A RECIPE FOR MAKING MUSIC AT A NEW ENGINEERING SCHOOL

A RECIPE FOR MAKING MUSIC

OR HOW TO BAKE A MUSIC PROGRAM FROM SCRATCH

(FALL 2001 - SPRING 2009)

Years 1-5

Ingredients:

Year 1 (2000-01). Find and purchase pianos [no students yet on campus]

Year 2 (2001-02). Chamber ensembles, music stands, chairs, practice rooms, BSO student concert tickets [30 students on campus]

Year 3 (2002-03). 75 students on campus. Locate and purchase musical scores, books, CDs, BSO student concert tickets, more practice rooms, a concert piano, humidifiers, de-humidifiers, talented student performers and composers in two performance/composition seminars (Music Performance, Music Composition; Musical Aesthetics and Design), weekly performances for the Olin and Needham communities, OCO—the Olin Conductorless Orchestra (audition required) consisting of violin, cello, oboe, clarinet, bassoon, trumpet, percussion, piano. Master classes at Olin, master classes at Juilliard, performances of music by Beethoven (Gantz '06; Dillon '06), Poulenc (Wieczorek '06), Mozart (OCO), Tansman (Tsai '06), Cabezas '06, Shannon '06, Donaldson '06, Graham '06, Cave '06, and Tsai '06; performances for two Candidates' Weekends (to attract top engineering students who are also excellent musicians); 5 passionate pursuits in music; performances for 'Olin Rising', the inauguration of Richard Miller as Olin's first President.

Year 4 (2003-04). 150 enrolled students, 10% of whom pass the audition and enroll in the Olin Conductorless Orchestra (OCO); another 10% enroll in a music/orchestration seminar—The Wired Ensemble¹—dedicated to the live performance of original student compositions for orchestral instruments and voices; 6 passionate pursuits in music; performances for Family Day, Admissions Open House, two Candidates' Weekends; four concerts of student works, and orchestral works for the end-of-term Olin Exposition; BSO student concert tickets; New England Conservatory student opera tickets. Find and purchase timpani.

Year 5 (2004-05). 225 enrolled students with 40 students on junior term away. 14 students in OCO (junior semester abroad claims 4). 17 students in Wired Ensemble, 11 of whom choose their work in Wired Ensemble as their choice for presentation during Olin's required Fall Exposition.² More practice rooms, a repaired Steinway A,

¹ So-called because the students are 'wired', i.e., in a high energy state when it comes to their music.

² All Olin students were required to choose one piece of work from any of their courses to present at Fall Expo 2004.

additional humidifiers, Wenger musician chairs, 5 more music stands, a set of triangles, one xylophone, and a music club (the Olin Jammers).

Mix in: one professor with a lot of help from staff, administration and faculty (Abby Adair, Manny Amaral, Dave Anderson, Holly Bennett, Linda Canavan, Ellen Cooney, Rod Crafts, Terri Dunphy, Mary Fitzpatrick, Joe Hunter, Susan Johanson, Carol Kelley, Chris Kelly, David Kerns, Sherra Kerns, Leslie Larocca, Dee Magnoni, Joe McDonald, Rick Miller, Mike Moody, Andy Moutinho, Duncan Murdoch, Charlie Nolan, Jay Patten, Pedro Perez, Carole Perrin, Gill Pratt, Janey Pratt, Margie Quinlan, Tony Rivera, Ann Schaffner, Steve Schiffman, Steve Sherrick, Scott Slaboden, Rob Stewart, Brian Storey, Nancy Sullivan, Karen Stone, Cara Szeghy, Jennifer Thomas, Melissa Trotta, Rachel Weinstock), 2 anonymous donors, the 1000 Committee (3 students, two faculty) to decide how to spend the donors' gifts, and (at one time or another) virtually every Olin student.

Add: a term teaching in the graduate studies division at Juilliard during Spring 2002; resources at New England Conservatory and Juilliard

Create: the only college conductorless orchestra in the country

Find: a concert hall(way).

Schedule and organize: rehearsals, dress rehearsals, and performances for approximately 15-20 events per year.

Oversee and check: instruments, piano tunings, repairs, humidity levels

Locate: orchestral parts for OCO and various ensembles

Supervise: 11 passionate pursuits in music performance, 3 independent studies in music composition and theory

List: teachers (at least 2-3 per instrument/voice so that students can find a good fit and choose accordingly) for 22 vocal and instrumental students

Monitor and help solve: plunging humidity levels, overcrowded practice rooms, instrument tuning and repair

Use: the piano to bridge the different instrumental palettes within a small orchestra and fill in missing parts (as needed)

Arrange: Mozart's c minor concerto for 1 oboe, 2 clarinets, 1 bassoon, 1 violin, 1 viola, 1 cello, and piano

Write: piano cadenza for Mozart's c minor concerto

Arrange: Rhapsody in Blue for 1 oboe, 2 clarinets, 1 bassoon, 1 trumpet, drum set, timpani, 1 violin, 1 cello, and piano

Arrange: Rhapsody on a Theme of Paganini for 1 oboe, 2 clarinets, 1 alto sax, 1 bassoon, 1 trumpet, 3 trombones, percussion, 1 violin, 1 viola, 1 cello, and piano

Arrange: Bartok's Transylvania Dances for 1 oboe, 2 clarinets, 1 alto sax, 1 bassoon, 1 trumpet, 3 trombones, percussion, 1 violin, 1 viola, 1 cello, and piano

Arrange: Britten's Diversions for 2 clarinets, 2 alto saxes, 1 tenor sax, 1 bassoon, 1 trumpet, 3 trombones, xylophone, 1 violin, 1 viola, 1 cello, and piano

Arrange: Stravinsky's orchestral Suite No. 2 for 2 clarinets, 2 alto saxes, 1 tenor sax, 1 bassoon, 1 trumpet, 3 trombones, xylophone, 1 violin, 1 viola, 1 cello, and piano.

Arrange: Stravinsky's Ebony Concerto for 3 clarinets, 2 alto saxes, 1 tenor sax, 1 bassoon, 1 trumpet, euphonium, 3 trombones, percussion, 1 violin, 1 viola, 2 celli, piano.

Re-arrange: Gershwin, Rachmaninoff, Stravinsky for performances when various players are sick or out-of-town for job interviews, etc.

Perform: piano parts to all of the above for 22 concerts (Nov 2002 – Dec 2004), in addition to concerts given by students in the *Music Performance, Music Composition* class (coach and pianist for Poulenc clarinet/piano sonata, Beethoven G major violin/piano sonata op. 30 no. 3, Beethoven g minor cello/piano sonata, op. 5 no. 2), the *Musical Design and Aesthetics* course (coach and pianist for Shostakovich cello/piano sonata and Tansman Sonatine for bassoon and piano), the *Wired Ensemble* (23 student compositions in concerts), *Independent Studies* (2 student compositions in concert) and the *Passionate Pursuit* program (coach and pianist for Handel Sonata no. 3 in G for flute/piano and the Weber Concerto for clarinet/orchestra (piano reduction)).

Field: myriad questions from prospective and admitted students (including their parents) wanting to continue music at Olin

Select and purchase: ~\$10,000 worth of CDs, books, and scores for the Olin Library

Order: all music for 3 courses³ plus the conductorless orchestra (scores, books, CDs)

Baking philosophy: Music enlivens the atmosphere of Olin. It permeates walls. Day or night—someone, somewhere is making music on campus. Often what you hear will inspire a reverie. At other times you may be its muse. The college gives students opportunities to perform, compose, realize individual projects, collaborate with others in chamber ensembles, including the Wired Ensemble and the Olin Conductorless Orchestra—the only conductorless orchestra of its kind at an American college. Courses encompass composition, performance, instrumentation, musical variation, and spoken word. A number of experiential projects accompany each class. Students have traveled to New York to participate in master classes at Juilliard, heard the Boston Symphony Orchestra at Symphony Hall, and produced the performances and compositions featured at a number of Olin events, including Candidates' Weekends and the Inauguration of Olin's first President, Rick Miller.

Years 6 - 9

Ingredients:

Year 6 (2005-2006). 300 students enrolled at Olin, half of whom 'do' music. Wired Ensemble performances for the Olin and Needham communities: Family Day, Admissions Open House, Fall Expo, both Candidate Weekends, Spring Expo, and North Hill Retirement Community. Olin Conductorless Orchestra (OCO) performances for the

³ Music Performance, Music Composition; Musical Design and Aesthetics; The Wired Ensemble: Instruments, Voices, Players

Olin and Needham communities: Family Day, Admissions Open House, Fall Expo, Candidate Weekends, Spring Expo, Senior AHS Capstone concert, Commencement, and North Hill Retirement Community. First AHS Capstone in Music projects and concerts (Grant Hutchins, Katie Rivard, Amanda Blackwood, Steve Shannon, Janet Tsai, Jake Graham, Jay Gantz, and Ben Donaldson.) Passionate Pursuit performances at Fall and Spring Expos by the Olin String Quartet, vocalists, and instrumentalists. Additional musical scores, books, and CDs for the Olin Library. Boston Symphony Orchestra (BSO) student concert tickets. Wired Ensemble trips to Jordan Hall, Juilliard, and the Brooklyn Academy of Music to hear classic and contemporary works. Olin acquires an upright Baldwin piano for AC 318 donated by Jack Ma in memory of Maryann King Ma.

Year 7 (2006-2007). Concert of 18 World Premières by the Wired Ensemble (Family Weekend). Additional Wired Ensemble performances for Admissions Open House, Fall Expo, and Candidate Weekends. OCO gives its first full-length concert (Glavin Chapel, April 21, 2007), as well as performances for Admissions Open House, Fall Expo, and both Candidate Weekends. First Wired Ensemble trip to the Metropolitan Opera to hear Puccini's *Tosca*, as well as local trips to Jordan Hall at New England Conservatory to hear the Cantata Singers with orchestra. The Steinway A gets an overhaul. More CDs, musical books and scores for the Olin Library. 2007 AHS Capstone in Music projects and concerts (Kristin Dorsey, Matthew Tesch, Laura Stupin, and Kat Kim). Passionate pursuit performances at Fall and Spring Expos by eight instrumentalists and vocalists, with a separate concert each semester for a larger group of vocalists (12 students Fall 06 and 7 students Spring 07). BSO concert trips to Symphony Hall and Boston Chamber Music Society concerts at Jordan Hall. Additional music stands and musician chairs needed. Two new practice rooms allocated in East Hall.

Year 8 (2007-2008). Two new courses added to the Olin curriculum—Engineering the Orchestra I: Acoustics, Waves, and Vibration (Lee and Dabby) and Engineering the Orchestra II: Orchestration, Theory, Composition (Dabby). Wired Ensemble Event performed for Fall Expo. Engineering the Orchestra demonstration and performance at both Candidate Weekends. OCO gives its own Fall and Spring concerts, in addition to performances for Admissions Open House, Fall Expo, and both Candidates' Weekends. OCO becomes too large for the Olin Concert Hallway, so the Milas Hall Mezzanine becomes the favored performance venue for the orchestra. OCO holds its first Recording Session on May 1, 2008, the last day of classes for Spring 2008. Its recording of the first movement of Haydn's Symphony no. 48 in C goes online and is now available at https://youtu.be/knulC0k1r5M

Passionate Pursuit Concerts for Fall and Spring Expos plus additional concerts each semester for a larger group of vocalists (7 students Fall 07 and 6 students Spring 08). Wired Ensemble trips to Boston's Jordan Hall and to the New York City Opera at Lincoln Center. OCO trip to Jordan Hall to hear the Cantata Singers perform Orff's Carmina Burana. Trips to hear the BSO at Symphony Hall.

Year 9 (2008-2009). A new Jam Room is built in the Campus Center. CC310 also allocated for musicians' practice. Wired Ensemble trips to hear the Fauré *Requiem* in Boston and the New York Philharmonic at Avery Fisher Hall in New York. The Wired Ensemble writes, composes music for, and stages *Sir Falsalot* for Fall Expo. Wired Ensemble pieces featured during both Candidates' Weekends, in addition to work from the Engineering the Orchestra II.

OCO holds its first video taping/recording session and creates its first DVD. The orchestra is asked to perform a concert for the Trustees/President's Council May 11 meeting. The Trustees/Presidents' Council Concert features 35 minutes of music by Mussorgsky, Beethoven, and Saint-Saëns. In addition to its annual Fall Expo performance, OCO performs for Admissions Open House, the Jessica Herman '10 Memorial Service, and both Candidates' Weekends. Passionate pursuit performances at separate, dedicated concerts at both Fall and Spring Expos. "Olin does the BSO" continues as a co-curricular.

Mix in: one professor with a lot of help from staff, administration and faculty (Manny Amaral, Bruce Andruskiewicz, Allison Bahme, Holly Bennett, Alison Black, George Butler, Linda Canavan, Rebecca Christianson, Caitlin Clark, Paul Coveney, Rod Crafts, Andy DeMelia, Elaine Drobnis, Terri Dunphy, Steve Durfee, Ozgur Eris, Noel Espinal, Mary Fitzpatrick, Alyson Goodrow, Siddhartan Govindasamy, Steve Hannabury, Kurt Hirschenhofer, Joe Hunter, Zhiaopeng Ji, Susan Johanson, Carol Kelley, Chris Kelly, David Kerns, Sherra Kerns, Joanne Kossuth, Chris Lee, Caitrin Lynch, Dee Magnoni, Deb Manzelli, Joe McDonald, Linda Miller, Rick Miller, Mike Moody, Emily Moscol, Duncan Murdoch, Oscar Mur-Miranda, Charlie Nolan, Carole Perrin, Gill Pratt, Stephanie Rizzitano, Courtney Sampson, Ann Schaffner, Steve Schiffman, Scott Slaboden, Brian Storey, Nancy Sullivan, Nick Tatar, David Ware, Lydia Zeglarsky, and (at one time or another) virtually every Olin student.

Find: a new concert venue (Milas Hall Mezzanine) due to a larger orchestra

Schedule, organize, and coach: rehearsals, dress rehearsals, and performances for approximately 10-14 events per year.

Recommend: student instrumentalists and vocalists for Needham and Wellesley musical performances/events

Oversee and check: instruments, piano tunings, repairs, humidity levels

Supervise: 35 individual passionate pursuits in music; 8 group (51 students involved) passionate pursuits in music; 9 individual independent studies in music composition and theory + 1 group independent study (5 students)

Locate: teachers (at least 2-3 per instrument/voice so that students can find a good fit and choose accordingly) for vocal and instrumental students

Monitor and help solve: humidity levels, overcrowded practice rooms, instrument tunings and repairs—resolved with a new Jam Room Fall 2008

Solicit and give feedback: Academic Program and Facilities' design for the new Jam Room

Perform: Wired Ensemble and OCO Concerts (2005 – 2006) and subsequently, as needed.

Field: questions from prospective and admitted students (including their parents) wanting to continue music at Olin

Select and purchase: CDs, books, and scores for the Olin Library

Bring in: five external guests/year to provide direct feedback to OCO and to the Music Program at Olin, in general

Arrange, arrange, arrange: Due to the small size of Olin's student body, it soon became apparent that the Olin Conductorless Orchestra might never achieve a full string section, not to mention complete wind and brass sections. So I opened auditions to any instrumentalist who could pass the audition requirement. Thus saxophones (typically associated with jazz bands), euphoniums (found in wind bands), and other nontraditional orchestral instruments entered the orchestra. Yet the students in OCO were choosing pieces by Tchaikovsky, Bartok, Elgar, Schubert, Haydn, Beethoven, Smetana, Bernstein, and Saint-Saens—none of which utilized saxophones, guitars, or euphoniums, and many of which required large 50-90 piece orchestras. (Our orchestra has typically numbered 15-17 players.) As a result, I began re-orchestrating repertoire to suit OCO's nontraditional instrumentation and unbalanced wind, brass, and string sections. From Fall 2005 to Spring 2009, I made 36 of these re-orchestrations, each of which took anywhere from 10 – 75 hours to create. There are several reasons why this is such a laborintensive, yet nuanced process. Numerous design constraints exist, some in conflict with others: 1) OCO's eclectic

instrumentation, 2) differing musical abilities among the students, 3) instrumental, sectional, and orchestral voice leading, 4) contrapuntal and harmonic intent of the composer, 5) reduction from original scores requiring 90 players to ~16-player arrangements, or an increase in forces, e.g., from a small woodwind section in the original orchestral work to a large wind section in the OCO arrangement, 6) complaints by winds that the strings get all the good parts, and so on.

Baking philosophy

The Short Story

- Provide orchestration, composition, theory, and performance skills towards all facets of the program.
- Organize, coach, and rehearse concerts for Olin events and programs (10-14 events/year).
- Ensure year-to-year continuous improvement and innovation.

A Longer Story (the nuts and bolts) ...

- Select music, schedule rehearsal times, coach composers/ensembles, and serve as pianist-on-call for musical programs featured at Family Weekend, Fall Admissions Open House, Fall Expo, Spring Expo, Candidates' Weekends (4-6 performances over 10 days), Graduation, corporate requests, and Olin requests.
- Address difficult spots with student musicians on an individual basis to improve performance.
- Review student compositions on an individual basis for upcoming performances.
- Supervise 1-3 independent studies in music per year.
- Advise 12-18 passionate pursuits in music per year.
- Meet with and field questions from prospective Olin students regarding music at Olin.
- Answer questions about music from Olin students and their parents regarding teachers, instruments, instrument storage, the jam room, practice rooms.
- Advise piano tuners and technicians about what needs to be repaired on the Olin pianos.
- Purchase CDs, musical scores, books for the Olin library.
- Monitor and check out pianos/timpani/humidity levels in Studio 305/Res Hall practice rooms/Jam Room.
- Answer student questions regarding homework assigned in BBOW (Brandeis, Babson, Olin, Wellesley) music courses.
- Schedule, coordinate, purchase tickets, and arrange transportation for students to hear Boston Symphony Orchestra concerts in Symphony Hall during the school year, as well as concerts at New England Conservatory's Jordan Hall.
- (Am I forgetting something :)

Ah yes ... additional program work includes

- Helping students find 'good fit' private teachers on their instruments
- Providing musical opportunities for students to create and perform
- Instrument repair and maintenance instructions (written and oral) for Facilities and other members of the Olin community

- Fall meetings with incoming frosh interested in pursuing music at Olin
- Consultations with students regarding tuning and maintenance of Steinway A in East Hall
- Meetings with administration and students regarding the Jam Room, CC 310, and the East Hall practice rooms
- Meetings with external constituents in Needham community
- Providing musicians at request of external constituents in the Needham community, e.g., Friends
 of Music at Needham High School Benefit Concerts and weekly Sunday services at the
 Presbyterian Church of Needham



The above recipe continues to this day. Olin has a thriving music program. Over the next ten years (2009 – 2019), each year included class trips to the Metropolitan Opera in New York City, class trips into Boston to hear Handel and Haydn Society concerts, Boston Lyric Opera, the Cantata Singers, and more, AHS Capstones in Music, Candidates Weekends concerts, my co-curricular "Olin Does the BSO", "Family Night at the Opera" (our advising family makes a spring pilgrimage into Boston for dinner and a night at the opera), passionate pursuits in music, Admissions Fall Open House, the Olin Fall and Spring Exposition concerts, performances outside of Olin for OCO, Wired Ensemble, and other groups—all take place on a yearly basis!

So what did happen next?