or in preparation for performance can provide the raw material. When commissioning a mini-composition from a student the teacher needs only to select something from this chunk—a very short segment, a melodic line, an accompaniment, a rhythmic figure, a short chord progression—and identify an aspect which can be varied—the succession of components, the dynamic shape, articulations, texture (subtracting voices or instruments or sections of instruments), rhythm, or countless other variables. Many of these variables could seem secondary or insignificant in the normal context of things, but when any of them becomes the primary focus and shaping factor, it becomes surprisingly effective. The kinds of variation that may be applied should be listed by the teacher, and the range of variation possibilities should also be explicitly limited. The teacher might also recommend repeating all or some of the material as it undergoes a variation treatment.

The student composer then takes this material, the variables and the limits, and continues the composition process similar to the method detailed above for the “So-Mi” project:
• Sketching out in some way (see “Notation” below) a number of explorations of possible applications of the variable;

• Imagining how these might sound, the impressions they would make, and the roles they might play in the progression of the piece; and finally, based on these observations

• Designing the composition as defined by a specific ordering of the uses of the variable to make a meaningful new time-shaping experience.

I would guess that one large question that might arise at this point is: How will the composer write down the sketches that come to them in the exploratory phase, and much more critically, how will the composers notate their pieces so that they can be performed by the class or a large ensemble? To answer this question, I hope that the notation used in the discussion of the “So-Mi” piece might serve as a model. Instead of So and Mi, letter names can be used to represent the components of the raw material to be manipulated. It is probably better to use the end of the alphabet (W, X, Y, and Z) as labels so as not to be confused with musical pitch names. The “L, V, VL, VS” of the So-Mi piece would be replaced by abbreviations representing the kind or level of the variation process imposing a shape on this material, although traditional music notation abbreviations, such as dynamic markings, could be used as well. For example, if the raw material for a band “commission” is three chords used in a warm-up exercise (we’ll call them X, Y, and Z) and the variable is the dynamic level (ranging from pp to ff) here is the final “performance score” of a piece using a notation system that also would have been used in exploratory sketches:

\[
\begin{align*}
\text{ff} & \quad \text{mf} & \quad \text{mp} & \quad \text{pp} & \quad \text{p} & \quad \text{pp} & \quad \text{mp} & \quad \text{p} & \quad \text{mf} & \quad \text{mp} & \quad \text{f} & \quad \text{ff} & \quad \text{p} \\
Z & \quad Z & \quad Z & \quad Z & \quad X & \quad Y & \quad X & \quad Y & \quad X & \quad Y & \quad X & \quad Y & \quad Z
\end{align*}
\]
All the members of the band would have to be able to read this chart, and they would have to memorize the notes they play for X, Y, and Z. In return, they will have the experience of feeling how the notes and dynamics they play create a distinctly individual, intellectually engaging, emotionally stirring, time-shaping musical experience, crafted by one of their peers. The patterns of this piece are too well put together to have been simply improvised. The opening diminuendo, the slowly building sighing couples in the middle, the surprising dynamic inversion of the last X-Y couple, the final touching quiet chord, the clear distinction of roles assigned to X, Y, and Z—all of this is clearly the work of a composer who has done a lot of preliminary thinking and sketching exploring the possibilities of the given material, and who has envisioned and realized a way of bringing these elements together to make a personal musical statement. This is virtually what the experience of music composition is all about, and it is an experience that I hope can be made available to any student fortunate enough to study music in school.

**Guiding Budding Composers**

Thus far this essay has been concerned with finding ways to provide experiences in music composition to all students enrolled in school music classes. For most, these experiences will be an opportunity to discover some of their own creativity, the joy connected with creating and sharing musical ideas, and an appreciation for the brilliant creative energy we can find in great music. There will also be a few who wish to go beyond that appreciation to create great music themselves. Many of these will want to make music composition their life’s work and intend to apply to college as composition majors. As a member of the faculty of a major university composition department, I see many of these young composers every year. Some have received the guidance that has helped them find the experiences and training that prepared them for
studies at the college level. But an alarming number are very much unaware of the creative processes, organizational skills, and knowledge of music literature that are essential to the study of composition. It is especially puzzling when high school seniors whose SAT scores suggest guaranteed successful careers in medicine or law decide to commit their lives to being a composer, when they themselves cannot name a composer who has not lived in the nineteenth century or Hollywood.

Music educators who encounter budding composers in middle school and high school are in the best position to guide them toward finding the experiences and training they need. Here is a list of bits of advice that should be given to students who want to be serious about the study of composition.

- Find a mentor, preferably a composer who has studied composition at a university and is familiar with the way composition is studied and taught.
- Attend summer composition programs. Often, these are the only places young composers can meet other composers and serious musicians who will perform their works.
- Practice your instrument diligently—aim for the skills of a performance major. Most successful composers are (or have been) accomplished performers.
- Attend concerts regularly. Do not miss any concerts by your local orchestra. If there are local new music groups or college composition departments, make every attempt to hear what living composers are doing.
- Learn music literature. Get to know and love the masterpieces of the past. Look into chamber music and solos as well as orchestral pieces. Find some 20th and 21st century pieces to love. Find some twentieth and twenty-first century pieces to hate—it is good
for you! Your mentor can help you with this. Remember the names of the pieces and composers, both for the pieces you love and the ones you hate.

- Study scores religiously, of both old and new music. Your mentor should guide your score study. I recommend going back and forth between listening and reading, to see if you can hear what you saw, and see what you heard.

- There is a tremendous amount of new music information on the web. If you are planning to enter the world of composition, you should find out what is going on in that world. One great place to start is the American Music Center - http://amc.net/

- Play a lot of twentieth and twenty-first century music. That is the best way to get it in your ear and in your mind.

- Play chamber music. The experience of collaborating with other performers is essential for composers.

And, of course,

- Compose, daily. But avoid long pieces and large ensembles. You will learn much more about composition from writing short solo and chamber pieces than from a large ensemble work.

- Write for people you know, and get your pieces performed and recorded. Record rehearsals of your music and listen carefully to the recordings.

- Think of line and rhythm before harmony.

- Think of gesture and drama rather than boxy phrases and forms.

- Writing composition studies with very limited resources can be the best way to develop your imagination and organization. For example, write a two-minute piece for two suspended cymbals.
• Experiment with various kinds of tonal motion. Avoid key signatures and time signatures when sketching.

• Do not write from left to right. Sketch generously. Sketch only on the front side of the page, and tear the sheets out of your spiral bound notebook. Generate ideas, and then ideas about your ideas. If you are not sure what an idea is, look at Bach fugue subjects and the opening themes from Beethoven sonatas. Evaluate your ideas, determining how they might best contribute to a form.

• Computer notation programs can be a great tool, but can also be dangerously misleading. Write at least half your ideas away from the computer, to be sure it is not telling you how to compose.

• The final copy of your score is probably best engraved on a computer, but be very careful about the score layout, spacing, and other computer default settings that might be illiterate. Use a published score as a model.

• Notice how detailed the scores you study are about tempo markings, dynamics, slurring and articulations (especially 20th century scores). Your scores must have the same amount of detail.

In Closing

Music composition is one of the most thrilling and demanding activities I can imagine. Creating challenging, enthralling new musical experiences for the world is a gift only a dedicated composer can give. I hope the ideas presented in this essay will be of some use to music educators as they introduce and guide their students along the path of discovering the joy of creating their own musical worlds.