

and administrators from the Pittsburgh Public School System.

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CHAPTER 1 INTRODUCTION

A collaboration among researchers from Educational Testing Service and Harvard Project Zero, and teachers and supervisors from the Pittsburgh Public Schools, sought to reexamine instruction and assessment in the music classroom. Our goal was to make students' learning more visible to the students themselves and to others and, in turn, to make the assessment process itself foster further learning. This music handbook is both a report summarizing the efforts of this collaboration and a guide for implementing PROPEL assessment-based curriculum.

PROPEL provides a framework for constructing a curriculum, for identifying, generating, supporting, and documenting good teaching practices in the rehearsal studio as well as the general music classroom, and for assessing student learning. PROPEL is based on the following assumptions:

- * The pursuit of learning in music is worthwhile for all students, not only for those with special talent.
- * Learning in music occurs most fully when the activities of production, perception and reflection are consistently present and interacting.
- * The goals and skills of the professional practitioner in music — who strives for musical expression of ideas and feelings, who strives for correctness, who habitually takes the responsibility for critiquing, refining, revising, rethinking his/her work, who works in relation to others — should serve as a model for the music classroom.
- * Ongoing assessment, both formal and informal, by students themselves, and by teachers (in effect a dialogue about work and ways of working) yields revealing profiles of development, and promotes learning and new levels of achievement.

We have written this handbook in the hope that teachers and administrators will adapt the PROPEL framework for their own music programs, their own curricula, and their own students. This handbook is intended both as a guide through the materials and processes of PROPEL, chiefly by means of example, and as testimony to the transformations that have occurred in those classrooms from which these ideas began to take root. Most readers wishing to use the handbook to help them become practitioners will not be in a position to have the support of a practicing PROPEL teacher or researcher. We urge, nevertheless, a collegial approach. We hope teachers will work together to:

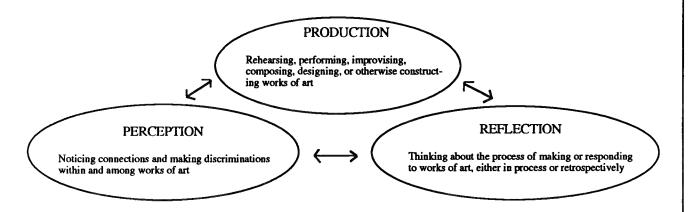
- * Interpret the framework
- * Plan for implementation
- * Try out some projects and approaches to reflection
- * Observe one another
- * Practice project assessment together
- * Implement portfolio development and assessment
- * Design new PROPEL projects, reflection guides and assessment documents and procedures

Finding ways to think about how Production, Perception, and Reflection can be fostered in students through instruction and assessment is the necessary first step toward implementing the ideas in this handbook.

WAYS OF KNOWING: PRODUCTION, PERCEPTION, REFLECTION

Teachers and researchers involved in Arts PROPEL music believe that the fullest, most convincing learning in music occurs when students *generate music* (whether in performing, composing or mapping what they hear), *listen discerningly* (to their own singing or playing or their own compositions or to someone else's music), and *think critically* about what they're producing and/or hearing (thinking on the spot and reflecting over time, whether in speech, in writing, or nonverbally). As the project developed, there was a growing consensus that learning could be described in terms of Production, Perception, and Reflection, and that the most effective learning in music occurs when these processes are integrated.

THE RELATION BETWEEN PRODUCTION, PERCEPTION, AND REFLECTION IN PROPEL



As ensemble and general music teachers implemented this approach, they discovered examples of mutual influences — the influence of reflection on performance, for instance, or the influence of a composing exercise on the ability to listen or appreciate. Production, perception, and reflection are illustrated in Figure 1.1:

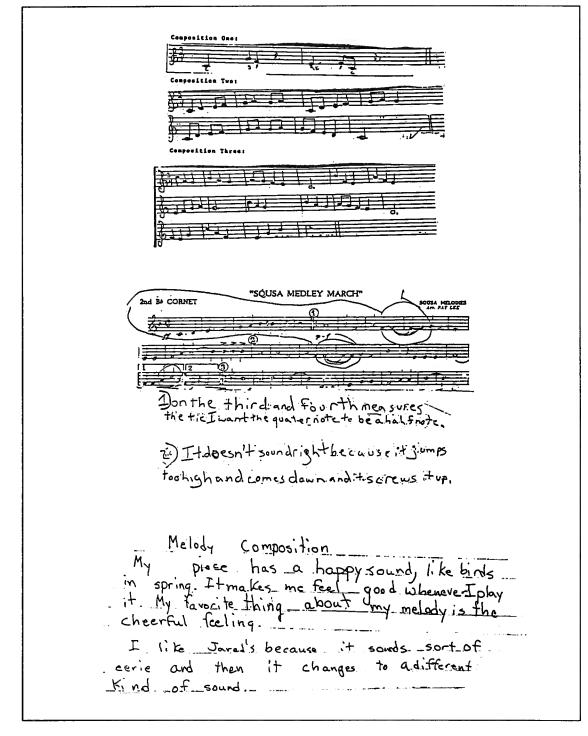


Figure 1.1 <u>Production:</u> a phrase from a composition, <u>Perception:</u> an error detection exercise, <u>Reflection:</u> a portion of a student's rehearsal critique or journal entry

Assessment was from the start another essential ingredient of PROPEL. Researchers began with observations in music classes, noting moments when teachers or students gave evidence for assessing or reflecting on work. These assessments were usually brief verbal comments or revisions in performance that did not interfere with the flow of rehearsal or class. Teachers and researchers together set themselves the task of capturing and documenting the significant moments of learning with minimal disruption to the rhythm of the classroom. They viewed assessment as a valid learning activity in its own right. Assessment in PROPEL builds students' awareness of the dimensions along which learning in music can occur, their achievement in these dimensions, and their active role in learning. Assessment also demonstrates the nature and extent of students' learning in music to people outside the classroom.

As the reader progresses through the handbook, the notion of assessing learning and describing learning over time may be clarified by watching this assessment timeline fill with information.

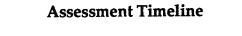
Assessment Timeline*

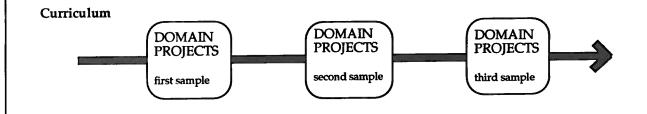
Curriculum

* An assessment period is assumed to be anywhere from 9 weeks to a semester (or longer)

Finding ways of implementing these assumptions about kinds of learning and assessment of learning became the cornerstone of the PROPEL project. Changes in classroom activities and in expectations of students came about gradually, as teachers identified central topics in the curriculum which they wished to try to tailor to the Production-Perception-Reflection (PPR) framework. This process led to the creation of a series of projects or repeated activities in the domain of music that came to be called domain projects. The goal of implementing and documenting assessment was also initially tied to domain projects.

DOMAIN PROJECTS





A domain project is designed to structure and document a body of work focused on a central area of curriculum in the domain. All domain projects focus on the development of production, perception and reflection; each includes a variety of ways to assess student progress.

The *Individual Performance Project*, for example, described more fully in Chapter 2, is the domain project most readily linked with traditional instruction. It builds on instruction in the basic elements of performance (everything from accurate pitch production to consistency of tempo to sense of phrasing) by means of taping, assessing and revising performances or practice plans at regular intervals. Assessment includes teacher observations, peer or parent critiques, *and* student self-assessment.

Another performance-class domain project is the *Ensemble Rehearsal Critique*, a project that fosters learning of music vocabulary, the ability to listen actively in rehearsal (to oneself, to one's section, to the whole ensemble) and to use terminology appropriately both in critiquing segments of a piece in rehearsal and in suggesting changes in rehearsal strategies.

These two projects focus on the development of essential performance skills and involve the acquisition of knowledge about the rehearsal process — the regular business of the instructor and the learner: developing technique, developing the skills of musical performance, developing the listening skills necessary for constructive practice and intelligent performance. Regular taped sampling associated with both projects allows for tracking growth and achievement in a way that is instructive for students and teachers. Studying the tapes fosters focused listening, encourages articulate comments, and heightens active participation in the work of the ensemble and in one's own contributions to that work.

In the area of general music, the *Invented Notation Project* calls on students to create a symbol system for writing down what they hear. It is a domain project that can be used in various ways. For both middle- and high-school students, beginners or not, the project helps students grasp the idea of an abstract symbol system used to describe sound. It is a graphic reinforcement of ear-training exercises that can lead to an introduction to standard notation. Inventing notation helps students integrate listening and seeing. For both students who learn standard notation and those who are not expected to, Invented Notation can be used whenever listening is concentrated on a particular musical element or structural aspect (e.g., pitch contour, rhythmic duration, phrase structure, texture).

The *First Composition Project* puts music making directly in the hands of the learners. Students are asked to build rhythmic patterns first, then a melodic phrase, then a multiple-phrase melody that reflects formal structures they have been learning. The project helps students integrate their learning about the music they hear with their growing knowledge of standard notation and may set them on a path to using composition as a vehicle for their own artistic expression.

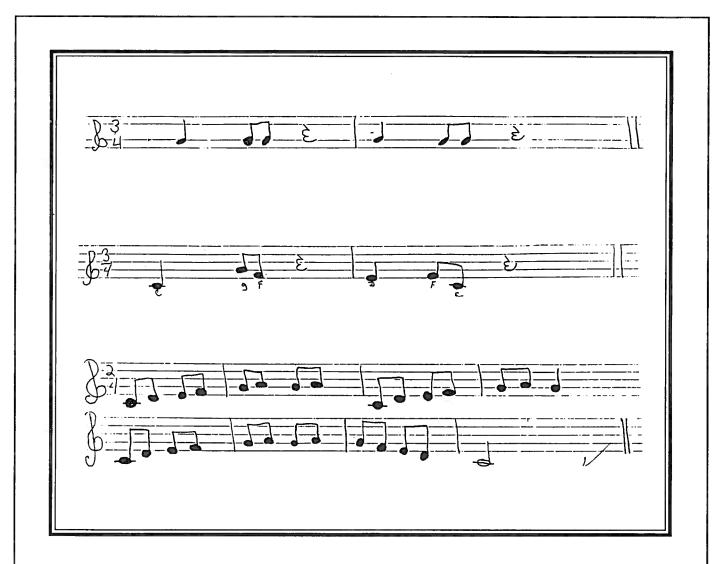


Figure 1.2 Student work from First Composition Project

VEHICLES FOR ASSESSING REFLECTION

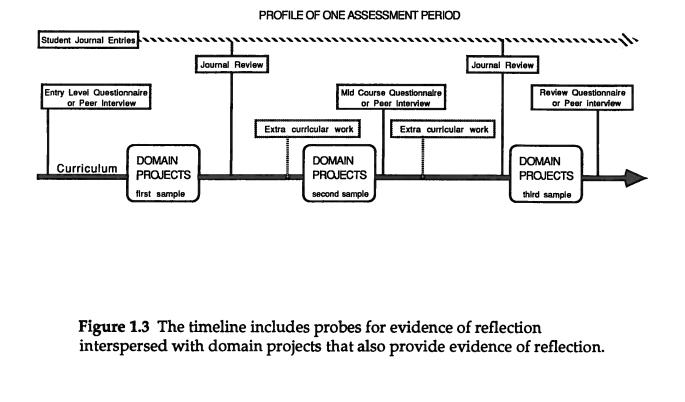
A commitment to trace reflective thinking in the music classroom in relation to a student's own work is central to Arts PROPEL. Such a commitment requires new forms of assessment. While each domain project has a specific reflection element built into it, we found that to encourage students to engage habitually in reflection required the development of additional supportive formats. In their past teaching, PROPEL teachers report that, even though they encouraged discussion and even though they could occasionally see glimpses of reflective thinking, reflection was not a regular, conscious part of students' work. Reinforcing the reflective process through informal means — continuous informal questioning by the teacher, class discussion, brief conferences — helps create dialogue about particular aspects of work and overall development. If time devoted to discussion and writing focuses work, it is not seen as time "lost" from rehearsal, composition or listening.

Verbal Reflection

Often astute observations are made in class discussion or in a conversation with the teacher or a peer. We devised more formal means — journals, questionnaires, peer interviews and questions guiding students' self-assessment — to provide additional support for capturing reflective thinking. Because these more formal reflections are written and can be carried out at regular intervals in the course, students can trace their individual progress in articulating reflections even if they do not participate in class discussion. Teachers who develop a teacher journal can keep observations about students' perceptions while students can use their own journals to continue to raise questions or evaluate their own progress.

Students and teachers can make entries in journals at any time during rehearsal, class or homework. In this way, insights are not lost, and observations can be shared later with students or teachers. They are also preserved for use in conferences or portfolio assessment as material that helps build a profile of learning.

Nonverbal reflection is, of course, vital in music learning. The kind of musical thinking that occurs when one is adjusting or shaping a performance, conceiving or revising a composition, or grasping a work one is listening to, is at the heart of what teachers want to foster in students. Again, teacher journals or student journals can be repositories of brief anecdotes, in this case capturing evidence of the "reflection-in-action" that occurred. The productions themselves, preserved on tape or paper, may be considered for the evidence they give of reflective thinking.



What is evidence for increasingly sophisticated reflective understanding of music? The reflective student is engaged in continuous self-evaluation: evaluation of specific work, of working processes, of attitudes, of his or her position in the full range of musical development. The reflective student develops a broader critical perspective, in part through reflecting on the work of others and through incorporating peer and teacher comments. The reflective student is able to use the substance of this thinking as a basis for improving performance or other productive work, generating questions, making discoveries, forming opinions that have support, and setting goals.

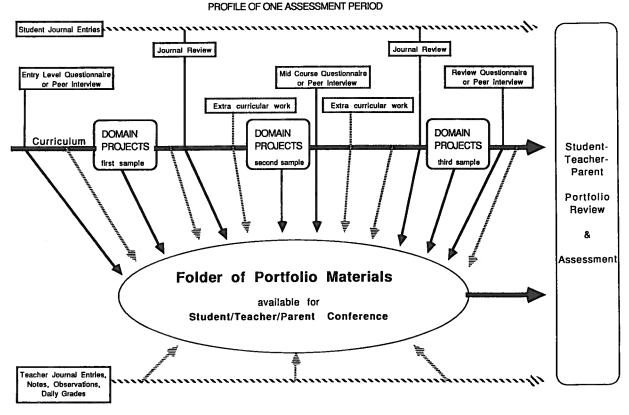
Domain Project: GIVING & LESSON Give a lesson to a classmate. As you teach, try to listen for specific problems as well as overall musicality. Listen for correct thythm, articulation, dynamics. Pitches, and good tone. When you find a problem, asplain what it is using correct musical terminlogy. Then try to get your "atudent" to improve. Think about your own lessons and how your teacher belpe you. Playing, singing, and counting aloud are some of the ways to belp. After the lesson, answer the following questions. How do you think you did? Why? OK because at first I didn't know how to explain What problems did your "scudent" have? Bow could you tell? Slurring because when she each note instead Conjusting the Band Wh. mayeted ته المعلى have much traidle. a didn't were in weer mos what did 100 king every. at the much time 1 moto whent at zer isne FCD16,1990 When we do the interview I feel that you can appress yourself mark I don't think it's a waste of time to express what you the about muste. and to compare costain to share things with your class mates and get there point of stew. I think it's clopad Oppurturity to do things if the interview's anci to discuss the way you feel

Figure 1.4 Snippets of student's reflective comments about their own work

PROPEL PORTFOLIOS

A PROPEL portfolio documents student work. It is not merely a repository. It is a dynamic collection that allows students to participate in an ongoing assessment of work, thought, and development over a period of time. The contents of a PROPEL portfolio are determined by how the collection is to be used. A portfolio might be a representative sampling of a student's work; it might show the breadth of curricular coverage; it might show stages of one particular project. Often PROPEL music portfolios are simply a complete folder of work (paper and tapes) that can be combed for particular evidence of learning, whether by the student alone, as part of a peer interview, or with a teacher reviewing a semester of work for the purpose of profiling the learning that has occurred.

The notion of portfolios was at first alien to the music PROPEL teachers. Traditionally music teachers were not inclined to document individual work in an ensemble class, let alone take the time to structure and assess portfolios. As PROPEL Music progressed, however, the goal of gathering evidence of individual student development became important. Later, the need to organize the information in domain projects and in written reflections brought the group directly to the concept of a portfolio.



THE ARTS PROPEL PORTFOLIO PROCESS

Figure 1.5 The timeline includes not only particular evidence of learning but also the process of taking stock, looking back at work over time in order to build a profile and to set individual goals.

Some of the challenges associated with having students create portfolios were immediately apparent. Managing and storing folders of papers and tapes would be difficult. Having extended conferences with students to review their portfolios seemed unrealistic to those with a hundred or more students. As students arrived from a different school or teacher, portfolio in hand, the time to review those portfolios would be difficult to carve out.

Despite these problems, teachers and students began to see the potential rewards of the portfolio process. Students found that looking back over work in an effort to describe their own learning was highly instructive. When teachers did have portfolio review conferences with students, the learning on both sides of the table was notable. Past experience with paper-and-pencil tests and performances alone began to pale in comparison.

Although portfolio assessment presents formidable challenges, music teachers using portfolios found that they learned a great deal more about their students as learning musicians, and were able to use the information they gained to shape subsequent instruction.

IMPLEMENTING PROPEL MUSIC IN THE CLASSROOM

Those who find the concepts, specific approaches, and projects of PROPEL Music compelling need to know what a PROPEL classroom is like and just what is involved in implementing the program.

If readers think first about how music education is conducted in their local situation, they can anticipate the advantages and disadvantages of implementing alternative assessment practices. For example, in the traditional performance classroom, the teacher is the master who directs the class. While this may initially make for efficient rehearsing, students may not learn more than to follow directions well. In the PROPEL classroom, the situation is quite different. Considerable learning can occur when students have more authority over their work, present their work to peers or parents, and involve peers in problem solving. Relying on forms of assessment that come from these activities encourages the teacher to make the transition to a more mentor- or coach-like role. Teachers in this role can be sources of knowledge, explaining and providing examples of points on the range of musical development. Students, therefore, assume more and more responsibility for their own learning, much as a professional musician does.

Happily, many teachers report that more diverse assessments of individual learning promote more varied learning. However, the number of students a typical music teacher sees each week, the scheduling conflicts which many students who wish to participate in music programs experience, and an ambitious performance agenda (to say nothing of unscheduled "performances on demand") make it difficult for both teachers and students to have sufficient time for sustained learning and assessment activities. The difficulty of organizing individual assessment to include evidence of production, perception and reflection needs be offset by the benefit of increased educational credibility. Superintendents who are aware of full documentation of individual learning may be less inclined to demand as much concert repertoire. Teachers may feel less pressure to enter their students in competitions to show that learning has occurred. Parents and others in a community who see evidence of students responding to criticism and taking more initiative in their learning may begin to think of music not as a civic function but as an essential learning experience. Employers or colleges who interview applicants may be less inclined to look at music as a nonessential learning experience when students are able to present portfolios of work as evidence for personal growth and maturity.

There are challenges in implementing PROPEL that need to be squarely faced. For many teachers and students, PROPEL music requires a change of mind-set. For instance, many students have had little experience engaging in reflection. In one classroom, a teacher commented:

> These students often don't know the difference between fact and opinion. No one at home or school invites them to offer opinions, let alone to reflect on their work and to develop the skill and knowledge they need to give substance to their reflections.

Whether or not students have had encouragement to be reflective, they are certainly not accustomed to writing in music classes, or to having such homework (as writing in journals or preparing tapes of their practice sessions). Music teachers may be equally unaccustomed to having students generate written or taped work that they, the teachers, must evaluate. More broadly, many teachers are not used to thinking about what guidance and instruction students need to help them learn the skills of reflection.

Musicians are always assessing. Musicians who are music teachers are always assessing, too, making judgments, often intuitive ones, about the work of their students. PROPEL challenges these able evaluators to make those intuitive judgements explicit, consistent and constructive for students. It challenges them, along with students, to document assessment so that a profile of learning is available, primarily for the student's and teacher's use, but also for the benefit of parents and administrators. PROPEL encourages teachers to work together, in this case to develop instructional goals and strategies, to determine together what dimensions of learning associated with those goals will be assessed, and to determine appropriate standards for achievement.

Where PROPEL music is fully implemented, teachers will have to be given time to work collegially, to build assessment devices and scoring systems, and to have individual conferences with students. Students need time to build knowledge and skill steadily and thoroughly. For performance students, "time" may mean a schedule that allows them to attend class every time it meets; for general music students, "time" may mean more sustained exposure to musical activities.

Where PROPEL is implemented in less than ideal conditions, the effort to document the full range of students' learning will help build the case for improved conditions. Without the means to employ rich assessment practices, teachers cannot be responsible for documenting fully individual learning over time. Where there is support for a more complete spectrum of assessment, teachers can evaluate, for

example, development of technical proficiency, astute listening skill, musical expressiveness and the ability to evaluate. In addition, students will assume more responsibility for working alone or collaboratively, developing the discipline for sustained effort and using critical judgment to guide their work in the future. Their growing independence will be a source of self-esteem.

BECOMING AN ARTS PROPEL MUSIC TEACHER

Entry-level (First-time) Propel Music Teacher

First semester:

- observes a mentor teacher's class engage in one domain project
- begins to reflect on the implications of introducing PROPEL in her or his own class implications for instruction, material presented, nature of student-teacher exchanges, and for assessing and documenting learning

Second semester:

- implements one domain project and some form of reflection stimulus (e.g., entry and mid-level questionnaires or journals) under the guidance of the mentor teacher
- · establishes dialogue with students about work and ways of working
- begins keeping a journal for her or his own reflections and begins keeping anecdotal records about individual students' learning

Second-level ("Encore") Propel Music Teacher

- implements more than one domain project
- practices in-class assessment of these projects
- tries out and adapts reflection instruments (e.g., journals, questionnaires, peer interviews)
- establishes an environment in which there is ongoing assessment of work as part of the larger dialogue about work between teachers and students
- helps students use their collected works as Propel portfolios and tries out portfolio conferences as closing interviews with a sample of students

Leader/Mentor Propel Music Teacher

- implements a variety of domain projects, domain project extensions and reflection instruments and adapts or invents others
- establishes an environment in which the assessment of work is ongoing, is integral to the dialogue in the classroom, and is fully documented and shared with students and parents as well as supervisors and principals
- serves as mentor to a first-time teachers and/or as a resource leader to "encore" teachers
- participates in cross-class scoring sessions and regular collegial discussions about projects and students, about standards for work and criteria for judging work

Figure 1.6 Dissemination model diagram

Steps in Implementation

The dissemination activities which Pittsburgh supervisors and teachers have implemented may be helpful to others. An introductory workshop — in which the philosophy of PROPEL and its implications for classroom practice and for collaborative work among colleagues are described and in which domain projects, portfolios, and assessment practices are illustrated — is a good starting point. Observation of a PROPEL practitioner who can become mentor to a beginning practitioner is the natural next step. When it is impossible for teachers (and supervisors) to observe a practitioner, an alternative model must be established.

One such model is for teachers to undertake PROPEL together, planning how to implement one domain project, later observing and critiquing each other during that implementation, and working together to assess their students' work on that domain project. As time goes on, these teachers will add domain projects and portfolios to their PROPEL practice, and they will prepare to serve as models for observers and then mentors as those observers become beginning practitioners. The pair, or team, will next practice assessment at the cross-classroom level. When a new PROPEL teacher does not have a teacher colleague to be partner and critic, a supervisor should be observer, sounding board, and critic.

As you read this handbook, you will encounter a more thorough discussion and illustration of the ideas and materials to which you have been introduced: domain projects, the vehicles for reflection, PROPEL portfolios, and the PROPEL classroom environment. Implementing projects and portfolios will carry you a long way in designing a course using the PROPEL framework. In implementing only one domain project, you can promote an atmosphere of dialogue around work, in which everyone has responsibility for thinking about the work, assessing the work, and setting goals for the next endeavor.

With this introduction to a complex but rewarding way of thinking about and conducting music education, we invite you to make your way through the handbook and onto the path of change made possible through alternative assessment practices in the music studio or classroom. Consider the following questions as your reflection guide:

- 1. Are making music, heightening perceptions of music, and reflecting on work documented through the central activities in your classroom? In other words, are Production, Perception, and Reflection activities tied to all central curricular topics? Does instruction focus on documenting these aspects of learning (e.g., Is there instruction related to critiquing a performance just as there is instruction/modeling related to fingering a specific note?)
- 2. Are you establishing a dialogue with students which includes informal and formal assessments that contribute to a profile of what learning has occurred? Within that dialogue, are you assessing all important work? Are the goals inherent in that work clear to students? Are those objectives the foundation for what will be assessed? Are the judgments made in the assessment process communicated thoroughly and constructively to the student?

3. Have you made students aware of this framework for learning and assessment and the responsibilities they have within this framework? (e.g., Are students aware that they must describe their own work and that of their peers?)

CHAPTER 2

ARTS PROPEL DOMAIN PROJECTS IN MUSIC

In this chapter you will find:

- * discussion of the characteristics of Domain Projects
- * introduction to Domain Projects in the performance classroom
- * focus on the Ensemble Rehearsal Project
- * introduction to Domain Projects in the General Music classroom
- * focus on the Invented Notation domain project
- * focus on the First Melody domain project
- * focus on Domain Project Assessment: Individual Performance
- * illustration of the classroom transformation resulting from the use of domain projects

Domain projects, the central assessment vehicle of Arts PROPEL, are activities that integrate production with perception and reflection. They are meant to engage students in ways that help them incorporate what they learn, that avoid sending them skimming over the surface of information and skill acquisition. As the characteristics of domain projects are described and examples of particular projects given, the reader should note how the framework of production, perception, and reflection fits a variety of curricular goals. An Arts PROPEL music teacher, Jim Charlton, writes:

> The domain project ought to be transportable from one context to another, but in emphasis and organizational priorities, not necessarily in literal surface features. Differing teaching styles, student entry level and experiences, environments, or cultural influences mean that implementation will vary as per application; what remains constant is the framework and its processes and goals.

Rather than replace the curriculum, then, teachers using Arts PROPEL focus on ways of reshaping curriculum objectives so that they can be taught and assessed in domain project format. Projects can be compatible with various instructional sequences or texts, or graded performance ensemble literature. Several domain projects are described in this handbook. These are presented as samples. Because they may or may not be easily transported to every context, we believe that teachers should go beyond the examples in this handbook, tailoring them to their individual instructional goals. Ultimately, individual teachers should make domain projects which center on the unique attributes and needs of students in their classrooms.

Characteristics of Domain Projects in Music

The domain projects described here share several characteristics:

- * they are long-term or repeated projects involving issues central to the domain of music;
- * they integrate production, perception, and reflection;
- * they emphasize process as well as product, incorporating revision and experimentation;
- * they provide opportunities for self, peer, teacher, and parental assessment;
- * they are highly compatible with an apprentice/mentor style of teaching.

1. <u>Domain Projects are long-term or repeated projects involving issues central to the</u> <u>domain of music.</u>

Such issues include composition, sight reading, or critiquing a rehearsal. These are the practices engaged in by serious practitioners; they stand in contrast to the narrower tasks more typical of music classes (e.g., practicing writing clefs, identifying quarter notes in a score, or rehearsing without critiquing).

2. Domain Projects integrate production, perception, and reflection.

They involve students in a number of different and complementary kinds of artistic activity. Production or performance is central. Only when an individual takes the risks involved in making is the real work of music begun, whether that making takes the form of an arrangement, a composition, or a performance. In contrast, assessing musical production without evidence of perception or reflective understanding undermines the scope and depth possible in the music ensemble and classroom. Supporting activities that include perception (e.g., error detection tasks) and reflection (e.g., developing practice strategies) provide both teacher and student opportunities to exercise the kind of work and thinking in which practicing artists are engaged.

3. <u>Domain projects emphasize process as well as product, incorporating revision and</u> <u>experimentation.</u>

Developing drafts of composition, trying out notation systems, making tapes of practice sessions, making suggestions for how to rehearse a work — these examples of work connected with domain projects suggest how the discipline necessary to producing music is reinforced and how the process of producing music is given emphasis along with final products as work is assessed at regular intervals in the process, and ways of working are given attention.

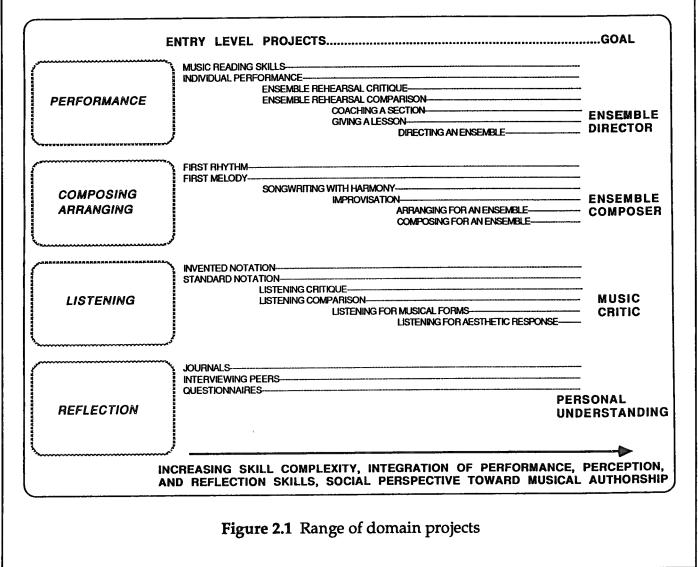
4. Domain projects provide opportunities for multiple forms of assessment.

Reflecting on work is the continuing responsibility of students and often amounts to an immediate, instructive self-assessment. Assessments by teachers and peers are incorporated as the student revises or moves to a similar activity. Projects, along with assessments, are readily shared with parents. Students are often put in a position of explaining their work to peers, teachers, or parents, an activity that is in itself instructive. Domain projects yield work that can be evaluated outside the classroom by a group of teachers, for example, when looking at group data for the purpose of program evaluation. This cross-classroom assessment engages teachers in the joint activity of identifying appropriate criteria for assessment, setting standards, and coming to agreement on the merits of pieces of work.

5. <u>Domain projects occur in the context of a classroom that embodies aspects of a</u> <u>studio-like atmosphere.</u>

Domain projects help form this environment by structuring repeated, ever more complex tasks and by creating opportunities for dialogue about work in progress, about revision, and about finished work. In this environment students are introduced to what a range of work is like, from that of novice to that of mature practitioner. In such a classroom, students become committed apprentices, and teachers become mentors and coaches.

ARTS PROPEL MUSIC DOMAIN PROJECTS OVERVIEW



Domain Projects in the Performance Class

As students progress from novice status to become increasingly skilled members of an ensemble, many changes can take place, not only in their technique and artistry, but also in their capacity for instructing themselves and their peers. PROPEL teachers of performance created domain projects that reflect the steps of this apprenticeship in five levels of work:

- 1. ability to perform individually
- 2. ability to critique one's own and others' performance
- 3. ability to compare
- 4. ability to coach
- 5. ability to direct

While the ordering of the steps suggests a long-range developmental model, we discovered that the simultaneous development of the skills associated with the first three of the following projects brings about greater overall growth. This finding served as confirmation of the importance of integrating production, perception, and reflection.

Teachers and students assess the students' skills at each of these levels. They rely on classroom observation, taped performances, written critical comments, error detection sheets, and other forms of documentation. As students become more musically expert, teachers can document the changes that take place in the students' musical thinking, their perceptual acuity, and their performance skills.

We consider each of the performance domain projects in turn: Individual Performance, Ensemble Rehearsal Critique, Ensemble Rehearsal Comparison, Ensemble Rehearsal Coach, Ensemble Directing.

1. Domain Project: Individual Performance

The Individual Lesson domain project is based on performance (i. e., the ability to play or sing). Its structure ensures that as the young performer learns the technique of the voice or instrument, he or she also begins to discriminate the score from the performance, what is intended to happen from what actually happened. In this way, production is informed by perception and reflection. Technical mastery, music reading skills, aural discrimination, and an operational understanding of musical dimensions emerge as tools for deciding how to practice a part of the ensemble score. Opportunities for assessment by self, teacher, peer , and parent, all occur, in at least some of these projects.

2. Domain Project: Ensemble Rehearsal Critique

The Ensemble Rehearsal Critique domain project provides a structured way to develop the critical skills necessary to evaluate and revise performances in ensemble music. Students discuss their perceptions, reflect on them, and then write down their conclusions first after performing a brief piece or excerpt, and then after playing back the tape of that performance. These written comments may form the basis of discussion or result in the formulation of practice strategies to be tried out in later rehearsals. Students are encouraged to critique from multiple perspectives: evaluating their own performance, identifying the relation of their performance problems to those of the ensemble, speculating on causal relations of articulation and rhythmic errors, etc.

3. Domain Project: Ensemble Rehearsal Comparison

The Ensemble Rehearsal Comparison domain project requires the student to exercise skills of the critique project, but adds the task of making comparisons between two different performances captured on tape. Here, the student gains practice remembering musical features of a previous performance in order to compare them with the current taped performance. The student gains perspective from hearing how work changes over time in relation to goals. This project can also be adapted for general music class when the goal is to contrast performances as part of a listening assignment.

4. Domain Project: Ensemble Rehearsal Section or Individual Coaching

The ensemble coaching project brings the listening, reflecting, and revising skills developed earlier into the activity of coaching an ensemble section or an individual. When students excel at previous projects they are given the responsibility for guiding other students in their rehearsing. This project requires students to listen to a portion of a rehearsal, and then address the issues that the reading raises for the ensemble, section, or for an individual player. Students develop interpersonal skills by critiquing the work of their peers in constructive ways and doing so in a manner which does not jeopardize the good will which supports performance. Student coaches document the results of their work with other students on tape and in the form of practice summaries, practice logs and peer critiques. As they learn to do this, they become candidates for the final project in the series, directing the ensemble.

5. Domain Project: Directing the Ensemble

In this project, a student is prepared by the teacher for directing the ensemble through a rehearsal. Using critical skills and reflective understanding of musical rehearsal, the student identifies and addresses problems during the rehearsal. Selected students might simply gain experience during rehearsal, or they might prepare a piece for a concert, oversee ensemble sightreading, or rehearse an original arrangement or composition for the ensemble. Here the student can be assessed for preparing rehearsal plans, engaging in problem finding and problem solving in the course of a rehearsal, displaying rehearsal and conducting technique, as well as learning from criticism of the teacher and peers. We recommend a separate journal to document the extensive preparation and reflective comments likely to come from this project.

A Close Look at Reflective Thinking in Ensemble

Looking at examples in middle school and high school suggests very different levels of development in reflection. In middle school the range of reflective comments is typically unidimensional and quite broad. Commenting on performance without sufficient specificity and breadth of perspective suggests at least inexperience in applying musical concepts while participating in musical performance. The numerous examples from middle and high school students of reflections on work reveal the greater developmental maturity of the high school student. Even when high school students' first efforts are at a beginning level, they move quickly to generating specific descriptions.

Name Period				
CRITICAL COMMENTS REVISIONS OR PRACTICE PLANS				
Location Dimension My (Section's) Performance For Myself (My Section)				
9th meas. rythm It didn't connect right when Islured them didn't sound right. together Here Also				
25t Imas notes Sound didn't gavight I played B ^b instead of because I played B ^b instead of Nice comment				
Location Dimension Ensemble's Performance For the Whole Ensemble				
ameas, rythm notes messed up just a improved. bit and a little off trach. My to Be Mone fe! Great for Por Prachee	7			
ARTS PROPEL assessment form Specifics Suggested Revisions Critical Perspective USE OTHER SIDE OF PAGE FOR ADDITIONAL COMMENTS				
Figure 2.2 Middle school student's Ensemble Rehearsal Critique with teacher's comments				

Although the content of the reflection sheets in high school often begins at the same level, there is considerable evidence that the task becomes increasingly productive and meaningful with musical maturity. Looking through a range of high school student comments we see considerably more astute perceptions specifically described with relevant practice plans or performance revisions. There is evidence of students taking several critical perspectives at once. There is also evidence that these students learn to question all aspects of the ensemble - seating, balance, the director's conducting technique - when encouraged to listen carefully and offer suggestions for themselves as well as the ensemble. Directors who learn to use this information ask students to demonstrate their perceptions, try out student rehearsal strategies, and present students' critical comments as annotations on the concert program.

Name

Instrument

5 Period_ TENOr ENSEMBLE REHEARSAL CRITIQUE Date //-/-89 3/23/89 version

Piece And WE Sins Glorin

Write down your critique of the ensemble performance specifying LOCATION [where you performed particularly well or need to improve] and MUSICAL DIMENSIONS [such as mythm, intonation, tone, balance, articulation, phrasing, interpretation, etc. or any dimension specified by the teacher]. Using words such as "because" be sure to mention any links between your own or your section's performance and the ensemble as a whole. Also include remarks concerning REVISIONS OR PRACTICING STRATEGIES for yourself or the ensemble. Be sure to include the main problem in terms of its dimension and location in the piece you or the ensemble should practice on before or during the next rehearsai.

		CRITICAL COMMENTS	REVISIONS OR PRACTICE PLANS
Location	Dimension	My (Section's) Performance	For Myself (My Section)
P. 2.		(filled out immediately after performance)	and the second state of the second states and the second states an
MENSURE 4	Dynanics	Dion't Sing Loud Enough Divisit get Softer Filts Enough (405:44!)	WE CTENORD ALLO TO SING WITH HORE ENERGY BLEND IN TOGINER. SING LIKE WE KNOW The NOTES. (1975)
P. 3			C
Неябигез 16 , 17	1ດົ າວໃດາ`) ະບົ	WE SLOWLY JUHPED INTO THE NUTES MAKING IT SOUND LAZY (45, "But could also describe "articitates"	WE REED TO CONCENTRALE AND STOP BEING LARLY, PAY HOR ATENTION TO WHAT WE WHIL DOING.
Location	Dimension	Ensemble's Performance	For the Whole Ensemble
Location ?. 2	Dimension	Ensemble's Performance (filled out after listening to recorded performance)	For the Whole Ensemble
	Diction	(filled out after listening to recorded performance)	PRONOUNCE FINAL VOWIES AND CONFIDENTS
7. 2 NEASULES 1-5	Diction Imonation	(filled out after listening to recorded performance)	PRONOUNCE FINAL VOWIES AND CONLAWENTS CURRECTLY,
7. 2 NEASULES 1-5	Diction Imonation	(Illed out after listening to recorded performance) EUEryone Did not provouse infir final Jumies Correctly. (100're vight!) Altos were out of the with Eueryone	PRONOUNCE FINAL VOWIES AND CONFRONTS CURRECTLY,
7. 2 HEABURES 1-5 7. 3	Diction Imonation Dynamics	(Illed out after listening to recorded performance) EUEryone Did not provousce infor final Vowers Correctly. (you're right!) Altos were out of the with Eueryone ELSS. (oK)	PRONOUNCE FINAL VOWIES AND CONFIDENTS
7. 2 NUHBURES 1-5 7. 3	Diction Imonation Dynamics	(IIIIed out after listening to recorded performance) EVERYONE DID NOT PROYOUNCE TITEIR FINAL VOWIES Currectly. (400're right?) RLIOS WERE OUT OF TUNE WITH EVERYONE ELSI. (0K) THE BASS SELTION WAS SINGING TO LOW	Pronounce Final vowies AND CONFRANCIS Correctly. Sing with Thore Energy (40!40!)

Specifics 3 Suggested Revisions D+ Critical Perspective 3-ARTS PROPEL assessment form USE OTHER SIDE OF PAGE FOR ADDITIONAL COMMENTS

Figure 2.3 High school student's Ensemble Rehearsal Critique with teacher comments and evaluation

DOMAIN PROJECT FOCUS: Ensemble Rehearsal Critique

By assessing a tape of a single reading, rehearsal, or performance, students develop the ability to use musical terms, to make critical assessment of a performing group, and to suggest revisions on the basis of their assessments. This domain project requires a carefully selected short excerpt of a piece being rehearsed (approximately 16 measures), individual student folders, teacher and student assessment forms with a student's part or an entire score included, a tape recorder, and a cassette tape for recording each ensemble class. Ensembles at any grade level may use it.

The project requires that verbal and/or informally written critique become a part of the daily work of class. The sampling for assessment includes taping and completing written critique forms on a minimum of three occasions over the course of one nineweek evaluation period.

When implementing the domain project, the teacher first introduces the section of the piece to be recorded, and asks the class to look the music over before they rehearse it. The teacher may also supply copies of the conductor's score so that students can link their comments to specific locations in the music. (Students' own parts may be highlighted in the score.)

The teacher leads a discussion about the piece, e.g., pointing out (or, with experienced students, asking about) the distinctive features of each performer's part, commenting on the style of the music, the key of the piece, or an aspect of the rhythm which is central to the selection. During the discussion, the teacher establishes the vocabulary particularly relevant to the piece and therefore to the written critiques. (Alternatively, the teacher may list terms on the blackboard and give examples of each one, etc.).

The teacher then hands out and explains the student evaluation sheet: what is meant by "LOCATION," "CATEGORY," "MY PERFORMANCE," "ENSEMBLE'S PERFORMANCE," and "THE WHOLE PIECE" and gives examples of a "main problem to be worked on."

After the teacher leads students through a series of warm-up exercises, which may well be based on the musical materials of the piece, the students perform the excerpt and the teacher records it.

Immediately after the reading of the excerpt and while their memory of the performance is still fresh, the students fill out the section headed "MY PERFORMANCE." There may or may not be discussion of their reactions so far. They then listen to the recording of the first performance of work, discuss the performance with the teacher, and write out a critique of the ensemble performance. The teacher collects student evaluations and observations written on assessment forms (or on the music scores).

At times, students are also given a perception task. One example is the use of previously recorded tapes marked for errors controlling for specific dimensions of the piece. These tapes can be customized by the instructor for the piece, or the instructor may use a standard set of examples throughout the year. Alternatively, while the teacher plays examples of single parts and melodies from the score, students can mark

PLANS ensemble as a whole. Also include remarks concerning REVISIONS OR PRACTICING STRATEGIES for yourself or the ensemble. Be sure to include the main problem in terms of its dimension and location in the piece you or the ensemble should practice on before or during the next rehearsal. and MUSICAL DIMENSIONS [such as rhythm, intonation, tone, balance, articulation, phrasing, interpretation, etc. or any dimension specified OTHER SIDE OF PAGE FOR ADDITIONAL COMMENTS Write down your critique of the ensemble performance specifying LOCATION [where you performed particularly well or need to Improve] by the teacher]. Using words such as "because" be sure to mention any links between your own or your section's performance and the **REVISIONS OR PRACTICE** Perspective For Myseif (My Section) For the Whole Ensemble Piece Date Critical **ENSEMBLE REHEARSAL CRITIQUE** Suggested Revisions (filled out after listening to recorded performance) Performance (filled out immediately after performance) COMMENTS **Ensemble's Performance** 3/23/89 version ЯS (Section's) Specifics CRITICAL ٨ ARTS PROPEL assessment form Dimension 'Dimension Location -ocation Instrument Period Name

Figure 2.4 Ensemble Rehearsal Critique Form

the errors in the music and identify the type of error (rhythm, pitch, dynamics, etc.) on their scores.

The final products from this domain project include a series of taped performances of the excerpts and a collection of assessment sheets in each student's folder. A record of each student's ability to demonstrate musical dimensions or to exaggerate them (e.g., dynamics, articulations, intonation, etc.) on their instrument may also be included to be used in a portfolio review. After the excerpt is taped, students evaluate and compare previously taped rehearsal with the current week's rehearsal. The fragment is taped approximately three times each semester or report period. Students evaluate and compare previous rehearsal on tape with the most current rehearsal. Each student writes a short critique on the COMPARATIVE OBSERVATIONS form and suggests changes for the next rehearsal. This summary work is like the Ensemble Comparison Domain Project.

> *Ensemble Rehearsal Critique* encourages students to engage in a range of activities central to musical artistry: performing, critical listening, and taking a critical perspective in order to suggest the most effective rehearsal revisions. This situates the domain project in the musical world where performance is top priority, but a broad and deep range of skills supporting performance is also highly valued.

The skills of reflection are vital. The sample of student work in Figure 2.5 demonstrates considerable development in musical reflective skills typical of an experienced player. The student, a high school senior, may not always provide a rich response, but he is able to offer contextually relevant remarks. He contributes to the ensemble a set of possibilities worth considering in any performance.

76 Name Date Period ENSEMBLE REHEARSAL CRITIQUE Plece SEAGATE Instrument Muchan Write down your critique of the ensemble performance specifying LOCATION [where you performed particularly well or need to improve] and MUSICAL DIMENSIONS (such as rhythm, intonation, tone, balance, articulation, phrasing, interpretation, etc. or any dimension specified by the teacher). Using words such as "because" be sure to mention any links between your own or your section's performance and the ensemble as a whole. ocation Dimension My (Section's) Performance **Ensemble's Performance** (filled out immediately after performance) (filled out after listening to recorded performance) 26-48: Arcut NCED TO BE GIVEN APE HARTER TONGLE. SOUND MORE SAVES NECTO 10 BE С 10 FEILDER UN FILE Eigth) R in this SECTION. like volume. L 04 116 source . to loud τ DIANAHIC Sounded 13 \mathcal{T} NUCH WORSE Incubate Q.P. The other L PLAYIND UN THE TAPE AND TUBA WERENT Than N Q IVE. NEEC 10 U 1ad ENOUgh SOLLER OF 12 E 1]-58 100 CULTER IWAS MUM DIANAMIC FO through WhOLEJONE the lover NECD Also include remarks concerning REVISIONS OR PRACTICING STRATEGIES for yourself or the ensemble. Be sure to include the main problem in terms of its dimension and location in the piece you or the ensemble should practice on before or during the next rehearsal LOTES PLAYING All of -16E 10V TON RYTHME So the 26-41 R IN THIM short then working Ε the diece . fit ۷ IN **RYIHMS** LONNIE NOCOS LU DENOLIE that part a little more L 27 S I WISUKE OF THE HE SEEM 0 DNRt. TO CUNCERALE MORE ON N 'n∈€D. Everv CERTAIN PARTS MORE THAN Others, Bit still NEED to war **ARTS PROPEL assessment form** Specifics Suggested Revisions **Critical Perspective** USE OTHER SIDE OF PAGE FOR ADDITIONAL COMMENTS

Figure 2.5 Student's critique form

His highly articulate comments using vocabulary (dynamics, articulation rhythm, and ensemble performance) describe what he perceives ("too loud," "too short," "work on rhythms so they fit the piece"). Particularly impressive are the multiple perspectives suggested by the remarks and their relation to practice strategies. Rather than commenting purely on the quality of loudness, Walt reflects on the complex dynamic balance of the ensemble in relation to his own playing ("I sounded too loud at the G.P. The other trombone and tuba weren't playing loud enough."). In addition, Walt relies on differentiating between live and recorded performance to test his views ("Sounded much worse on the tape than live; [the taped performance] <u>confirms</u> that I was too loud. Need to be softer."). Specific musical terms and locations are provided for additional context.

Rehearsal plans reflect the ability to redirect the focus on the music toward solving complex problems. Speculating on the effect of creating new performance procedures related to the score, certain problems can be addressed. Providing specific locations and combining musical concepts in ways not explicitly provided by the music, Walt, for example, recommends exaggerating articulation to focus on rhythmic problems ("try playing all of the eighth notes short and then working on them"). In addition, his criticisms include references to individual performances ("Lonnie needs to practice that part a little more. He seems unsure of that part") and section performances ("measures 26-48, saxes need to be together on the eighths in this section"), as well as remarks that address the entire ensemble. Walt's proposed strategies greatly amplify his reflective comments.

Interpreting Student Work

In sum, students are expected to assess the ensemble from several critical perspectives:

- 1. "How did I sound?" vs. "How did the ensemble sound?"
- 2. "How did version A differ from version B?"
- 3. "What suggested revisions are appropriate to the critique?"
- 4. and general versus specific comments about musical dimensions.

As a result of this project, the teacher can expect to see students begin to use a working vocabulary for tracking their musical perceptions. Teachers report improved performance of repertoire both in the mastery of technical skills and in enhanced sensitivity to musical nuance and expressive qualities. They also notice enhanced music reading skills, developing knowledge of rehearsal skills, as well as strategies for improvement, and skill in identifying errors.

The Ensemble Rehearsal Critique domain project addresses <u>production</u> through performance and revision. The project addresses <u>reflection</u> through group discussion or written peer assessments, where musical vocabulary is related to perceptual judgment and ideas for revision are formulated. <u>Perception</u> is addressed through error detection tasks and by students' written and oral comments in class, indicating their ability to monitor and discriminate musical dimensions.

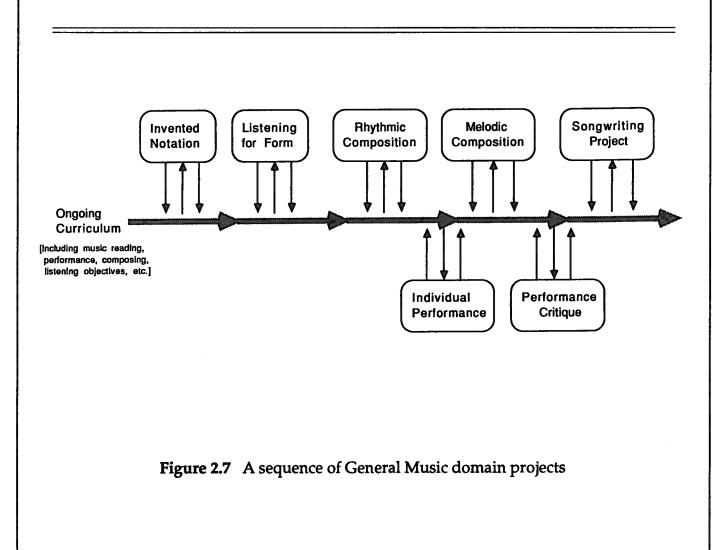
ENSEMBLE OR	CL <u>ASS</u>	[OCTOBER 1989 version]
	S)	
		TEACHER SCORING KEY
		AL ELEMENTS IN CRITICAL JUDGEMENTS ABOUT
Ability to offer specific references to musical elements while making critical comments and/or suggested revisions throughout the critique	PERFORMANCES NR= no response or not enough sta 1= DOES NOT REFER TO MUSICAL E (e.g., 'bad'; 'great'; 'much bette 2= REFERS TO ISOLATED MUSICAL INAPPROPRIATE OR IRRELEVAN (e.g., 'out of tune'; 'sloppy rhy 3= REFERS TO MUSICAL ELEMENTS MUSICAL DIMENSIONS (e.g., 'the 'the accents in the trombones r 4= MAKES MANY SPECIFIC AND AP PERFORMANCE (e.g., 'the trum	tements given LEMENTS IN PERFORMANCE ar': 'keep together') ELEMENTS and/or MAKES OVERLY BROAD, SOMETIMES T REFERENCES TO THE PERFORMANCE thm'; 'trumpets too soft') WITH INCREASED SPECIFICITY, COHERENCE AND RELEVANCE TO he flutes played the eighth notes like quarter notes [rhythm]'; weed more punch [dynamics]') PROPRIATE REFERENCES TO MUSICAL ELEMENTS IN THE upets came in late and too loudly on measure 16 and never caught ive the half notes two beats on measure 3 but I held the quarter
		VISIONS OR PRACTICE STRATEGIES FOR
ability to suggest REVISIONS or PRACTICE PLANS linked with critical comments	THE PERFORMANCE (e.g., 'practice'; 'take your in 2= OFFERS OVERLY BROAD, SUPE (e.g., 'play more in tune'; 'fin 3= SUGGESTS MORE SPECIFIC AN LINKED TO CRITICAL COMMEN (e.g., 'the flutes should use a rhythm'; 'violins should pra 4= SUGGESTS HIGHLY ARTICULAT WITH SPECIFIC CRITICAL COMI (e.g., 'the flutes should play s	MUSICAL ELEMENTS WHILE SUGGESTING HOW TO IMPROVE Instrument home': or 'listen to Mr. Daller') (RFICIAL OR UNCONSTRUCTIVE SUGGESTIONS d the bad spots and practice them'; 'don't play sloppy') D CONSTRUCTIVE REVISIONS OR PRACTICE PLANS SOMETIMES TS ON THE FORM (hard and crisp tone'; 'the drums should tap their feet for better ctice with separate bowings') TED PRACTICE STRATEGIES AND REVISIONS CLEARLY LINKED MENTS ON THE FORM taccato like the trumpets do in the first version'; 'the percussio
critical perspective	CRITICAL PERSPECTIVE	3 3 times slowly, then at the tempo marked for more precision' S) ASSUMED BY STUDENTS WHILE DISCUSSING EMBLE PERFORMANCE(S)
developed through musical elements or practice plans increasingly coordinated with	 (e.g., 'very bad'; 'good'; or 2= DESCRIPTION OF ONE OR MOR DIMENSIONS (e.g., 'I was too 3= EVIDENCE FOR SINGLE COORD (e.g., 'Trumpets were too loo 	DETERMINING CRITICAL PERSPECTIVE
critical comments	RELATIONS ACROSS ONE OR M (e.g., 'after the sopranos ca	COORDINATION OF TWO OR MORE POINTS OF VIEW AND CAUSA NORE MUSICAL DIMENSIONS me in the tenors got louder and I started singing flat; the d it was much better in tune')
["highest instance	score the highest level of achieve	vement demonstrated by the student]
	ARTS PROPEL	ASSESSMENT FORM
Figu		sal Critique Assessment measures core figure 2.3)

Teachers and students assess critiques and compare scores or evaluations. Error Detection Tasks are scored separately in order to track links between reflective comments and perceptual skills. The teacher should score the results using the assessment measures provided.

The relation between Perception and critical comments are to be scored directly in the critique forms. The teacher, where possible, can include comments about student reflections based on peer discussion and on ability to demonstrate errors or contribute revisions or corrections.

In summary, Ensemble Rehearsal Critique demonstrates important aspects of Arts PROPEL domain projects in performance. It present a wide range of activities authentic to the musical domain, as it is currently practiced, implemented repeatedly over a long-term period.

The teacher who uses these projects will learn much about each individual and about the effectiveness of the rehearsal process. The student who participates becomes not only more knowledgeable and skillful but also more engaged and more aware of her or his own learning.



Domain Project Sequence in General Music

Although the main thrust of the traditional general music class has not always been on performance, the central focus of Arts PROPEL is production. In an Arts PROPEL general music class, production may take the form of composing, inventing notational systems, or analyzing musical forms or styles in recorded performances.

Each of the following domain projects explores one of these areas; several of them incorporate performance in the project.

1. Domain Project: Invented Notation

Through the Invented Notation project, students in middle or high school invent or create notational systems as a starting point for learning musical concepts such as pitch, duration, meter, or form. Students may also become familiar with standard notation through this project. Some teachers take this project quickly in the direction of learning conventional notation by refining the level of explicitness of the symbols forming the contour of the melodies being played.

2. Domain Project: First Rhythm

In the First Rhythm project, students become familiar with note values and meter through composing simple rhythm compositions. Performances and listening skills are also developed as students perform and compose their own melodies as well as those of their peers. A conducting component may also be included as part of this project, if there is an ensemble component in the class.

3. Domain Project: Phrase and Form

Fundamental concepts of formal aspects of composition are presented to students in the Phrase and Form project. Students perform and analyze simple melodies, observing their key and time signatures, the repetition and contrast of phrases, and the motivic structures of the melodies. Their observations form the basis for their invented notations representing these features.

4. Domain Project: First Melody

Basic compositional techniques are introduced to the students through the First Melody project. Students become familiar with musical notation and concepts of melodic contour, repetition, and contrast, as they compose melodies eight to sixteen measures in length. Students may learn basic performance skills on a melodic instrument in order to enable them to compose and perform their melodies, or may realize them on a computer.

5. Domain Project: Text Setting with Songsmith

Songsmith is a computer-generated composition project. Performance skills are not necessary for this project, as the computer will perform the student's melody, giving even the student with little or no performance skill the opportunity to make sophisticated musical decisions. The *Songsmith* manual includes tools for student selfassessment in the form of journal entries. First Melody assessments are also appropriate for melodies composed on the computer.

DOMAIN PROJECT FOCUS: Invented Notation

In this section we will focus on *Invented Notation*. We then turn to two domain projects addressing composition skills: *First Rhythm* highlights the focus of domain projects on process as well as product (facilitating revision and experimentation); and *First Melody* demonstrates a teacher's adaptation of an Arts PROPEL domain project.

In this domain project, students invent ways to depict graphically the contour (ups and downs, the "shape" of a melody) of simple melodies without using standard music notation. Invented notations provide students with the opportunity to reflect on, and show their understanding of the contour of a melody prior to mastering standard music notation. In subsequent domain projects involving notation, perspectives other than contour may be considered using these same musical examples. For example, students may be asked to notate only dynamics, rhythm, structure, or a combination of two or more dimensions.

This domain project requires an overhead projector and overlays, notation examples from different historical periods, and folders for each student. Students in grades 4 through 12 may use it, and it requires a minimum of six 45-minute class periods over a span of about three weeks.

To introduce the domain project to the students, the teacher begins by demonstrating the concepts of melodic contour and shape by analyzing simple and familiar melodies, such as nursery rhymes, pop tunes, or folk tunes. The students are encouraged to listen with pencil and paper handy, keeping track of the melodic contours they perceive. The teacher may want to have the students sing the songs first to refresh their memories. It is also useful to ask students to sing from their notation afterwards.

This domain project produces at least six notations, assessment sheets, and one written paper which reflects self-evaluation or summary evaluation of the materials in the folder. Over approximately three weeks, student classwork and exercises are collected every class period and kept in a folder. This project can be repeated later during the school year when a new topic is introduced. This can provide a very full record of how a student maintains contact yet expands upon the original task. The work developed this way is assessed through peer assessments of daily exercises and evaluation of materials in the folder.

The teacher can expect students to improve in terms of musical skills. Out of the need to keep records of the listening process and describe specific aspects of melody, students will develop some understanding of melodic contour. In addition, students will grasp the essentials of a notational system, develop an appreciation of the values of consistency, legibility, and the evolution of the conventional notational system.

The teacher can also expect improvement in general cognitive development. The student will develop an ability to adopt a critical perspective towards his/her own work and that of peers, as evidenced by improvements in accuracy and consistency of graphing and through invented strategies for solving notational problems.

With this domain project, the teacher will be able to track students' growing ability to perceive the musical dimensions being studied before the students undertake the task of mastering the intricacies of the standard notation system. Teachers will be able to observe students developing notational systems to reflect what they perceive rather than forcing what they hear into a highly structured conventional system. In addition, the teacher will be able to look at individual profiles of student perception and their reflection on these perceptions through their notational productions.

Several particular instructional goals are met by this domain project. First, concepts of notational systems are brought to students' attention. Second, students consider melody, melodic contour, and possibly phrase structure and musical form. Finally, students develop critical thinking skills to organize and shape perception. They engage in transfer of musical skills across musical contexts; and they may attempt the synthesis and generalization of isolated subskills.

Invented Notation Project Summary

This domain project can be used to meet a variety of curricular goals. It can be used as an introduction to the study of standard music notation. It allows students to have the experience of composing before they learn standard notation. It allows students to show graphically the musical elements (e.g., form) of works they listen to.

Short-range goals include creating graphic representations of simple melodic contours that become increasingly rich and accurate; and may include development of a consistent and uniform representational system capable of showing phrase structure, melodic symmetry, closure, and the integration of these musical dimensions in the notation. Long-range goals include student use of their notational skills to represent musical structure, to record their perception of intervals, and to take simple dictation using their invented notations.

As with performance class projects, this domain project involves assessing aspects of production, reflection and perception. With respect to <u>production</u>, students formulate and revise notational methods for showing musical dimensions. With respect to <u>reflection</u>, student notations should show their ability to apprehend musical dimensions in increasingly sophisticated ways. Students can review the notations to explore paths which lead to more refined musical perceptions, which will allow them to consider the relation of the final copy to the first and second drafts. Class discussion of students' invented notations will help individuals shape their own notations as they learn to recognize others' musical perceptions and must make increasingly refined perceptual discriminations.

Figure 2.8 shows the form on which students write their observations and reflections about their invented notation systems. The teacher scores these reflections using the guidelines depicted in Figure 2.9. These include the critical perspective the student takes, the identification of musical elements, the ability to specify notational goals, and the ability to suggest revisions to improve the notation.

DOMAIN	PROJECT:	INVENTED	NOTATION P0 version]		
ENSEMBLE OR CLAS	SS				
	DDLE SCHOOL LEVEL	DIMENSIONS			
		- STUDE	NT		
STUDENT					
WHEN REVIEWING	NOTATION 1	NOTATION 2	NOTATION 3		
YOUR NOTATIONS, DISCUSS:					
Did I understand what was meant by a notation system?					
What is it for, or how should it work?					
Did I write down the pitch? (highness or lowness of the melody) How did I do It?					
Did I write down the rhythm? (long and short sounds of the melody)					
How did I do it?					
Did I write down the pulse or the meter? (the groupings of notes)					
How did I do it?					
Did your notation system change since the first and second sessions?					
Why or why not?					
Why is a notation system Important?					
Compare your notation system to others' in your class and to the standard notation					

ARTS PROPEL ASSESSMENT PROFILE

Figure 2.8 Invented notation student assessment form

DOMAIN PROJECT: INV	ENTED NOTATION
ENSEMBLE OR CLASS: GRADE LEVEL(S): MIDDLE SCHOOL/HIGH SCHOOL DATE: TEACHER: STUDENT:	SCORING STUDENT REFLECTIONS NOTATION NOTATION 1 2 3
DA PERCEPTION/REFLECTION	TE
CRITICAL PERSPECTIVE	
A= subjective perspective only; B= objective perspective only; C= combination of subjective and more objective points of view	
IDENTIFICATION OF MUSICAL ELEMENTS 0= does not refer to musical elements in the melody; t = seldom refers to musical elements or makes consistently inaccurate or inappropriate references; 2= consistently refers to musical elements but sometimes inappropriately; 3= consistent and accurate reference to musical elements	
ABILITY TO SPECIFY GOALS OF THE NOTATION (AND REVISIONS 0= no attempt to indicate goals of the notation or a notation system in general; 1= goals of the notation may be specified yet still unsubstantiated by the notation; 2= the goals of the notation are nchy specified and substantiated by the notation and revisions)
ABILITY TO SUGGEST OR GENERATE REVISIONS 0= no attempt to revise notations; 1= revisions are attempted superficially but with little substantive change; 2= revisions are articulated and implemented effectively	
(OTHER)	

ARTS PROPEL ASSESSMENT PROFILE

Figure 2.9 Example of teachers scoring sheet for student reflections

When using invented notation forms over various age groups teachers can see real development. The following examples show a developmental glimpse of the song 'Happy birthday' — from 4th through 12th grade. As can be seen, the notation of a simple song can reveal problems in integrating perception and understanding of musical concepts. While younger students find ways of representing general musical properties as they perceive them, older students face a different problem. They must resist notating their assumptions (which are based on their musical and standard notational knowledge) while continuing to represent their perception of the melody of a familiar tune.

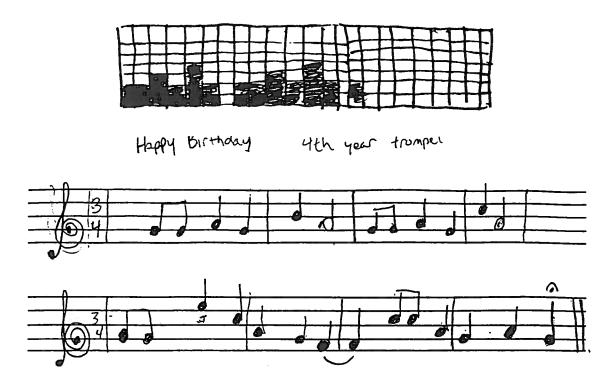


Figure 2.10 Examples of "Happy Birthday"

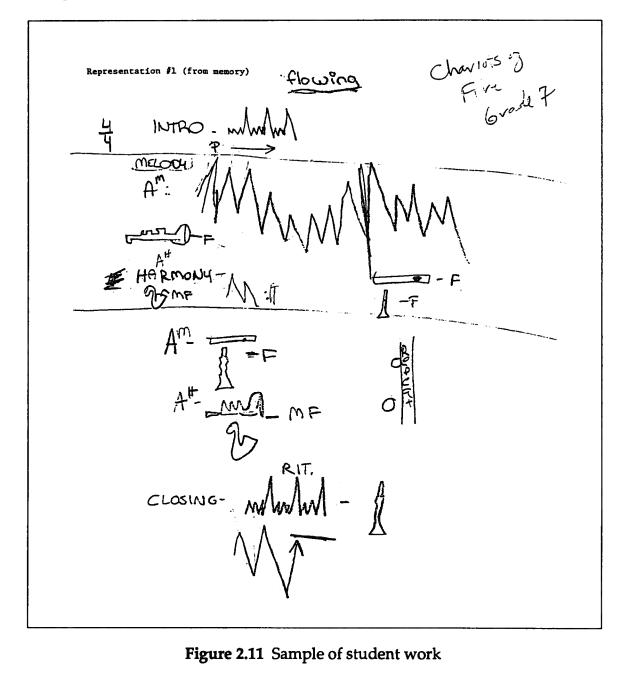
Extensions of Invented Notation Project

The sequence of events entailed in the *Invented Notation* domain project helps students develop independent listening, reflecting and representational skills. In addition, the domain project facilitates the integration of these ways of knowing by coordinating them in a single project-based activity.

Figure 2.11 shows the invented notation of the song "Chariots of Fire" made by a student also engaged in the Conducting the Band domain project in middle school. After the student prepared to conduct the ensemble, she was urged to represent her understanding of the music by depicting the structure and detail of an entire score. She represented what she knew about the song, or at least what she found salient, by fashioning her notation in specific ways.

For example, after appropriately identifying the time signature and form device

("intro"), she traces the contour of the melody she heard. In so doing, she draws on her perception of the piece to make critical observations of the melody's ups and downs, attending to the specific dimension of contour of the melody, before depicting these observations with a squiggly line. Later she redirects attention to the instrumentation by drawing a picture of the instrument she hears. In this case, as she perceives the music, she reflects on what instrument makes the sounds to which she attends, and transforms this knowledge to produce a rendering of the instrument. Later still, she writes the word "harmony" when the chord motion catches her attention and labels thematic material by identifying the 'a' and 'b' themes in the music. Clearly her invented representation of the score provides an effective view of her understanding of the structure of the score - an understanding that supports her work conducting the band responsibly.



DOMAIN PROJECT FOCUS: First Melody

We turn now to First Melody, a domain project focusing on compositional skills. While many teachers prefer to start with First Rhythm or with text setting on the computer, First Melody is a domain project that builds on the skills begun with Invented Notation and continues to feature production, perception and reflective thinking skills.

The description of the *First Melody* domain project that follows is one teacher's adaptation of the domain project.

In this domain project, each student composes an original melody (four to sixteen measures) and performs the melody using tonal bell sets, recorders, piano, or other instruments. This domain project requires tables and chairs, one tonal bell set or recorder per two students, two mallets per set of tonal bells, manuscript paper, pencils and erasers, folders, musical staff and notation reference sheet, and a baseline performance piece. It is suitable for middle-school entry-level students. On the first attempt, the project requires a minimum of 10 to 12 class periods of forty minutes each. It may be conducted in the general music classroom.

Preparation for the project includes activities and work which ensure students' familiarity with pitch naming and elements of music notation, corresponding keyboard pitch identification, and developing tonal-bell or recorder playing technique sufficient for playing the melody. An assigned composition for performance (for example, "Frère Jacques" for bells and piano, "Mary had a Little Lamb" for recorder) is recommended as a preparatory piece preceding the original composition task.

Students are introduced to several things in this domain project. First, they work with a collection of preparatory pieces which familiarize the student with rudimentary pitch and rhythm values in the key of C or the key of the instrument. Second, students are taught the concept of a phrase, and the difference between phrases which end on the tonic and those that do not. Finally, students are taught to use notation to record pitch names (limited to one key), meters (2/4, 3/4, 4/4), and rhythmic values (limited to whole, half, quarter and eighth notes).

After the fourth or fifth session, students are assigned a composition task and given the criteria for their assessment. The starting note, key, time signature, and range of rhythmic values are all given. Students are asked to compose and shape their own two-measure melody with standard notation. Next, students are asked to revise their compositions according to teacher or peer criticisms.

The final composition is assessed for accurate use of standard notation in fulfilling the compositional requirements (notes that belong to a key, time signature, etc.). Students' ability to perform accurately from their notation is also assessed (distinguishing perhaps between what was intended to be heard and what was actually written). There is also an assessment of "higher order" compositional qualities such as closure (e.g., whether it ends on the tonic or not), the shape of the melodic contour (e.g., how it leads to the final tonic, etc.) and the quality of rhythmic expression (e.g., rhythmic expression of the cadence).

The final product is a four-to-sixteen-measure melody composed by each student, with students reading their own notations. Copies of compositions with revisions marked and comments written for feedback, tape recordings of performances, and written teacher comments are maintained in student folders. All student work is collected during the project throughout the term of the domain project.

In terms of musical dimensions, teachers can expect the creation and performance of an original musical composition. This achievement promotes the student's self-concept as a composer (i.e., a source of original musical expression), and as a performer (competent and expressive performance from music notation). With creative use of musical elements and articulate use of standard notation the students become more apt to recognize and reflect on musical dimensions in short melodies.

In terms of dimensions of cognitive development, teachers can expect heightened perception and comprehension through exploring the construction and performance of musical composition. This includes increasingly connected visual-aural representations of music, growing concepts of tonality, phrasing, and first-hand experience with the relevance of the music notation system. Critical perspective is expanded through students' ability to analyze, revise, and respond to peer and teacher suggestions, and their ability to evaluate peer compositions constructively.

From this domain project, the teacher can expect to see evidence of improved self-esteem through creation and performance of original work, and simply through the recognition that one has, even as a beginning musician, the ability to compose. The teacher can also expect to see evidence of musical aptitude in performance (including motor skills), and ability to respond to a limited set of musical parameters to create musical expression. The teacher can expect to see evidence of increased musical listening acuity (perception) through performance and composition, and evidence of increased listening acuity and musical vocabulary in the peer assessment group. Finally, the teacher can expect to see evidence of the student's grasp of musical tonality and musical syntax through composition, listening, and peer assessment sessions.

The typical middle school curriculum examines five basic elements of music: pitch, duration, dynamics, timbre, and form. This domain project stimulates students to explore the use of at least two of those elements: pitch and duration. Specific attention is given to pitch identification, high-low combinations, intervals, tonality, key signatures, time signatures, rhythmic notation, note values and proportions, and meter.

This domain project is designed to be flexible. It may be implemented with other media such as tape recorders, piano, or computers (e.g., Deluxe Music Construction Set for Macintosh computers) and can be repeated throughout the year with less class time needed and with added musical complexity.

Summary and Student Work

The First Melody Project again clearly integrates production, perception and reflection. Production is addressed through performance of prerequisite pieces and project pieces from notation, and through written compositions and stages of revision by students. Reflection is addressed through engagement in self and/or peer

assessment in which criticism is offered; students can exercise options to revise notation to reflect compositional ideas or performance. Perception is addressed through identification of note names and values, through recognition of time signatures, meter and key signatures, and through comparison of notation with actual performance (in class or on tape).

The students' work is assessed in a variety of ways. First, there is an examination of the response to defined criteria. Each assessment profile is designed to fit the specific part of the project, but the basic format remains the same. Work is also assessed by comparing the self assessment completed by the performer to that of the teacher.

The samples of student work shown in Figures 2.12A-B demonstrate an adaptation of a domain project by a teacher working with PROPEL researchers to meet curricular goals. In this case, the teacher adapts the *First Melody* domain project to an elementary school setting, grades 3 through 6.



Figure 2.12A Sample of student work

As this work suggests, students are learning to think compositionally as well as aesthetically in their work. Students, even in elementary school, are capable of setting goals, judging work and suggesting revisions.

 $\left(\left(C \right) \right)$ Reuject: Melody Composition After you have composed your melody, answer the following questions. 1. What do you like most about your melody? Explain why. The pattern and how it sounds overall because it has a certain feel to it." 2. What did you learn from writing your own music? I have learned that you many times to make sure it sands good. 3. How do you think you did writing your notes down? Fire Could others read your music? Could your notes and symbols be more clear or better in some vay? KS I think they coold Could your notes and symbols be more clear or better in some vay? KS I then they COuld be a little neater the they could be a little neater 4. Besides high and low sounds (pitches), does your melody have any other type of sounds? (C; What are they? The Me For Et A ? Did you show this in your music? Yes How? by putting those 5. If you were to write a new melody, what would you do differently or try to do that was new? I would USE a different combination notes and rhythms If so how? Ves I think it is because I repeat a certain part to give it a pattern but I dont do this somary times that 6. Do you think your melody is organized in some way? it will get Dota

Figure 2.12B Sample of student work

Figure 2.13B shows an example of the scoring system the teacher uses to assess student work and reflection sheets. Figures 2.13-2.14 are from middle-school students who are writing their first duets. Faced with the task of writing for multiple instruments students begin to discover how to harmonize simple melodies they composed previously in First Melody.

Figure 2.13 Student's duet Student Grade Score L. Compositional Dimensions Ability to shape effective melodic contour 1 = avkward or random collection of notes. 2 = shows some melodic shape and line, simply constructed, may contain some awkward leaps. 3-3 = smooth, lyrical and clearly shaped melodic line(s). Ablitiy to create rhythmic units or patterns 1 = succession of notes of the same duration. 34 2 = shows some long and short sounds. 3 = shows a clear rhythmic unit or pattern. 4 = repeats rhythmic pattern(s). Ability to create a cohesive tonality 1 = a collection of notes with no tonal center. 2 2 = a musical phrase which shows some sense of tonality via scale use or outline of chords. 3 = clear sense of tonality, ending on the tonic. Ability to extend melodic phrase 1 = not attempted B 2 = extended with little or no sense of unity 3 = extended with some rhythmic and/or melodic ties 4 = extended with rhythmic and/or melodic ties, all parts related and showing overall structure or unity. Jazz / blue feel in John's meloy. Comments Figure 2.14 Teacher bood use of accelicat / bless make . hacks scoring system harmonic program

DOMAIN PROJECT ASSESSMENT: Individual Performance

To provide an example of how private or class lessons are assessed, we will look at the *Individual Performance* domain project. Although it is designed for the one-on-one situation of the private lesson, it can be used with groups of students. Many schools are unable to offer private lessons to students and offer group lessons instead. The example we discuss represents this latter situation: an inventive adaptation of the Individual Performance domain project to the conditions of a piano class, where a Pittsburgh teacher alternates her focus from the individual student to the group.

The goal of the Individual Performance project is to develop and demonstrate increasing proficiency in a variety of specific musical dimensions: pitch, tempo, dynamics, articulation, technique and posture, balance and overall musicianship, music reading, coordination of hands, demonstration of nuance, and expressiveness. The project is also designed to encourage students to adopt a critical perspective, to develop personal practice plans, to perceive and understand musical structure, and to perform selected pieces from memory.

In the lesson, the teacher has the student review the section to be performed and discuss the dimensions to be addressed in the performance. During the discussion, the teacher establishes the vocabulary of terms and concepts to be used in the critique. The student then plays the passage or piece. Using the Individual Lesson form (see Figure 2.15), the student fills out the sections of Performance Dimensions indicated by the teacher. The student may mark on the music to help specify the errors to be mentioned in her critique. Finally, the student fills out the section headed "Suggested Revisions." After this is completed, the teacher reviews the Individual Lesson form and discusses it with the student.

Like its ensemble equivalent, the Ensemble Rehearsal Critique, this project generates a series of documents: taped performances of the selections, completed Individual Lesson forms, copies of the piece performed, comments on the piece, teacher's scoring of student work. These can be used to develop a profile of each student's progress. The documentation allows the teacher to chart a student's musical growth, ability to reflect on musical dimensions, and performance skills.

Figures 2.16A-C depict a scoring system by which the teacher (and students, in the case of a class lesson) may assess production. Using the scoring forms, the teacher assesses student growth in performance execution dimensions, higher-order dimensions such as phrasing, specific references to musical elements, critical perspective, and suggested revisions. Scoring levels (listed under each dimension) guide consistent and informative scoring for each dimension.

Note that the forms are designed to score multiple performances of a single piece. This is done so that the developmental path of a piece can be traced easily. Alternatively, in a group situation separate performances by several students can be scored on a single occasion.

TEACHER)			RE	UDENT PE	ON	
	MUSIC PERFORMED:		DATE		GHT READ, I	REHEAR	SED?):
DISCUSS THE		J				<u></u>	
PERFORMANCE		CRITIC	AL		SUGGESTED		
DIMENSIONS:	SPECIFICITY	PERSPE	-		REVISIONS		
TEMPO							
(steadyness, flexibility, etc.)							
DYNAMICS					··· ···		
(control, special effects, etc.)							
ARTICULATION							
(control, special effects, etc.)							
TECHNIQUE & POSTURE (hand position, fingering, etc.)		<u></u>					
BALANCE	·····			· · · · · · · · · · · · · · · · · · ·			
(control of voicing, ability to change balance, etc.)							
OVERALL MUSICIANSHIP (expressive nuance in performance, sense of phrasing, etc.)		2011					
SUGGESTED REVISIONS (for improving or correcting any of the above)							

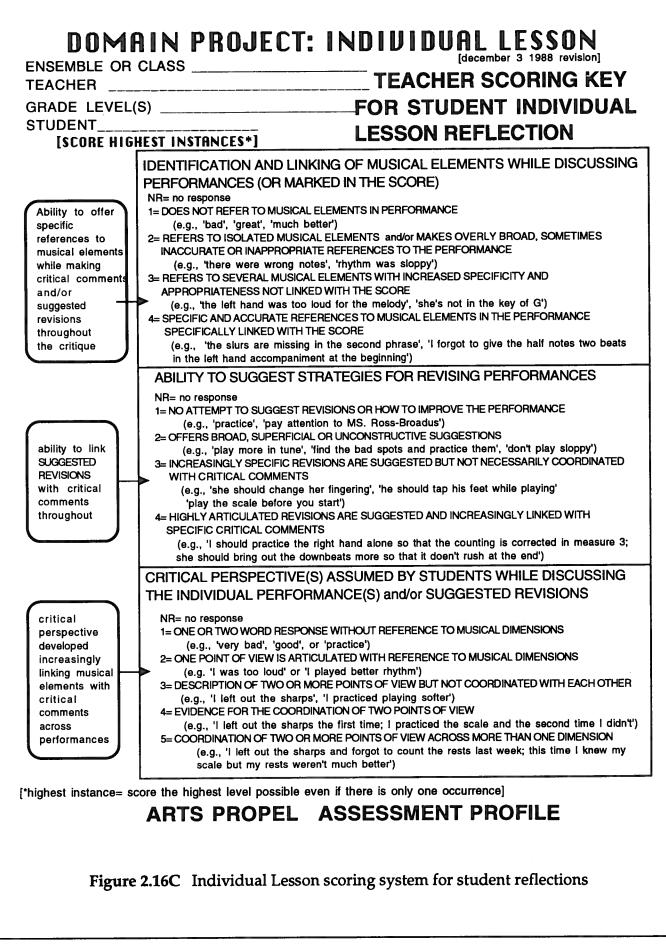
ARTS PROPEL ASSESSMENT PROFILE

Figure 2.15 Individual Lesson student form

DE LEVEL(S) (Aug 1988 Tevision)		STUD	ENT F	PERFC	RMAN	NCE
CHER		1	2	3	4	5
	ATE					
PERFORMANCE						
ECUTION DIMENSIONS		-				<u> </u>
SCORE = NA IF NOT APPLICABLE	RMED:					
CH PRODUCTION [most conservative score	ng*]					
-1.9] = seldom performs pitches accurately[0-50%] or securely;						
)-2.9] = sometimes performs with accurate pitches [50-75%] but with frequent or repeated errors;						
-3.9] = mostly accurate and secure pltches [75- 95%] but with a few isolated errors;						
0-4.9] = virtually no errors and very secure pitches [95-100%]	+7			<u> </u>		
YTHM/TEMPO PRODUCTION [most conservative score [.9] = seldom performs durations accurately [0-50%] or with a steady	tempo					
2.9] = sometimes performs durations accurately [50-75%] but with an pulse or with frequent or repeated durational errors;	erratio					
pulse or with frequent or repeated durational errors, 3.9] = mostly accurate rhythm [75-95%] and steady pulse with a few						
durational errors;						
I.9] = secure pulse and rhythmically accurate [95-100%];			<u> </u>		 	_
RTICULATION (if applicable) [most conservative sco D-1.9] = seldom able to regulate attacks [0-50%);	oring*)					
)-2.9] = generally consistent attacks (50-90%)with some responses to						
staccato, legato, and slur markings in the score; -3.9] = consistent attacks (90-100%) and responses to articulation ind	licated		1			
in score;			L			
DYNAMICS (if applicable) [most conservative score] 0-1.9] = seldom able to control dynamics (0-50%); (0-50%);	Ing*]					
0-2.9] = generally controls dynamic levels (50-90%) with some respons	ses to					
dynamic effects (cresc, decresc, etc) in the score; 0-3.9] = consistent dynamics (90-100%) and responses to dynamics ind	licatod				1	
In the score;						
AND AND/or FINGER CONTROL (if applicable) (OBSERVED BY TEACHER DURING PERFORMANCE	Ξ)					
0-1.9] = seldom attempts to use conventional hand positions or fingering	IS;				1	
D-2.9] = poor hand position sometimes interferes with production of so D-3.9] = mostly even volume only with all fingers in five finger position	und;					
0-4.9] = mostly even volume only with an ingers in five iniger position 0-4.9] = maintains consistent control using smooth finger crossings;	'					
ENERAL CONSIDERATIONS (if applicable) [1= yes; 0= n	0] A					
(OBSERVED BY TEACHER DURING PERFORMANCE)	в				╂	+
A= uses appropriate fingerings	C			—		
B= satisfactory hand coordination		<u> </u>	┣───	 	<u> </u>	
C= use of sustain pedal consistently coordinated with music D= ability to produce three finger and weight-shift slurs	D		 	 	 	–
E= ability to sustain to tempo set by instructor or group	E		<u> </u>	<u> </u>		_
F= satisfactory time on task (attitude and Interest)	F					<u> </u>

Figure 2.16A Individual Lesson scoring system for Execution Dimensions

ENSEMBLE OR CLASS BRADE LEVEL(S)	(ALIG 1988 VERSION)	TEACHER SCORING STUDENT PERFORMA					
EACHER		1	2	3	4	5	
	DATE						
PERFORMANCE: HIGHER ORDER DIME	CONDITION NSIONS MUSIC PERFORMED:						
pressivity and Style in Musical Phra	sing						
pressivity and Style in Musical Fina	[HIGHEST INSTANCE]						
1.0-1.9] = seldom evidence of musical nuance in m 2.0-2.9] = sometimes responds to musical nuance 3.0-3.9] = often performs with nuance or style Ind suggested by the instructor or peer; 4.0-4.9] = consistently performs with nuance and s and coaching;	Indicated In the score; icated in the score or						
Evidence of Grasp of Musical Structu [evidence for musical comprehension in performan articulation, dynamics (balance), to show phrase	[HIGHEST INSTANCE]						
[1.0-1.9] = seldom indicates phrasing structure [2.0-2.9] = sometimes uses musical nuance to [3.0-3.9] = consistently uses musical nuance t	through nuance; indicate phrase structure;						
Balance and Voicing (If applicable)	[HIGHEST INSTANCE]*						
 1.0-1.9] = control of dynamics only within one void 2.0-2.9] = seldom able to regulate or adjust to bal (melody and accompaniment) 3.0-3.9] = often regulate or adjusts to dynamic bal lines by controlling the dyamics of eac 4.0-4.9] = consistently controls independent lines 	ance between two voices lance (establishes independent sh hand;						
Performance Proficiency [IIst mo	st pronounced						
 characteristic contractions and the second se	e;						
Ensemble (Duet or 4 hands) Perform	ance (if applicable)			<u> </u>	<u> </u>		
[1.0-1.9] = entrances or attacks seldom in sync wi [2.0-2.9] = sometimes demonstrates the ability to [3.0-3.9] = consistently demonstrates the ability to [4.0-4.9] = consistently demonstrates the ability to PLUS the ability to adjust tempo and d	follow or lead ensemble; follow or lead ensemble; follow and lead ensemble						
HIGHEST INSTANCE*= score the highest level possible even if there is only one occurrence ARTS	(make additional comm S PROPEL ASSESS				FILE		



Overall, this assessment system offers teachers a valuable way of documenting individual students' growth and performance. As in the other domain projects, repetition of this assessment process on several occasions makes it possible to trace the trajectory of musical learning in a manner that is multidimensional, detailed, and rich with information about a student's comprehension of various musical concerns. Expanding the view of the lesson beyond performance skills alone, it makes other, indeed critical musical issues highly visible as important parts of the lesson.

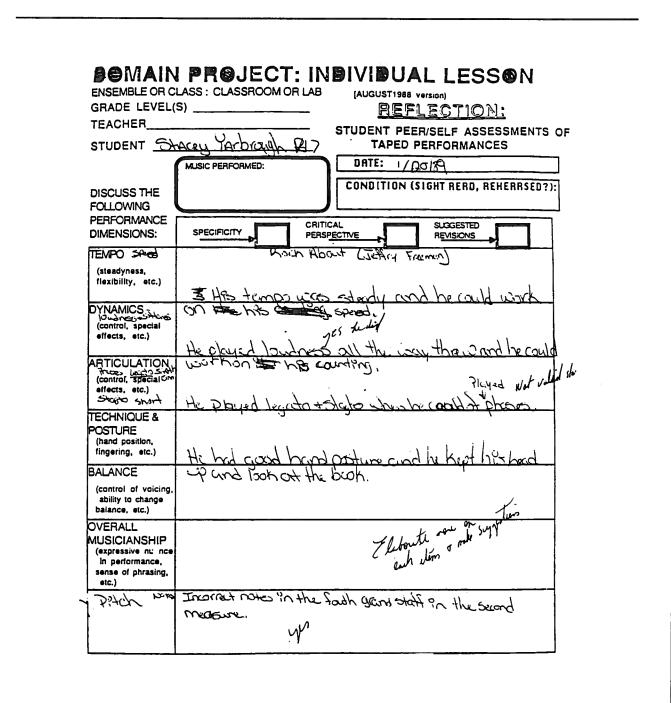


Figure 2.17A Individual Lesson student form

Teachers work to develop rich profiles of student learning which go beyond performance to assess perceptual acuity and reflective knowledge. Moreover, this domain project provides an example of an assessment system serving both as an instructional tool and as an evaluation tool. As the student perceives and reflects on her performance, or that of a peer, she is learning about music as well as providing evidence by which the teacher can assess her critical skills. Assessment of the *Individual Lesson* domain project thus maintains the triangulation view of musical learning, including production, perception, and reflection.

ENSEMBLE OR CLASS :		EACHE			-
GRADE LEVEL(S) 7 Hu. (Aug 1988 revision)		ENT P			
TEACHER	1	2		4	T
STUDENT ARBLOUGH STACEY DATE	1%4	"/ ₃ ,			
PERFORMANCE CONDITION	R	R			
XECUTION DIMENSIONS	al			+	+
SCORE - NA IF NOT APPLICABLE	won	sinh			
PITCH PRODUCTION [most conservative scoring*]					
 [1.0-1.9] = seidom performs pitches accurately[0-50%] or securely; [2.0-2.9] = sometimes performs with accurate pitches [50-75%] but with frequent or repeated errors; 	1.5	2.5			
 [3.0-3.9] = mostly accurate and secure pitches [75- 95%] but with a few isolated errors; [4.0-4.9] = virtually no errors and very secure pitches [95-100%] 					
BHYTHM/TEMPO PRODUCTION [most conservative scoring*]				1	+
[1.0-1,9] = seldom performs durations accurately [0-50%] or with a steady tempo [2.0-2.9] = sometimes performs durations accurately [50-75%] but with an errational sector sec	1				
pulse or with frequent or repeated durational errors;	2.8	1.9			
[3.0-3.9] - mostly accurate rhythm [75-95%] and steady pulse with a few durational errors;	ľ	'			
[4.0-4.9] - secure pulse and rhythmically accurate [95-100%];				ł	
ARTICULATION (if applicable) [most conservative scoring*]				1	
[1.0-1.9] = seldom able to regulate attacks [0-50%); [2.0-2.9] = generally consistent attacks (50-90%)with some responses to	2.9	1.9			
staccato, legato, and siur markings in the score;		1			
[3.0-3.9] = consistent attacks (90-100%) and responses to articulation indicated in score;	[1	
DYNAMICS (if applicable) [most conservative scoring*] [1.0-1.9] = seldom able to control dynamics (0-50%);					
[1.0-1.3] = seldom able to control dynamics (0-50%); [2.0-2.9] = generally controls dynamic levels (50-90%) with some responses to					
dynamic effects (cresc, decresc, etc) in the score;	NA	-			
[3.0-3.9] - consistent dynamics (90-100%) and responses to dynamics indicated in the score;	'			1	
HAND AND/or FINGER CONTROL (if applicable)					1
(OBSERVED BY TEACHER DURING PERFORMANCE)	,9				
[1.0-1.9] = seldom attempts to use conventional hand positions or fingerings; [2.0-2.9] = poor hand position sometimes interferes with production of sound;		3.0			
[3.0-3.9] = mostly even volume only with all fingers in five finger position;					
[4.0-4.9] = maintains consistent control using smooth finger crossings; GENERAL CONSIDERATIONS (if applicable) [1± yes; 0± no] A				┿╼╼╼	
	0	0			
	1-	1-			
Be satisfactory hand coordination	NA	1		T	
C- use of sustain pedal consistently coordinated with music D	NH	-	-		T
D= ability to produce three finger and weight-shift slurs E E= ability to sustain to tempo set by instructor or group	1	0			1
F= satisfactory time on task (attitude and interest)	1.			+	

ARTS PROPEL ASSESSMENT PROFILE

Figure 2.17B Individual Lesson teacher scoring

The following excerpt from a discussion in the piano class documents students' perceptions, critiques, analyses, and judgments as they reflect on a classmate's performance. They are applying their increased perceptions across a range of styles, genres, and contexts other than those which they customarily encounter in their own pieces. Aware of musical techniques and issues in very specific terms, they are also able to identify the performance sound of an unsure performer.

Taken together, the comments can be used to construct a profile of the performer, useful because it positions strengths and weaknesses in relation to one another. A student can be shown to have scored at the top level in pitch, but not as well in terms of articulation and dynamics. While the student has learned the basics of the piece — the notes and rhythms — he has yet to attend sufficiently to higher order "nuance" dimensions.

Comments which indicate an awareness of subtle dimensions such as phrasing ("I had lost all types of phrasing until I played it the second time") provide an opportunity to intervene to help students put their perceptual and reflective knowledge of higher order musical dimensions into practice.

February 8, 1988 PIANO CLASS DISCUSSION

LENESHIA

S: Mrs. Broadus, you know since I've been in this class I've been really getting into music more. I like listening to music and have been really getting into it since I've been in this piano class.

T: Music on the radio?

S: Yes. I was like a music baby. Music all the time, but I just listened to it then. But now I can really get into it since I've been in this class.

T: What about some of things we've talked about in the class? Can you differentiate between what's staccato-legato? Tempo--fast or slow?

S: I can tell on the radio but on the piano it's not the same, but as far as phrasing and dynamics, I can't get into that.

T: That will come. However, the pieces on the radio may not have a variety of expression.

LENESHIA

S: Dawn played like she wasn't sure. She has played this song before and it shouldn't have sounded like she wasn't sure. She played it like "was this right"? It was pretty good, but it could have been better.

T: It could have been better in what area? How specifically?

S: She played staccato.

T: Any other comments?

CHERYL

S: The tempo was steady. At first she played rather loud, but I think she understood what she was doing and gradually got softer as the piece went on. Her fingering looked about right as far as I could see.

ANTOINNE

S: She wasn't sure about her fingering which made her play the notes wrong.

T: She had some wrong notes?

S: Yes

- T: OK. What measures?
- S: Fourth bar in the 1st staff, and second bar in the second grand staff.
- T: Very good.

Figure 2.18 Piano class discussion

PORTFOLIO DOMAIN PROJECT SEQUENCE CHART

(Instrumental Music - Grs. 4-8)

PRODUCTION	Year 1 End-of-the-Year Per- formance Tape (MD*) Composition Project (MD) Solo Interpretation (MD)	Year 2 End-of-the-Year Performance Tape (MD) Composition Project (MD) Solo Interpretation (MD)	Years 3 & 4 End-of-the-Year Per. Tape (MD) Composition Project (AD) Solo Interpretation (MD)	End States PERFORMER COMPOSER
PERCEPTION	End-of-the-Year Per- formance Critique ("How could your classmate im- prove his/her perfor- mance?") (MD) Invented Notation (MD)	"Give a Lesson to a Classmate" (MD) Invented Notation (MD)	"Rehearse the Band" (MD) "Write a Review" (MD & AD) Invented Notation (MD)	PERCEPTIVE LISTENER
REFLECTION/ UNDERSTANDING	Composition Project (MD & AD) Aesthetic Evaluation (from lesson material) (AD) *MD = Musical Dimension AD - Aesthetic Dimension	Composition Project (MD & AD) "Give a Lesson to a Classmate" (MD) Aesthetic Evaluation (from lesson and band material) (AD)	"Rehearse the Band" (HD & AD) "Write a Review" (MD & AD) Composition Project (MD & AD) End-of-the-Year Per. Tape (MD) Aesthetic Evaluation (AD) (from band and outside class material)	¥ AESTHETIC PHILOSOPHER

Figure 2.19 Example of one teacher's domain projects in a portfolio program for upper elementary and middle school music program

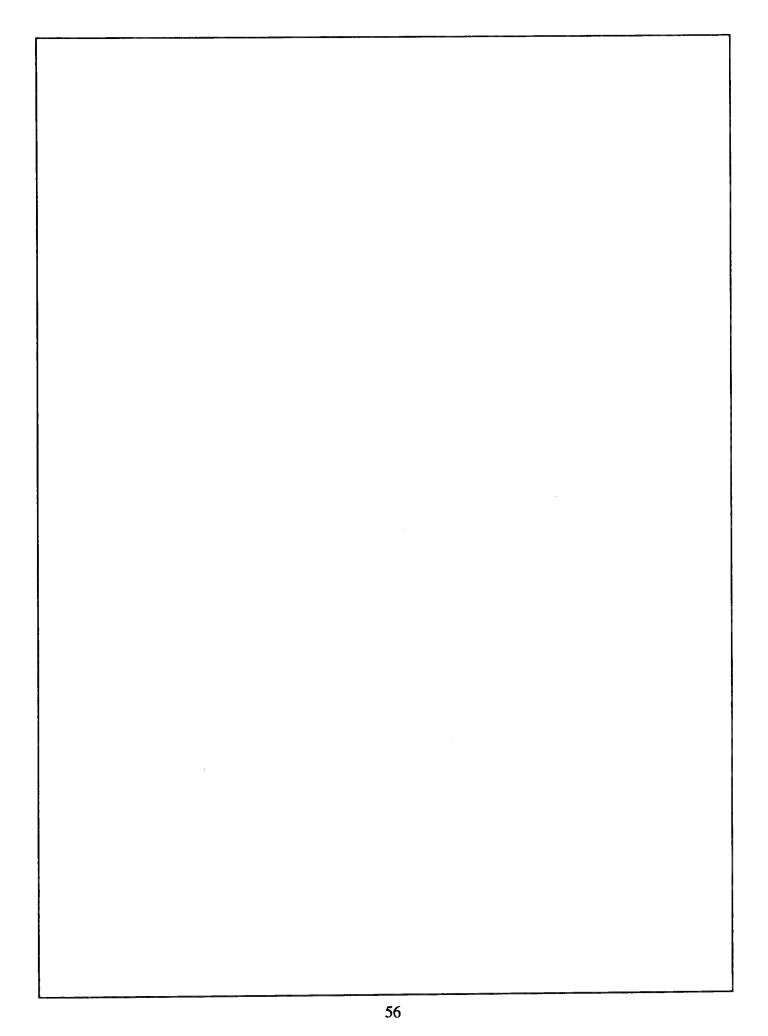
Summary of Assessment of Domain Projects

Teachers and researchers in Music PROPEL share a firm conviction that thoughtful work demands evaluation that recognizes the number and range of activities that can occur in and outside of the classroom. Both teachers and researchers value assessment in the form of learning profiles which take into account multiple strands of learning associated with these roles. In music we support performance evaluation that stresses self, peer, and teacher rating along multiple dimensions (such as rhythm, tone, intonation, etc.). We are committed to the construction of assessment profiles that view musical development along the entire array of dimensions necessary to characterize development in music.

Each domain project has its own multi-dimensional assessment system. Rather than a one-dimensional, global assessment in which a single grade is assigned to work, assessment of domain projects creates a profile of students' abilities as revealed in their work. This approach honors the complexity intrinsic in any worthwhile work.

A domain project must provide a means of repeatedly sampling a student's understanding of a concept, including a sample of initial, intermediate and final work. Both teacher and student evaluations of progress occur at a number of points within the activities and are based on the products called for in the activities themselves. These repeated evaluations provide an instrument for the teacher to use in profiling student achievement and in documenting students' awareness of their goals, and of their growth toward these goals. Moreover, a domain project should be usable across elementary, middle- and high-school levels. The use of the same project over the years (allowing for some age-appropriate adaptation) provides a long-term picture of student development.

Domain projects, thus, are a framework for instruction integrating production, perception, and reflection skills in music. They also serve as a means of assessing growth and achievement of these skills. Because of their comprehensiveness, domain projects form the centerpiece of the Arts PROPEL assessment strategy. In the next chapter, we take a closer look at how the reflective skills demanded by the domain projects are nurtured.



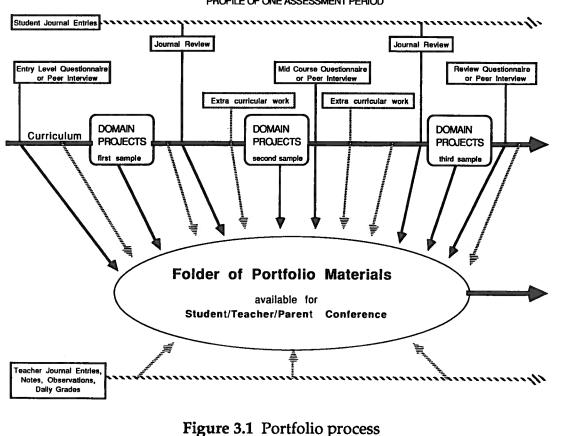
CHAPTER 3

REFLECTION VEHICLES: QUESTIONNAIRES, PEER INTERVIEWS, JOURNALS

In this chapter you will find:

- * A discussion of questionnaires, peer interviews, and journals
- * A discussion of how to assess reflection
- * Observations of transformations in PROPEL classrooms

The interactions among the activities of making music, thinking about music and thinking about oneself as a learning musician, are often not explicit. By helping students engage more consciously in reflection, PROPEL teachers aim to stimulate those interactions. To that end, teachers have used questionnaires, peer interviews, and journals to support and amplify the learning in domain projects. As with domain projects, we urge teachers to try out what seems appropriate and eventually to create new vehicles for reflection. Reflection documents, together with domain projects, are the basis of the PROPEL portfolio.



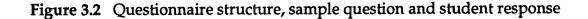
PROFILE OF ONE ASSESSMENT PERIOD

Questionnaires

Teachers find out about their students, but doing so informally takes time. If they work with their students long enough, those students' backgrounds come into view. Questionnaires are an efficient means for gathering information about the knowledge students bring to the class, how they view the class and, as time goes on, how they feel about their work and their achievement in class.

In addition, questionnaires can help students identify and understand the goals of the class. A sequence of well designed questionnaires make the issues the teacher wants to stress in the class more clearly evident to the students. Moreover, questionnaires can publicize the dimensions on which students are assessed and help make these dimensions clearer to students. Finally, the questionnaires help students document the impact of the class and are useful when they review their work.

you "like music? Why they not? No ito and is no NMG-M-a nor play_an_enstrument. Gou What No. role does mus Name some of mm 02 NNO chon Bolor What IJ٥ The loca motion. 007 •7, Think When OU Cr. evens (That do you QX in music? 104 learn



Format of the Questionnaires

We developed three questionnaires for use in an Arts PROPEL Portfolio. Each one is constructed for a different purpose; taken together, they cover a range of issues. (The importance of these issues is confirmed by the educational objectives specified by the Music Educators National Conference [1991].) The first questionnaire contains questions which focus on the students' background; the second documents the students' emerging personal goals and their view of the social context of learning in the class; and the third serves as a tool for the reviewing the students' work.

QUESTIONNAIRE/INTERVIEW SEQUENCE

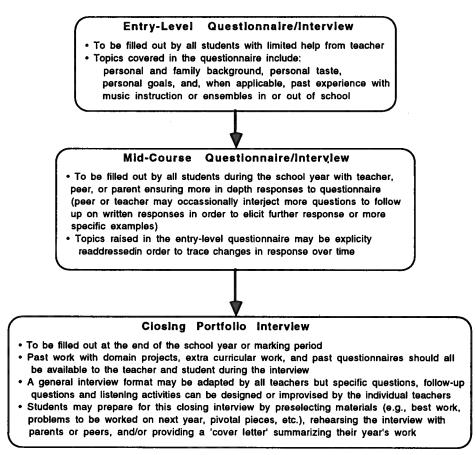


Figure 3.3 Questionnaire/Interview Sequence

Students fill out the Background Questionnaire during the first days of class. The questions focus on the background knowledge and experience and expectations the individual brings to the class. Questions for this entry-level questionnaire are grouped under the categories Personal Background, Personal Taste, Personal Goals, and Past Experience in Music Classes. This questionnaire provides the teacher with a great deal of information about each student's experience, favorite music and musical groups, desired objectives, and thoughts about any previous work in music.

> 5. Do your friends and family generally like the kinds of music you like? Yes No

- a. What kind of music do you listen to that your friends also like? Q_1, Q_2 . ANA Temp. Gasoel Music. b. What kind of music do you listen to that your friends do not like?
- JAZZ
- c. What kind of music do you listen to that someone in your family also likes? JAZZ
- d. What kind of music do you listen to that someone in your family does not RADE MUSIC which I very Seldición Listen to like?

6. Do you ever listen to or perform music that is different from what your friends or family like? Yes ____ No_ If so, please tell about that.

Personal Goals

What class τo be 1. do you expect this ٥F about?___ LEADWING more interms me MUSIC

- a. Are there particular things that you expect to learn or do? ucs ! Letta) what is we are REAlly Singing
- b. Do you have any goals of your own that you hope you can reach through this class? U.S. ± 0 S. ± 0 , \pm 100 de R.
- c. Is there any particular kind of music that you would like to learn? MORE Gospel Music
- d. What do you think is expected of you in this class? to ORO. ect MORE AND SING
- e. How well does that fit with what you are willing to do for this class? Der fectly

2. What are you interested in doing in music outside of class? SiNg wa the WORD OF GOD

Past Music Class Experience

1. List the music classes you have had in the past.

PRIVATE LESSONS /- LEARNER to Strag sutmore FREELY COnductive Class - Learners the Imperate in the Ralance of mos OBERT WORK Shop - to sing with jou and Laugh ter. I LEVER APRILL did musthing outside subci.

- 2. Describe those classes one at a time, answering the following questions in your description but mentioning other things if you like.
 - a. What did you do in the class?
 - b. What did you most like to work on in the class?
 - c. What did you least like to work on in the class?
 - d. Did you do independent practicing, composing or other work in music outside of class?

Figure 3.4 Example from Questionnaire 1 with student responses

Students complete the <u>Mid-Course Questionnaire</u> sometime during the middle of the marking period. The purpose of the questionnaire is to provide students with an opportunity to focus on the social context of learning. In the model second questionnaire for a class or rehearsal, the questions are grouped under Personal Taste, Personal Goals, Attitude Toward Work, and Social Interactions. Teachers may want to adapt these questions to their specific purposes, and ideally the questions should reflect the students' responses to the first questionnaire and to the work the class has been doing. The questionnaire provides an opportunity to sample the learning taking place with the class, the degree to which students' tastes, personal goals, and attitudes are changing. It can provide an opportunity to determine the extent to which the work in the class supports, develops and transforms interpersonal relationships in the class.

SAMPLE (THIS EXAMPLE MAY BE MOBIFIED ACCORDING TO THE PARTICULAD DOMAIN PROJECT THAT YOU ARE USING) Questionnaire No. 2 (Midcourse)

Nome RAYMONT GILLIAM SCHOOL WESTINGHOUSE

Course_ 5th, 4th period Choir Homerson_ 130____

Teacher Mes. Ross- Anonovas Bate 1/19/90

I. What have you been doing in this class so far? LEARNING NOTES, MUS. CAI PHRASES, CONDUCTIONS,

Bells, Comparing performances, Piano, exc. 2. What activities have you liked best in this class?

HEARNING MORE ABOUT MY WEARS, BECAUSE I CAN <u>PICK UP MUSIC AUD SING IL MORE INDEPENDENTING</u> 3. What activities have you liked least in this class?

Bechuse I like to

A.What work has been hardest for you?

<u>piano i Because of the way you have to held you hands.</u> 5. What work has been easiest for you?

Bells, And COMPAPER 9 MUSIC, But REALLY AND EASY HAT 6. What did you do so far that you have been proudest of?

 $\frac{\beta \lambda \alpha_{ijin} q}{\beta R_{i} B_{i}} = \frac{\beta \lambda \alpha_{ijin}$

Figure 3.5 Example from Questionnaire 2 with student responses

Students use the <u>Review Questionnaire</u> at the end of the course to support the process of re-assessing or revising the work they have accumulated over the course of the grading period. The questions focus on the work a student does in the class. Questions should guide the review of the material in the student's folder of PROPEL Portfolio materials. For example, students can be asked about their least and most challenging experience, performance and practice habits, how listening experience has changed, area(s) of most progress, new goals, and advice for the new student who might take the class in the future.

1. Describe the work that you have done in music class this semester We have been enhancing our voice and learning different techniques to help i m prove our singly

2. What did you do in music class that was easiest? Why? Dreath Ontrol, I don't take b98 crown breathy

3. What did you do in music class that was most challenging? Sight recard over projecting

4. Looking over your Ensemble Critiques, do you see any areas that you need to improve?

yes, elbrate more

 On you Music Critique Scores and Ensemble Rehearsal Critiques, did you identify problems or make comments only on your own performance or did you critique other sections as well? Explain.

I gust talked about we and my section

- 6. What would you tell a new student about approach to work in this class? Include comments on what is expected in terms of independent work, completing assignments, preparing for performances Olor of Concernences
- 7. Do you think it is worthwhile to tape record choir members singing individually? Explain.
- Ces, It shows how for you've came and where is needed to go 8. What are some goals that you would like to achieve next in music class?
- 3. What are some goals that you would like to achieve next in music class? Proservice even more; and breath control

9 What grade do you deserve this term? Why? Ajtry with wear hard in whatever I ce

Figure 3.6 Example from Questionnaire 3 with student responses

Rationale for Questionnaires

Starting from the broadest perspective and concluding with questions about specific work completed in class, questionnaires give students an opportunity to think about their work, their participation in class or rehearsal, and the degree to which their backgrounds were of use in the class. In some cases, questionnaires alert the teacher to significant work done outside of class.

The three questionnaires allow a comprehensive view of students' work: the background students bring to the class, the impact of the class on their original interests and goals, their awareness of the work of others around them, what they value in their own work, and their view of their own work in relation to the work of others. Students can summarize their questionnaires during the portfolio review at the end of the term or marking period. Using a sequence of questionnaires ensures that students have several distinct times to take stock.

Interviews

Structured questions provide a useful way for students to talk to one another about themselves, their work, and the class. Peer interviews provide a context for classmates to develop a working relationship having class work as the focus for the exchange. These dialogues provide a natural beginning for collaborative work and peer teaching.

The interview format is very simple: students interview one another about their work, write down short responses to questions, and later flesh out their impressions of their classmates' responses as key words are expanded into full sentence form. Students complete the project by gathering the sentences into paragraphs, thus forming a short biography of the student which captures some of the learning that has occurred. Students in diverse settings in grades three through twelve have used this format successfully.

An individual interview takes less than twenty minutes to complete. This means that within a single 40-minute period, a pair of students can each take on the roles of interviewer and interviewee. There is usually time left to write up the full-sentence form. However, some teachers have found that students prefer to take the interviews home to make a more considered version to show to their classmate. Students exchange these first draft interviews for corrections and revisions. Copies are made, and students place the final versions in each of their folders.

Format of the Interviews

Peer interviews can parallel the questionnaires. For example, a preliminary interview may contain questions about the student's background; the second may document the social context of learning; and the third may focus on a retrospective look at the student's portfolio. Some teachers substitute the interviews for questionnaires, some alternate interviews with questionnaires, some do one or two of each, some do three of each. For students, however, the effect of conducting peer interviews is clearly different from that of filling out the questionnaires. Interviews allow students to discover the different cultural backgrounds of their classmates ("My uncle sings in a gospel choir.", or "My parents own a rock club."); their diverse learning goals ("I want to be able to read music for myself." or "I want to know how to write a song, my own way."); the different accomplishments of students ("I learned how to make an instrument." or "I found out how to stay on the beat.") and their awareness of others in the class ("I wish I could sound like Martha." or "I rely on Duane for my entrances.").

BIOGRAPHY OF A CLASSMATE:

1.Docs anyone in your family play an instrument? Yes 🗹 No 🔜 members Lanie If so, please tell which relative(s), which instruments and/or kinds of singing, and in what as grandmother لأعييه capacity (e.g. professional, amateur). anera piano; grandmother unde : piano, quitar piaro. and Interest in 2. How did you first become interested in grantmother due to her grandmather music? ____ Relative? //____ Teacher? Friend? Classmate? _____ Other? ___ Music was acquired 3. Did you learned about music from your parents. Interest through ____ brothers? _____ sisters? parents? mother was atter AD Jacents and greindmother Has anyone in your family made you interested in music? If so, whom? ______ nother; grandmother nstrumenta 4. What instrument(s) do you play? (include how long you've been playing your instrument. wice DIANO neer and lycar; 1 month 3 mths three U0100



BIOGRAPHY OF A CLASSMATE: _____ Date: _2 Name: ____ ____ Class: Banc Period: MID-COURSE EVALUATION 1. What are you doing now in this class so 1 far? Chamber Music. 2. a. Which class activities have you liked 2 best so far? <u>Radicing w/Trio</u> $\Omega \Omega$ b. Why? 3. a. Which class activities have you liked 3. the least so far? Farthal clams b. Why? feezing 4. a. Which activity has been the easiest so far? Nothing b. Why do you think it has been so easy? Nothing

Figure 3.8 Example from Peer Interview 2 with student responses

	- (a)
Name: Jason	Date: <u>69</u>
Class: <u>Concert cho</u>	Period:
BIOGRAPHY OF A CLASSMATE:	mika
WHAT WAS SAID:	WHAT WAS DEMONSTRATED:
1.	1. $-la -l 0$
a.Describe the work you've been doing in	a_ she showed
your portfolio <u>She hastapes</u>	Jhem to me
of her singula	Firiques
b. How successful were you in completing the various assignments?	b.
venu complete	
c. What from the portfolio best	
demonstrates clear progress in your work i	in She Sama boushe
the class?	C. The song vow site
Crittane	hon, Donta, con
why?	
they showed	The Chool
she learned	-
a lot	_
2. NB-st did user do in chose the heat?	2.
What did you do in class the best?	
Why?	
She learned	
to accept criticus	n

Figure 3.9 Example from Peer Interview 3 with student responses

Rationale for Peer Interviews

Talking about one's ideas and raising questions about the ideas of others are powerful ways of developing understanding and generating greater engagement. Peer Interviews, which taken together form a biography of a classmate, prove to be valuable instructional and assessment tools. They provide a structured format for a conversation with a classmate, reinforce the usefulness of writing out replies to questions, and establish a model for interviewing which students can use in other contexts.

The three interviews represent a comprehensive plan for viewing students' work: the background they each bring to the class, their awareness of the work of others around them, what they value in their own work, and how they see it in relation to the work of others. Interviewers learn as much as those they interview. The broadened perspective that comes from knowing another's work and thoughts promotes a reevaluation of one's own work, goals and thoughts. Using the sequence of interviews ensures that students who are interviewed have several periods for taking stock of their work and progress and for reflecting on their work and the class. Students can summarize interviews during the portfolio review at the end of the term or marking period.

The teacher may find the range of information gathered to be very useful. A good interview can provide information about self-esteem, about a students goals, and about that student's view of her own work as well the work of others in the class. One middle-school general music teacher learned, for example, that a "problem kid" in her class, who refused to write melodies for recorder, was busy at home writing more than thirty drum pieces with his friend.

Music Journals

9/27/90 of think the choir is perpet chance to learn. how to sing not only my sing but think as a singer, of like every think about the choir but when Ms. Ross takes my hat. Other than that of like the choir.

Timothy, I'm after you've meticed that you have to think in clair, even though you have only been her for a week. she the future your hat will belong to no in you continue to wear it on the Building.

Figure 3.10 Sample Journal and teacher's response

Students have used journals in classes of other subjects such as language arts, for some time. However, in music classes they are new. Music students and teachers have found the journals to be a useful vehicle for carrying on discussions about learning and for generating new ideas about work. Regular journal entries provide a way to keep track of what the student is learning, to make connections among activities, and to develop genuine understanding. In addition, a music journal can function as a dialogue between student and teacher, making it a valuable tool for individualizing each student's instructional experience.

Formats for Journals

Journal entries take many forms. They are sometimes only a sentence or two, but can be a paragraph.

During the early years of school, sentences and paragraphs may not be effective. Instead, teachers have found that lists of words provide a useful way for younger students to keep records of their thoughts. Lists are also useful for older students because they are a quick and easy way to capture the essential characteristics of an event or idea.

experience, and it's helped my to
- seing cicher and fuller And, my intonation - which is
ot wonderful in first place, has improved grantly.
I'm satisfied with my playing and improvement,
although I know it could be better
improved and it tas a lot to do with my experiences this year
with the influences from all of my teachers, I've pushed
myself to where my ans inling has gotten for better than it
and also simply practicing tas helped in making this possible
Like I and intoration to my warest point. It always has
been wery, I've been using a "Karg" for tuner, which I
tores. Although, I still believe that careful listening with
nurt.

Figure 3.11 Sample Journal with sentences

002 N, 1987 *Textures) monophonsic monophony everyone sings the same purt acappella (no tostrumento accompanied 2) Homophanic) Homophany ----melocity is supported by 2 Chordal accompaniment could be gooppelle. "Harmony" 3) Polyphonic | Polyphony

Figure 3.12 Sample Journal with short list of words

A particularly useful strategy for journals is the 'double-entry' notebook, like a stenographer's notebook. On the left side of the page, a student writes down the most important perceptions, concepts, facts or terms. On the opposite side of the page, the student writes an opinion about, reaction to, or elaboration of the material.

ARTS PROPEL JOURNAL FORM



Journal entries can be structured or open ended, scheduled or spontaneous, serious or playful in tone. Journal assignments can be based on class activities, practice logs, or listening assignments at home or in the concert hall. The teacher should work out journal-keeping strategies which best fit the purposes of the class and the learning goals for the particular student.

Rationale for Journals

A journal can function as a tool for learning. If a teacher regularly responds to a student's journal, the student begins to use the journal as a means of communicating with the teacher. Students can use a journal kept in a class folder or notebook to maintain contact with the significant phases of their own learning process, with the good ideas they may have not used, and with the problems they have worked through during the class.

Management of journals can be difficult unless the teacher anticipates the work involved in responding to them. However, with some planning, the task is manageable. A teacher can manage even large numbers of journals by dividing the class into three or four smaller groups and reading the journals of each group in weekly rotation. It is important, however, that the students know they can rely on the schedule.

Assessing Questionnaires, Interviews, Journals

Many teachers who value reflective writing assignments in the music classroom or ensemble studio are reluctant to assess this work. But at Cambridge Rindge & Latin High School, assessing interviews became an important way to create profiles of learning — both on an individual and class level.

After a series of interviews were collected, teachers devised a scoring system to capture three levels of evidence for reflective thinking along several dimensions which they identified as important. The dimensions include social and personal awareness, awareness of musical elements and goals, and evidence for understanding and application of this knowledge in a variety of ways - from devising practice plans to forming aesthetic judgements.

Teachers may find the class profile that emerges from interviews and questionnaires even more revealing than the profiles of individual students . For example, when analyzing the profile of a class as a whole, we have found that students' comments about their practice plans (column 6) tend to be less significant than comments about their awareness of others (column 4) or personal goal setting (column 3) in the jazz ensemble. The teachers' comments confirm this. As one teacher claims,

> "Yes, these kids do have trouble finding ways to act according to their knowledge. If only they could devise better ways of practicing — putting knowledge to work in the form of practice plans — half the problems they encounter in ensemble would be taken care of."

ARTS PROPEL PORTFOLIO INTERVIEW SCORING GUIDE

REFLECTION DIMENSIONS EMERGING FROM PORTFOLIO INTERVIEWS

I. Profiling Intrapersonal/Interpersonal issues (in context of musical activities) Evidence for various dimensions of personal and social aspects of in music making including	
• Level of engagement [commitment, practice, intensive interest, etc]	
• Range of engagement [active focus through a variety of musical medium, activities, interests, etc.]	
• Ability to articulate and formulate personal goals [ability to express, give suporting reasons for, or motivate musical activities]	
• Awareness of social roles [in terms of levels of peer ability within ensembles, teacher/student relationships, etc.]	
II. Profiling Cognitive/Developmental Issues in a Musical Context Evidence for Student reflection and perception from interviews including the ability to:	
• Demonstrate a grasp of musical elements in relation to musical dimensions [explicit reference to musical dimensions such as pitch, structure, dynamic, etc]	
• Establish increasing competency with symbol system [Showing an understanding and utility of notation systems to write down musical dimensions of what is he well as creating and performaning new music]	ard as
• Track musical processes [describing ways of working, how other people rehearse, etc]	
• Formulate revision/practice plans [including ideas for revision of interpretation or composition as well as strategies ranging from rote to his experimental and complex rehearsal procedures in the ensemble]	ghly
• Formulate musical goals [independent of personal goals]	
• Ability to assume increasing degrees of authorship in musical production [Showing the ability to coach, teach, direct, or compose for individual students as well as ensembles]]	
• Take advantage of musical resources [Seeking out various people, materials, recordings etc for help and advice]	
• Articulate aesthetic issues [raise or articulate aesthetic concerns, goals, or judgements]	
• Establish increasingly rich critical perspectives [Going beyond subjective statements and using conditional or causal statements to map, synthesize or in increasingly complex links, across various musical contexts or dimensions]	itegrate

Figure 3.14 Interview scoring guide

DIMENSIONS

L	NTER/I	NTRA	PERS	ONAL		MUSI	CAI. C	OG/DE	<u>. v</u>			
	1	2	3	4	5	6	7	8	9	10	11	ł
<u>SDT</u>	Lev	Rng	PG	Soc	Ele	Prac	Proc	MG	Res	AI	CI	P
1.	Н	L	М	М	H	L	Н	Н	L	H	H	
2.	Н	Н	H	М	L	L	М	L	L	L	L	•
3.	М	L	Н	М	М	L	Н	H	L	L	J	Ĺ
4.	М	М	L	L	М	М	H	L	Н	L		L
5.	М	М	L	Н	М	L	Н	L	L	N	1	М
6.	L	L	L	М	L	М	М	М	L	I	•	L
7.	Н	H	Н	Н	L	L	L	L	M	II	•	L
8.	H	М	Н	Ħ	H	ĿĿ	Н	М	H	[]	M	L
9.	Н	М	L	H	Н	L	Н	Н	Н	·]	•	L
	н		po	olar H	 -	L	Н	-	L	/p :	L	L

Figure 3.15 Scoring profile

Reflective writing can provide insight into application of musical concepts. In the following journal entry a high school singer spontaneously uses notation to clarify her thinking. Devising ways to solve ensemble problems encountered in class becomes the hallmark of productive reflective thinking.

When the altaplane represted Mates, we have a texternay to go flat. In ocoler 3. OCE 21 this problem We have to lift on the moto that repear. Starting with 1 = lift - If necessary; mans body ?. -___But, - just lift with voice slightly ------ toget note in two fuel lite my _____ - teumpet, it laste de u/ the way the _____ - air comes aut lither tighter the _____

Figure 3.16 Journal

Teachers may come to treat journals as occasions for conversation with students. This approach gives teachers opportunities to teach a great deal through modelling. For example, by carefully framing responses, the teacher can show a student how to select the useful and interesting from the less relevant; how to frame opinions and weigh evidence before coming to judgment. Students, encouraged by their teacher's comments, sometimes respond by writing pages and pages of comments. Our experience has shown that students tend to lose few journals when these conditions are in place. Students come to view their journals as important possessions. When teachers ask for reflective writing, students may respond in remarkable ways. One student showed her attachment to music in this entry:

... the last piece I play at night, I choose a tune that uses the sustaining pedal. And when I've finished it, I hold the pedal down so that I can lock into the piano some of the music and some of the love I put into it, so it will always be there.

- High school pianist

CHAPTER 4 PROPEL PORTFOLIOS

In this chapter you will find:

- * a discussion of the goals of PROPEL portfolio development and assessment
- * a discussion about deriving profiles of learning from portfolios
- * a description of a variety of portfolios
- * a discussion about how teachers assess portfolios
- * sample assessments
- * anecdotes about classroom transformations

A PROPEL music portfolio is a collection of student work assembled over time. The portfolio is a vehicle for monitoring the development of production, perception, and reflection skills. A music portfolio may contain a range of kinds of student work written compositions, journal entries, performance critique sheets, audio- or videotapes of rehearsals or performances, etc. Over the course of instruction, students and their teacher engage in a continuing dialogue which focuses on the works included in the students' expanding portfolios. We refer to this dialogue as the "portfolio process." By assuming active roles in the portfolio process, students and teachers strive to make visible the learning that occurs over time.

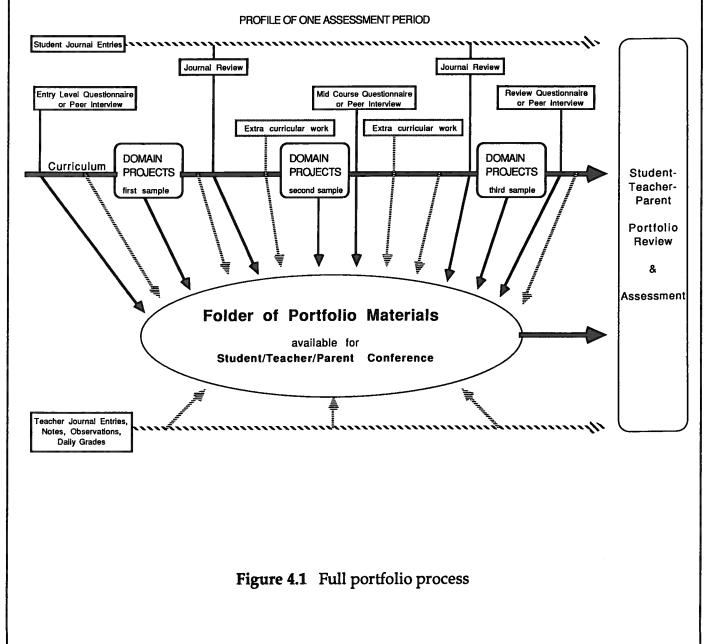
Goals of PROPEL Portfolio Development and Assessment

Student-teacher interaction is at the heart of the portfolio process. As students and teachers work together on real problems central to music, many opportunities arise for significant discussion built upon their shared musical experiences. Through these discussions, students learn to reflect on their experiences, and to take stock of their varied accomplishments while gaining insights into challenges ahead. One goal of the portfolio process, then, is to heighten students' awareness of their own learning by sharpening their abilities to reflect on, critique, and shape their work. Students get a feel for the genesis of a work — they note where they began, they gauge how far they have come, and they plan for the "next steps."

As students take responsibility for evaluating their portfolios, they are challenged to assess many dimensions of their work. They become aware that growth very often proceeds at varying rates depending upon which criterion one uses. A

second goal of portfolio assessment, then, is to provide students and teachers with a broader, more extensive picture of students' development than is typically furnished by paper-and-pencil tests is gained. Students and teachers learn to view the PROPEL music portfolio through a number of different lenses, each lens corresponding to a particular assessment dimension. The goal of portfolio assessment in music is not to produce a single score summarizing the student's level of performance. Rather, the goal is to produce a developmental profile which will help students understand which curricular goals they have met and which they have yet to meet. The developmental profile supplies them with meaningful detailed feedback about their strengths as well as areas needing improvement.

THE ARTS PROPEL PORTFOLIO PROCESS



Profiles of Learning

A portfolio is a means for students to present themselves to the teacher or another audience, and to say:

Here is my work.

This is how I approached it.

This is why I value it.

This is how I evaluated it.

This is how you evaluated it.

This is how I have changed.

This is what I can tell I should work on next.

Creating the profiles of learning that allow students to see themselves and present themselves is a process. From the beginning of portfolio development, students learn that they will be thinking about and saving work, looking back over their work, selecting work that builds a profile, explaining that work and their reactions to it. Students learn from the outset that teachers are interested in their musical development: in what performing or listening they do outside of school, what they think about the work they are doing in school, what awareness they have of themselves as learning musicians, how well they can hear, what they can produce, whether they are developing the ability to evaluate themselves and their peers, what is hard for them in sum, what is established about the student and the student's work that helps build a profile of the student's musical skills, learning, and understanding.

Varieties of Music Portfolios

The portfolio materials and process depend, of course, on the context of particular music classes. The collection and the profile that emerge will be determined by such factors as

Level of Instruction — middle school or high school

Type of Course — performance ensemble, private lesson, general music

Duration of Course — marking period, semester, full year

Schedule of Course — twice weekly, daily, etc.

At one end of the continuum, imagine a portfolio that a student keeps over four years which represents his or her work with one teacher in a high school performance ensemble that meets daily. A portfolio that contains student work collected over an extended period of time can vividly display the depth as well as the breadth of the student's learning in the field. At the other end of the continuum, consider the portfolio a sixth-grade general music student keeps in a semester-long course meeting only every other day. Although the general music student's portfolio may seem scant in comparison, the portfolio serves as an effective means of documenting that short-term learning experience. The learning that the portfolio represents, however limited, may be well integrated in the student's mind.

The General Music Portfolio

A typical portfolio of a general music student might contain the following materials:

- * domain project materials such as invented notations, listening for form projects, drafts of a composition, a tape of the performance of the composition, along with self-assessment comments and teacher-or peer-assessment comments;
- * questionnaires of each type: entry, mid-course, and review of work;
- * three Interviews conducted by a peer or teacher;
- * an assortment of Journal entries and teacher comments (whether in response to journal entries or made spontaneously at important moments of learning);

* other curricular work such as class notes about recordings heard in class;

* other forms of assessment, e.g., quizzes or standard exams.

Teachers may find it useful to help students organize their portfolios by using the following form as a first page.

Domain project materials form the core of the portfolio. Where the course structure allows, repeated experiences with the Notation, Form and Composition domain projects will allow for growth and documentation of that growth. Where the course structure precludes such repetition, the connections students make — between invented notation and standard notation, between form recognition and composition, between learning to read standard notation and using it in composing — can appear and be strengthened because of the portfolio documentation.

NAME	DATE				
GRADE	TEACHER	······			
CLASS					
his Portfolio Contains:		CHECK	PAGE		
Questionnaires (Entry Level, M	Mid Course, and Review)				
Peer Interviews (Entry Level,	Mid Course, and Review)				
Journal (Notebook and self e	evaluations)				
Invented Notation					
Listening for Form					
First Rhythm					
First Melody [or SongSmith]					
Individual Performance					
Ensemble Performance Critiq	lue				
Performance Comparison					
Extra Curricular Work	Extra Curricular Work				
Class tests					
Portfolio Self Assessment C	omments				
other					

Figure 4.2 Sample General Music Portfolio Table of Contents

The Ensemble Performance Portfolio

A rich portfolio in a performance ensemble class might contain the following materials:

- * domain project materials which include ensemble rehearsal critiques with teacher comments and with students' reflections on change in the critiques over time;
- * tapes which sample practice done at home and which may accompany a practice log, a marking-period performance quiz, or a tape of the ensemble to accompany rehearsal critiques;
- * questionnaires for each of the three types, entry, mid-course, and review of work;
- * three Interviews conducted by a peer or teacher;
- * an assortment of journal entries and teacher comments (whether in response to journal entries or made spontaneously at important moments of learning);
- * ather curricular work and assessments (e.g., printouts from a computer eartraining series; assessments of performance using individual performance project criteria, results of quizzes or standardized tests).

Critiques and tapes are the core of this portfolio. Where the class environment allows, the use of the Individual Performance domain project will provide repeated, clearly documented measures of performance. When the full Individual Performance project cannot be implemented, the project can still inform individual instruction in rehearsal and can be the basis for assessing practice tapes the student makes independently.

ARTS PROPEL PERFORMANCE ENSEMBLE PORTFOLIO

NAME_____ DATE_____

GRADE_____ TEACHER_____

ENSEMBLE_____

This Portfolio Contains:

CHECK PAGE

Questionnaires (Entry Level, Mid Course, and Review)	
Peer Interviews (Entry Level, Mid Course, and Review)	
Ensemble Rehearsal Critiques	
Error Detection Musical Scores	
Ensemble Performance Comparisons	
Individual Performance Assessment	
Peer Coaching Report	
Ensemble Directing Project	
Arranging or Composing for the Ensemble	
Journal (Notebook and self evaluations)	
Extra Curricular Work	
Class tests	
Portfolio Self Assessment/ Comments	
other	
TEACHER COMMENTS [based on portfolio review]	

Figure 4.3 Sample Music Performance Portfolio Table of Contents

The Biography-of-a-Work Portfolio

Another kind of portfolio is the biography-of-a-work portfolio. Students engaged in creative work (e.g. composing or arranging) may use a portfolio to document the development of the work and of their thinking about it. Such a portfolio might include:

- * computer or handwritten final versions, drafts, or sketches of the work
- * journal entries that record the decisions made along the way as the work is developed
- * a record of teacher, and possibly peer, comments at various stages
- * taped record of computer playing of drafts (if the student has worked at a computer)
- * taped record of rehearsals of the work
- * taped record of performances
- * final critiques and reflections
- * reflecting on feedback from audience members, parents, teachers, peers

The Portfolio Process: Interactive Reflection

Just as practice in performance or experience in listening will produce growth, so too will practice and experience in reflection and self-assessment. The early and late reflections shown in the two examples taken from a student's journal and Figures 4.4-4.6A and 4.6B demonstrate that students can acquire the ability to engage in thoughtful writing about music.

In November, Raymont, a tenor, wrote about the rehearsal:

I think today's rehearsal was very well but I think that me myself in terms of making things sound better would be to "think up" in terms of singing certain notes because its very true if you're not thinking musically you will not do a good job and that will not only help me but it will help my section.

To which his teacher responds,

Raymont,

It would be interesting to have you sing the comments you made above in one breath, since you didn't put a comma or period from the beginning until the end. Concerning your reflections, I'm glad you noticed and pointed out that you need to think up — that would improve your intonation. However, I can understand your being tired sometimes, with the long hours you're working. (You really don't have to make all the money! (smile))

The same student in May says,

I, Raymont, can work on my tone quality because I sometimes sing harsh on certain songs. I can also pulse when singing for a better sound. It will probably increase my singing range. Now I can take what I have learned and help others for a whole unified sound as well as a mature sound which makes a better group if everyone is working together.

And his teacher responds,

Ray,

I don't think you sing harshly. The other tenors need to project more so that the tenor section produces a balanced sound. Most of the time you're the only one projecting which may contribute to your thinking that you have a harsh sound.

As the students' ability to engage in these specific, targeted reflections improves, so too can the ability to reflect on work done over a period of time. Regular reviewing of their work allows them to notice and to evaluate such things as:

* Growth in production, perception, and reflection skills:

(e.g.,"My sight reading has improved tremendously, but not my tone quality!");

* Connections among production, perception, and reflection:

(e.g.," Well, once I could hear that the melodies you played for us really went someplace and came back, I think I improved in the next draft of my composition.");

* What being a musician means:

(e.g., "I have a sense of what a composer does. You've got to know the pitches in your head. Then you have to put them down on paper. But you have to have the basic idea of how it sounds.");

* Patterns in work:

(e.g., "Debbie Gibson uses patterns in her songs. Sometimes the notes will end going up and then end by going down." (referring to the strategy learned when composing antecedent and consequent phrases for her First Melody domain project.);

* Pivotal experiences:

(e.g., commenting on the Ensemble Rehearsal Critique domain project: "When we first started doing this, I hated talking about other people and having them criticize me. Now I know it's my performance.");

* Transfer of learning:

(e.g., "Learning the keyboard helps tune your ear. You can pick out all the notes of the chord. I can pick out notes on the record like I do with my mom and dad. They sing and I have to either sing what they were singing or the note in between.");

* Difference between music classes and other classes:

(e.g., "In my music class I can always come back to work on an assignment. The teacher lets me alone. In my other classes the teachers won't let me alone. They are always telling us what to do and making us copy it down.").

Regularly going back through work and reviewing it also allows students to take responsibility for such things as:

- * using the results of their reflection and evaluation to set new goals and help devise strategies for achieving them
- * taking advantage of musical resources: texts, people, performances, organizations
- * articulating aesthetic issues

ame			Data 2-5-40
<u>Z</u> bolre		ENSEMBLE REHEARSAL C	CRITIQUE Date <u>3-5-70</u> Plece <u>He Ain't Heavy</u>
	olce <u>Sopa</u>		<u> </u>
IND MUSICAL I	DIMENSIONS (au	ensemble performance specifying LOCATION (where you ich as rhythm, intonation, tone, balance, articulation, phra	using, interpretation, etc. or any dimension specified
by the teacher].	Using words su	ch as "because" be sure to mention any links between you e remarks concerning REVISIONS OR PRACTICING STRA	Ir own or your section's performance and the TEGIES for yourget or the ensemble. Be sure to include
he main proble	m in terms of its	dimension and location in the piece you or the ensemble	should practice on before or during the next rehearsal.
		CRITICAL COMMENTS	REVISIONS OR PRACTICE PLANS
	Dimension	My (Section's) Performance	For Myself (My Section)
Page 5 0 E measure 4	Articulation	My (Section's) Performance (filled out immediately after performance) There was poor attack on the part where it said "that everyone's hearf, s And we were h't sure of some of the notes (Mp) ("	
	1	there was poor attack on the part	1
		where it said that everyches heart.	aut)
		the notes	when inst
,		(mp) 10	
1			
	Dimension	Ensemble's Performance (filled out after listening to recorded performance)	For the Whole Ensemble
Masure 2	Articulation		
1	$\left(\left(\left$	The words" for one another" were - Not very clear.	
	Uction)-	- not very clear.	i t
1	1		
	1 1 1		
	•		
	1 1		
IS PROPI	EL assessme		Islons — Critical Perspective — F PAGE FOR ADDITIONAL COMMENTS
			AGE FOR ADDITIONAL COMMENTS
Fi	gure 4.4 E	xample from student work, Ensemb	ole Rehearsal Critique (early)

Name_____ Period_____H

Instrument/Voice

ENSEMBLE REHEARSAL CRITIQUE

Date	Mar	ch	R19	791
Piece_	All	MJ	19 TR10	?/s

[7-90 version]

Write down your critique of the ensemble performance. Specify LOCATION [where you performed particularly well or need to improve]

and MUSICAL DIMENSIONS (such as rhythm, intonation, ione, balance, articulation, phrasing, interpretation, etc. or any dimension specified by the teacher). Mention any links between your own or your section's performance and the ensemble as a whole. Also include remarks concerning REVISIONS OR PRACTICING STRATEGIES for yourself or the ensemble. Be sure to include the main problem in terms of its dimension and location in the piece you or the ensemble should practice on before or during the next rehearsal.

		COMMENTS	REVISIONS OR PRACTICE PLANS
Location	Dimension	My (Section's) Performance	For Myself (My Section)
Page 3 Ist Measure	articulation	(Alled out Immediately after performance) For All SECTIONS there was a poor attack.	"I could not stay in tone on "Rige 4 3rd system because "Some""in sopranic section was
		Sopranos aid not attack the 2°D" nows on the first measure unich made it sort of flat (and with the wrong grhythr	Singing at of tune.
Page 3 last Measure 2142 system Location		Sofranos were sharp on the G" note on the word mind the note wasn't low enough as fax Ensemble's Performance	
Articulation Balance Diction	n	(illed out alter laterling to recorded performance) Busses Slid on 'All" 3rd system 1 st measure pages Pour attack on 'All For page 4 Mease 2 3rd system everyone Slid on the notes	Altos were not balanced with the whole sections you couldn't hear them atall until the pronounced "My". The word "o-vuh" since "vuh" is at the end of the phrase or sentence it should have been softer.
ARTS PR		Assessment: Specificity 3 Suggested Revis ESSMENT FORM (USE OTHER SIDE O	F PAGE FOR ADDITIONAL COMMENTS)

Figure 4.5 Example from student work, Ensemble Rehearsal Critique (late)

Name

End-of-the Year Assessment

Instrumental Music

Look through your portfolio and examine the quality of work you did this year. When you can, make comparisons with work you did last year.

Focus your thinking on three areas of musical achievement: performance, listening, and understanding music. Begin by looking at your projects.

- Projects which emphasize performance in music include: Solo Interpretation, Conduct the Band, and End-of-the Year Performance Tape.

- Projects which emphasize Listening include: Critique of Last Year's Performannce Tape, Invented Notation ("Happy Birthday"), Conduct the Band, and Write a Review (BHS Jazz Band)

- Projects which emphasize musical understanding include: Solo Interpretation, Conduct the Band, and Music Composition.

In addition to your projects, give some thought to how much your playing has improved this year--in band and in lessons (if you take them). Also, look over your journal entries for the year.

Finally, give some thought to musical experiences you have had outside of school which have been of value. These might include performances and practice in other bands or groups, private lessons, or performances you have heard. It can even inlude changes in the types of music you listen to and enjoy. (Do you listen to the same type of music you did last year? 3 years ago? 5 years ago?)

After you have given careful consideration to all these things, answer the questions below. Try to explain the best you can where you stand in your music education: what are you good at? what areas do you need to improve in? what goals do you have in music? etc. Answer in complete sentences.

1. How have you done this year in non-musical things: for example, attendance at band rehearsals, have you been on time?, remebered your instrument? written in your journal regularly?, etc. I have done well this year

in attendince, but I usually an about S minutes late to each band practice (eer 14) I think that is goal to set for me: be early to band in 65 Tate I remember to pring my music but I slack 2. Are there any projects which you dod not complete (which you were off on jour supposed to). If so what are they? NO.

3. How has your practicing gone this year? How do you feel about th My practicing has been respended by my Dosy schedule. This doesn't help my learning

Figure 4.6A Example of student's reflection about portfolio

4. What projects do you think you did best on? Explain why. I think I did the best on conducting the bend because. I spent a lot of time on learning the score and my technique 5. What have you learned this year? (Answer for each area below.) Performance: I learned that it takes a lot of practice and staning to have a performance You can learn a lot about performing by wate fellow players. Hat you play then other performers. It really helps to watch the style of playing from listening to other Musical Understanding: Players I learned that it helps to go over mysic you play and see what your motakes are Then you an go back and fix them. 6. Overall, what things need most improvement. I think that overall, my practicing and my total time that I spend playing needs Can Improvement 7. What do you want to learn in music next year? What are your goals? My goals cut to fix this and write nor (n my gournal I would like to play some "poper Music in Band = Such as "Mission Inpossible".
8. Read your goals from this year. (Bottom of Critique Project.) Did you I was in a quintet, a jaze band, a school band and private lessons That accounts for two cfmy a 9. Choose one of the questions below (or combine them) and write a paragraph I dic about it: Why is music important to you? or What is music? Use back if necessary Ruhiew Music is important 78 we because I enjoy playing it listening it, and critiqueig it. I really like all of those. It takes up a very big part of my week always and. I do all of the obove alot. Music is definately

Figure 4.6B Example of student's reflection about portfolio

PROPEL Portfolio Assessment

For the effort associated with PROPEL portfolios to be worthwhile, the assessment must describe the learning that has occurred, must use dimensions tied to the curricular goals and known to the students, and must involve students in assessing their own work. The teacher's role in portfolio assessment is, in significant measure, a facilitative one. Students and teachers may collaborate to develop the assessment criteria which they will use to evaluate the dimensions of learning revealed in portfolios, but those assessment criteria should reflect the curricular goals. Regardless of who develops the assessment criteria, students need to understand the goals and assessment criteria so that they will know what they are expected to do.

Engaging in school activities that require reflection and self-assessment is foreign to many if not most students. These are behaviors that students have typically not been called upon to practice in the past. Therefore, teachers will need to introduce students to these activities, modeling reflection and self-assessment themselves and encouraging students to assume an active role in evaluating their own work. As students gain maturity and experience with the portfolio assessment process, they can take on more of the responsibility for assessment.

The criteria for portfolio assessment should be designed to measure the extent to which students have attained selected curricular goals and need to be couched in language that students can understand. Some of the assessment criteria may reflect specific instructional goals that are common across several domain projects while other assessment criteria may be designed to monitor the attainment of broader curricular goals which span the entire music curriculum. In some instances, the assessor will need to look across samples of student work in a portfolio examining works completed at different points in time in order to judge to what extent the student has met a specific criterion. Since the ultimate goal of portfolio assessment is to create a profile of student learning in the discipline, the particular criteria chosen to evaluate the portfolios should form a cohesive set that will facilitate the creation of an interpretable profile.

The assessment should be different from a summing up of the particular pieces of work in the portfolio. The whole is meant to represent more than the sum of its parts. Portfolio assessment takes a new cut, looking at the attainment of goals across time and bringing the evidence from the portfolio to bear. As teachers and students evaluate portfolios, they identify the work or portions of a work in the portfolio that represent the most convincing evidence for a particular assessment criterion. Students who are experienced in reflecting on their work can make selections of evidence to point out to the teacher and can assess that evidence for the degree of development and the quality of achievement it represents in relation to each criterion. The teacher, in turn, evaluates the student's work and generates his or her own assessment, perhaps pointing out other relevant evidence in the portfolio or in the anecdotal record/journal the teacher has kept.

Through conference or written exchange of comments, the student and teacher discuss their assessments, document the profile that emerges for other audiences for the assessment, and use the occasion to set goals for the next stages of learning in music.

Sample Assessments

What follow are examples of the dimensions and assessment ranges, along with two examples of self-assessment guides.

GENERAL MUSIC PROPEL PORTEC	Grade) DLIO ASSESSMENT 1	Evidence leasted in	Achievement	Date Class Teacher Evidence located in Governal/Records [Direct observations, Grades, anecdotes, etc	Achievement	Growth
PEHCEPTION	Discrimination of Musical Elements Perception of Musical Forms or Structure across Musical styles and Cultures					
APPROACH TO WORK REFLECTION	Critiquing Revising Work Setting goals? Reflecting on music in other cultures? Level of Engagement Working Independently Working Collaboratively					

OTHER? [resourcefulness, pursuit of a problem, etc]

Figures 4.7 General Music Assessment Form

GENERAL MUSIC PROPEL PORTFOLIO LEVEL DESCRIPTORS

sample dimensions

USE OF NOTATION [CRAFT]

The development of notational skills is essesntial to musical development in the general music class. In considering notational achievement or growth the student or teacher may want to cite evidence of notational accuracy in pitch, rhythm, form, key signatures, time signatures, tempo markings, dynamic markings or any other such dimensions clearly demonstrated in notations developed either in domain projects, extra curricular work, or noted in teacher records of class activities.

Level Overall Descriptor for Achievement

- 1 The work shows no evidence of achievement in notation skills.
- 2 The work shows little evidence of notational achievement or reveals that the student may be unaware of many notational problems that are unresolved.
- 3 The work shows some evidence for notational achievement or reveals that the student is attending to notational concerns occasionally in class work or domain projects.
- 4 In much of the work there is evidence for consistent notational achievement. Notations are mostly accurate and notational concerns are consistently or systematically addressed in the student's work.
- 5 The student has maintained consistenly high standards of notation throughout the work.

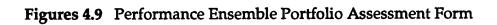
Level Overall Descriptor for Growth [improvement, development]

- 1 The work shows no evidence of growth in notation skills.
- 2 The work shows little evidence of notational development or reveals that the student may be unaware of many notation problems that are unresolved.
- 3 The work shows some evidence for notational development or reveals that the student is reletively more attentive to technical concerns in domain projects or class work.
- 4 in much of the work there is evidence for improving notation skills. Notations are reletively more accurate and notational concerns are more often addressed in the student's work.
- 5 The work increasingly shows dramatically higher standards of notational mastery throughout the grading period.

Figures 4.8 General Music Assessment Form

	Name Grade			Date Class Teacher		
PERFORMANCE PROPEL PORTF	E CLASS FOLIO ASSESSMEN	Fevidence located In Student Portfolio [Checklists, journals, Domain Projects, etc]	Achievement	Evidence located in Teacher Journal/Records [Direct observations, Grades, anecdotes, etc]	Achievement	Growth
PRODUCTION	Technique [Craft] Higher Order Performance Skills Music Reading Skills Composition Conducting					
NOLIGENTON	Discrimination of Musical Elements Error Detection Perception of Musical Forms or Structures Perception of Musical Styles or Historical Periods					
REFLECTION	Critiquing Revising Work Developing Practice Plans Setting goals?					
APPROACH TO WORK	Level of Engagement Working Independently Working Collaboratively Learning from other Pieces [transfer]?					

OTHER? [resourcefulness, pursuit of a problem, etc]



PERFORMANCE ENSEMBLE PROPEL PORTFOLIO LEVEL DESCRIPTORS

sample dimensions

TECHNIQUE [CRAFT]

The development of technique is essesntial to musical development in the performance ensemble. In considering technical achievement or growth the student or teacher may want to cite evidence of control of pitch accuracy, rhythmic accuracy, breathing, posture, or any other such dimensions clearly demonstrated in performance either in domain projects, teacher records, or during the course of a portfolio review..

Level Overall Descriptor for Achievement

- 1 The work shows no evidence of achievement in techique.
- 2 The work shows little evidence of technical achlevement or reveals that the student may be unaware of many technical problems that are unresolved.
- 3 The work shows some evidence for technical achievement or reveals that the student is attending to technical concerns occasionally in rehearsal or performance.
- 4 In much of the work there is evidence for consistent technical achievement. Performances are mostly accurate and technical concerns are consistently addressed in the student's work.
- 5 The student has maintained consistenly high standards of technique throughout the work.

Level Overall Descriptor for Growth [Improvement, development]

- 1 The work shows no evidence of growth in techique.
- 2 The work shows little evidence of technical development or reveals that the student may be unaware of many technical problems that are unresolved.
- 3 The work shows some evidence for technical development or reveals that the student is reletively more attentive to technical concerns in rehearsal or performance.
- 4 In much of the work there is evidence for improving technique. Performances are reletively more accurate and technical concerns are more often addressed in the student's work.
- 5 The work increasingly shows dramatically higher standards of technique throughout the grading period.

Figures 4.10 Performance Ensemble Portfolio Assessment Form

Critiguing Performances: How Have I Changed? The Student's Reflection

Directions How has your ability to listen to performances and to write about what you heard changed from the beginning of the year until now? Below are some questions for you to consider as you reflect on the progress you have made. Select some rehearsal critique sheets that you filled out in the beginning of the year, some you filled out in the middle of the year, and some you recently filled out. As you read each question, refer to your rehearsal critique sheets to help you respond to it. Write your response below each question(or perhaps, if your teacher prefers, think about each question and be prepared to talk with him/her about it). This is NOT a test. There are no "right" and "wrong" answers. This activity is designed to help you evaluate your work so that you can see where you have grown and where you have room to grow.

1. Look over your rehearsal critique sheets and list those musical elements that you can write about now that you did not write about earlier in the year. Can you identify and discuss more musical elements now than you could at the beginning of the year?

ITHINK THAT I COULD USE STUFF LIKE BALANCE, NOTENOUGHFERING, IN THE SENSETHAT IF AS POT IN A PIECE IS MARKED ENTRESSIVO" AND IT SOUNDS NOT EXPRESSIVE ATALL. OTHER TERMS INCLUDE ORNIMENTS (TRILLS, GUSSANDES) COULD BE NEATER AND TAKE MORE/LESG THE 2. Choose a problem that you discussed very briefly in an early critique and in more that your writing about that problem changed over time

detail in a later critique. How has your writing about that problem changed over time?

DYNAMICS-TOO LOUD - SAY TRUMPET I WAS OVERBLOWING AND I WOULD SAY NOT TO BLOW PHATLOUD. NOW I WOULD SAY MAKE A SOFTER DY NAMIC CHANGE

Look over the suggestions for improving the performance that you made in early critiques and in your later critiques. Are the practice stategies you suggested more specific now than they were at the beginning of the year? Are you making more suggestions for improvement than you did earlier in the year?

4. When you make a written comment about something that went well or poorly in a performance, do you give the location in the score? Do you see evidence in your rehearsal critiques that you have improved over time in your ability to pinpoint exact locations?

Figures 4.11: Guide to taking stock of critiques

Critiquing Performances: How Have I Changed? The Student's Reflection

Introduction: How has your ability to listen to performances and to write about what you heard changed from the beginning of the year until now? Below is a list of instructional goals for critiquing performances. You may have made much progress toward achieving some goals but little or no progress toward achieving others. This activity is designed to help you evaluate your work so that you can see where you have grown and where you have room to grow.

Directions: Use the rating scale below to rate yourself on each of the following instructional goals. On the line before each goal write the number which best describes how much progress you feel you have made toward achieving that goal.

4	much progress
	some progress
2	a little progress
1	no progress

<u>4</u> 1. When I listen to a performance, I can now write about it using specific musical terms (i.e., rhythm, pitch, dynamics, balance, etc.).

 $\underline{\mathcal{U}}$ 2. I can identify and discuss more musical elements now than I could at the beginning of the year (i.e., rhythm, intonation, phrasing, dynamics, etc.).

3. When I listen to a performance, I can describe what I heard in more detail than I could before.

 $-\frac{4}{1}$ 4. I can listen not only for problems in a performance but also for things that went well.

 $\underline{\mathcal{U}}$ 5. When I listen to a performance, I can hear problems that I could not hear before.

 $\underline{\underline{4}}$ 6. When I hear a problem in a performance or a part of the performance that went especially well. I can give the exact location in the score.

3 7. I can make more specific suggestions about how to work on problems than I could before.

 $\frac{1}{1}$ 8. I can discuss my own performance, describing things that I did well and problems that I am having.

 $\frac{U}{\text{did}}$ 9. I can discuss my section's performance, describing things that we did well and problems that we are having.

3 10. I can discuss other sections' performances, describing things that they did well and problems that they are having.

11. I can discuss the ensemble's performance, describing things that we did well and problems that the whole ensemble is having.

As teachers work together to arrive at the dimensions they wish to assess, and to have their students assess, the following list of dimensions, which describe much of the domain, may be useful. It is important that teachers use dimensions which best reflect their goals and objectives.

	MUSIC PORTFOLIO ASSESSMENT		5	но	RT FC)F
I. PRODUCT	ON:	No Evic	ience		bstan videnc	
A. <u>Craft</u> :	Student has control over elements, principles, and techniques of the musical arts.	•	•	•	•	
B. <u>Pursuit</u> :	Student can create a work, solve a problem or develop a performance over time and in depth.	•	•	•	•	
C. Inventivene	255: Student experiments with materials, solves assignments in imaginative ways, initiates own projects.	•	•	•	•	
D. <u>Expressive</u>		•	•	•	•	
II. PERCEPT	ION:					
	of Sensual Aspects of Experience: Student is aware of musical and non-musical experiences, and can draw these in his/her work.	•	•	•	•	
B. Awareness	of Physical Properties and Qualities of Sound: Student is aware and can make fine discriminations	•	•	•	•	
C. <u>Capacity to</u>	among musical sounds, gestures or techniques. Make Discriminations and Connections About Art: Student notices technical, functional, and aesthetic properties of music from various genres and cultures	• 5.	•	•	•	
REFLECTION	۹:					
A. Ability and	Proclivity to Assess Own Work: Student can articulate and defend judgements about his/her work	•	•	•	•	
B. <u>Ability and</u>	Proclivity to Take on the Role of Critic: Student can articulate and defend judgements about others' work.	•	•	•	•	
C. Ability and	Proclivity to Use Criticism and Suggestions: Student can use criticism to improve areas of weaknesses.	•	•	•	•	
D. <u>Ability to A</u>	rticulate Artistic Goals: Student can talk about goals as an artist, and the role of art in his/her life.	•	•	•	٠	
APPROACH	FO WORK:					
A. Engagemer	It: Student works hard, carries projects to completion, pays attention to details, and meets deadlines.	•	•	•	•	
B. <u>Ability to V</u>	Vork Independently: Student can work independently for long periods without being distracted.	•	•	•	•	
C. A <u>bility to V</u>	<u>Vork Collaboratively</u> : Student can cooperate with others and is willing to help others when needed.	•	•	•	٠	
D. <u>Ability to U</u>	Jse Cultural Resources: Student makes use of resources for music making, e.g., books, concerts, tools, experts, etc.	•	•	•	•	

Figure 4.12 The list of dimensions for portfolio assessment, with short music-specific descriptions

MUSIC PORTFOLIO ASSESSMENT

Please write a paragraph about each category, drawing upon specific categories mentioned in the check list and referring to specific works from the portfolio:

Areas of Strength	Needs Work
i i	
1	
İ	
i i	
1	
1	
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Expanding Assessment Through Portfolios

The completed portfolio provides many ways of looking at development that may be overlooked, forgotten, or even invisible to the teacher, let alone the parent or student. Perhaps the most distinguishing feature of Arts PROPEL domain projects is the emphasis linking reflective thinking with production tasks. Moreover, these projects are assessed on multiple dimensions. In the case of performance critique reflections or interviews, we see multiple-dimension assessment correcting for the narrowness of informal or evaluation on a single dimension. For example, it is obvious that neither silent participation nor performance accuracy alone describes a very complete picture of musical development in an ensemble or general music class.

A negative assessment on one dimension may not predict the development that is going on in another dimension. If, for example, a student writes in his journal reflections about how he is working on 'silently imagining the sound' before he can sing out in chorus, a very different assessment of his participation may be in order. In an instrumental ensemble, class discussion may be dominated by the seniors, while written critiques reveal stunningly incisive remarks by some of the first-year members. In general music class, a boy who writes very few melodies for recorder reveals in an interview that he has written 30 pieces of music for his drums at home. Rich portfolios simply bring more dimensions of assessment into play. In these cases failure to document reflection yields an incomplete picture of individual development.

Finally, portfolio assessment requires a different level of interaction between teachers and students. In portfolio classes, many teachers report that they become more apt to respond to student work through comments than to issue grades. Students play a genuine role in assessing themselves. They also are now more interested in the comments and advice of the instructor — they anticipate feedback on their portfolio work. Ideally, portfolio conferences between teachers and students provide additional opportunity for students to reveal what they have learned. Overall judgments of portfolios may well translate into grades. But these grades are now full of meaning for student and teacher, and readily explained to such audiences as principals and parents. In fact, we believe grades should enter the permanent record accompanied by a profile formed from descriptors from the assessment process.

More importantly, many PROPEL teachers see an opportunity for assessment that can describe the complex signature of an individual profile of learning. The form on the next page reflects a first attempt to capture the various attributes of development that occur in ensemble and general music classes alike.

These dimensions reflect the learning that is revealed in domain projects, questionnaires, interviews, and interviews that make up the music portfolio. The use of these dimensions allows the assessor to describe an individual's profile of development.

Name					Date Une 6,1991 Class Choir		
	Grade <u>1</u>)			Teacher <u>MRS.</u>	Rass	Branc
	MANCE CLASS PROPE	EVIDENCE LOCATED IN STUDENT PORTFOLIO (Questionnaires, Journa	GROWTH	ACHIEVEMEN	EVIDENCE LOCATED IN TEACHER JOURNAL/RECORDS [Direct Observations,	GROWTH	ACHIEVEMENT
PRODUCTION	TECHNIQUE (Intonation, Rhythm, Pitch, etc.)	Domain Projects, etc.) Individual lescon 10fsilac H-26-41 TAPR	5		Grades, Anecdotes, etc.]	4+	Ī
	HCHERORDER PERFORMANCE SKILLS (Phrasing, Expressiveness)	INDIVIDUAI	3			3+	
	MUSIC READING SKILLS	FINAL EXAMINE	5		Soly 1490 Exercises Tracker is read . Ard 1941	4-	
		(NA)	NA			_	
	CONDUCTING	(NA)	NA			-	
PERCEPTION	DISCRIMINATION OF MUSICAL ELEMENTS (Notations, Symbols)		4			4	
	ERROR DETECTION	ERROR Detection May 7, 1990 Nov 28, 1995	5			5+	
	PERCEPTION OF MUSICAL FORMS OR STRUCTURES (Knowing where you are in ,the score)	Erbor Delection Critique Sheets Nov. 28, 1990 May 7, 1991	4			5	
	PERCEPTION OF MUSICAL STYLES/HISTORICAL PERIODS		NA			-	
REFLECTION	CRITIQUEING	ERC - Apr. 17, 1991 Apr. 31, 19 Nor. 6, 1990	5			5	
	REVISING WORK	ERC. Apr. 17, 1991 Nov. 2, 1990	4	•		4	
	DEVELOPING PRACTICE MUSIC PLANS VOCADULOUY	FR2 word 111101				5	
ž	SETTING GOALS	Sept 27, 1990 Source Nor. 7, 1990	1.0		· · · · · · · · · · · · · · · · · · ·		
APPROACH TO WORK	LEVEL OF ENGAGEMENT	NO EVIDENCE				5 5	
	WORKING COLLABORATIVELY		$\left \right $				-
	LEARNING FROM OTHER	No Evidence				4	_
	PIECES [Transfer knowledge]		3			4-	

Figure 4.13 Dimensions identified

Opening Up the Portfolio Review Process

Reviewing portfolio materials is time consuming, but it can also be exhilarating for both the student and the teacher. Teachers and students need to share the various steps in the portfolio review process to realize the maximum effect. They need to use and further develop their clinical skills by raising good questions about work. They also need to be able to specify goals clearly. Teachers and students can help one another by organizing their work as well as actively exploring that work together.

The following figure is one model of how to structure portfolio review sessions. What is stressed here is the open and interactive nature of the portfolio review process. Teachers who are uneasy with an imbalance between written critiques and the amount of performance work included in the portfolio have another opportunity to ask for clarification of past performance work. For example, as middle schoolers review their past critiques, the teacher could ask them to demonstrate on their instruments or using their voices what they heard going wrong in the performance tape, how it should have sounded, as well as showing what practice strategies are appropriate for working on such problems. In this way, students not only demonstrate their level of instrumental mastery, but also their awareness and understanding of performance problems and their possible solutions. Performance demonstrations and other nonverbal evidence of understanding should be taken into account.

ARTS PROPEL MUSIC PORTFOLIO CONFERENCE STRUCTURE

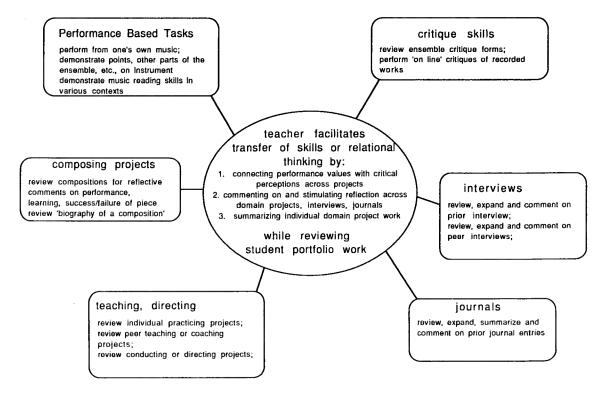


Figure 4.14 Portfolio Conference guide

Another possible emphasis in the portfolio review is selection. Seeing which pieces a student considers as best work, pieces which present the biggest challenge, or those which illustrate "pivotal moments" in the course can yield surprises to the person who knows the student best— the teacher. In Pittsburgh, a general music teacher was surprised that a student's favorite activity was group rhythmic composition something the teacher had forgotten she assigned earlier in the year. A band director finds out the trumpet player thinks his part had wrong notes in it. A choral teacher finds out that the tenors claim they can't read the notes in soprano part because they're much higher (although identically placed in the staff). The ensemble teacher finds out that a fourth grade student knows how to make the song 'Long, long ago' into 'a jazzier song'. In short, when teachers take the time to explore a student's past work in light of present work, the path of improvements can be highlighted, uncertainties clarified, and hidden intentions revealed and renewed.

The Parent Portfolio Conference

In the last year of the PROPEL project in Pittsburgh, some teachers began to involve parents in portfolio assessment. In Linda Ross Broadus' classes, for example, parents observed domain projects in classes. Approximately half of the parents showed up for a high school choral rehearsal on a week day morning. They were not disappointed. After watching the 'Ensemble Rehearsal Critique' project in action, they filled out a critique of their own. Using their own observations and drawing on the terms used in class, parents were able to find value in their son's or daughter's music classes. In short, they were delighted to find out that rehearsals involved disciplined performance skills, critical thinking and problem solving based on refined perceptions.

In the individual portfolio sessions they later attended at the end of the year, some parents volunteered surprisingly powerful indications of personal growth in their children. One mother recounts,

> I remember her first practice project well think it almost threatened the mother-daughter relationship we had. I mean, she wouldn't let me listen to her singing with me in the room - and, you know, it didn't sound so good either. I think we were both disappointed in the performance, but, you know, I had never heard her sing before, she is so shy. Well, this spring it was very different. <u>Very</u> different. She stayed in the room this time to listen to the tape. She was smiling at the end of the tape. She asked me if I could hear the improvement. She didn't need to ask me if I heard the improvement - it was <u>so</u> obvious. She was more confident, she was singing clearer, her rhythm was good I couldn't believe how much she had changed; how much more mature she is now!

The mother went on to explain her daughter's musical growth.

I think this critiquing that I saw earlier this year maybe is how this

happened.... She knows now what to listen for, how to work on music for herself, how to use criticism.... I even noticed she takes criticism better at home now. You know, I wish some of the people where I work could deal with criticism the way these kids do in this choir!

GEORGE WESTINGHOUSE HIGH SCHOOL

TAKE HOME CHOIR PROJECT

PARENT/GUARDIAN_RESPONSES

After you have listened to your child's tape and reviewed their written work, please answer the following questions. Thank you in advance for your cooperation.

- 1. Do you sing or play an instrument? Please explain.
- 2. The cassette tape includes your child's first attempt at singing alone in front of the class. After listening to your child what do you think are his or her strengths?
- 3. In Choir Class we do a lot of different activities such as tape record parts of rehearsals, discuss and write comments about the music, keep a journal and work toward developing good voice techniques. Has your child ever talked to you about any of the above activities? If so, which was the most interesting to you?
- 4. What did you learn about your child from this music folder?
- 5. What surprised you most about your child's work in this class? (His singing, his writing, etc.)
- 6. Has this TAKE HOME PROJECT been a worthwhile project to you?
- 7. Any additional comments, suggestions, questions?

Figure 4.15 Parent reflection guide

CHAPTER 5

IMPLEMENTATION OF PROPEL IN THE CLASSROOM

So far, we have presented the basic premises of PROPEL and guidelines for the implementation of this assessment program. The previous chapters have provided an introduction to the specific methods and strategies. This chapter focuses on the kinds of transformations that can come about through PROPEL and through the documented work of teachers and students.

Teachers bringing PROPEL into their classrooms need the opportunity to tie in the concepts and principles to what they already know and do. Once they have a basic understanding of the central concepts of assessment and an overview of the vehicles of domain projects and portfolios, they can move beyond abstract discussions to concrete experience: to look at student work, to discuss teachers' current curricular units, and to review and assess student portfolios.

The core group of teachers in Pittsburgh have had the benefit of developing and continuing to learn about PROPEL in an on-going group. Some of their colleagues to whom the program is being disseminated have had chances to learn in workshops from mentors and from one another. Although individual music teachers can adopt the principles and practices of PROPEL, we strongly recommend the benefits of the broader support available by working collaboratively with like-minded colleagues.

While the opportunity for collegial exchange is important for teachers as they explore this approach to learning and assessment, the importance of being open to working with students in new ways and the opportunity to learn in an interactive classroom atmosphere cannot be underestimated. As the concepts and principles of PROPEL take shape in a classroom, the relationships among and between students and teachers change. While clarifying for themselves and for their students what learning they want their lessons to facilitate, teachers have found new ways to turn over more control and responsibility to their students.

Finally, it is important to engage the students in the formative aspects of assessment. We have found that when teachers and students themselves develop the formats and procedures used to implement PROPEL the transition to instruction-based assessment becomes much more meaningful.

Throughout this handbook, we have drawn on the experiences of the core research teachers to present the central principles of PROPEL. In this chapter we will briefly revisit the central vehicles of Arts PROPEL, drawing on approaches developed for the Pittsburgh dissemination project.

Becoming an Arts PROPEL Teacher

Even beyond the initial training period, PROPEL teachers need the support of their districts to provide ample time and resources for portfolio collection and maintenance, and for on-going teacher-student conferences. Teachers benefit from an on-going opportunity to meet with their colleagues to discuss teaching strategies and assessment criteria.

The most successful use of Arts PROPEL depends on district or building support for teachers who will be implementing it. Ideally, flexible schedules, release time for observations, workshops, and an entire day for cross-class assessment meetings are necessary for teachers who are given responsibility for the PROPEL program. The changes which occur among teachers' relationships mirror those which take place in the classroom as the educational model shifts from teacher-as-knowledge-dispenser to teacher-as-mentor model typical of PROPEL classes.

In Pittsburgh, because of this shift, it was useful to distinguish among four levels of experience: the novice PROPEL teacher, the teacher who is learning how to use domain projects in the classroom or rehearsal, the teacher who develops domain projects and takes part in cross-class assessment, and the "core" teacher who carries the responsibility for supervising other teachers and monitoring the assessment project as it evolves. A large district adopting Arts PROPEL should consider the plan developed in Pittsburgh.

Changes Wrought by PROPEL

As important as the practical considerations of time and numbers are the changes in attitude and atmosphere that Arts PROPEL promotes. As a result of their experience with PROPEL, some Pittsburgh core teachers feel that they will never again teach the same way. One cannot underestimate the benefit from the process of meeting with colleagues, building rapport and trust as a group of professionals, having time as practitioners and researchers to evaluate their own teaching practices, and exploring the criteria and strategies for meaningful assessment. But there are also a common set of changes in their classrooms and in their thinking that PROPEL teachers mentioned repeatedly. It is helpful, when thinking about implementing PROPEL in a new setting, to review some of the changes teachers frequently noted by "listening in" on conversations between PROPEL teachers.

Types of Transformations

Perhaps the most remarkable thing about the ARTS PROPEL portfolio assessment program is the sure, yet predictably unpredictable changes in teachers, students, and in classes. There are several reasons for this: students' increased responsibility for their own assessment, more variety in ways of looking at assessment, increased documentation of the learning process, expanded approaches to documenting learning, higher quality of feedback to the student, and multiple opportunities for assessment. PROPEL, for many teachers, leads to a series of transformations that irrevocably changes the learning environment, teaching style, and what is used as evidence for learning. These transformations suggest radical changes in 1) relationship of the teacher to the curriculum, 2) role of the teacher in the classroom, and 3) the nature and evaluation of student work.

BECOMING AN ARTS PROPEL MUSIC TEACHER

Entry-level (First-time) Propel Music Teacher

First semester:

- observes a mentor teacher's class engage in one domain project
- begins to reflect on the implications of introducing PROPEL in her or his own class implications for instruction, material presented, nature of student-teacher exchanges, and for assessing and documenting learning

Second semester:

- implements one domain project and some form of reflection stimulus (e.g., entry and mid-level questionnaires or journals) under the guidance of the mentor teacher
- establishes dialogue with students about work and ways of working
- begins keeping a journal for her or his own reflections and begins keeping anecdotal records about individual students' learning

Second-level ("Encore") Propel Music Teacher

- implements more than one domain project
- practices in-class assessment of these projects
- tries out and adapts reflection instruments (e.g., journals, questionnaires, peer interviews)
- establishes an environment in which there is ongoing assessment of work as part of the larger dialogue about work between teachers and students
- helps students use their collected works as Propel portfolios and tries out portfolio conferences as closing interviews with a sample of students

Leader/Mentor Propel Music Teacher

- implements a variety of domain projects, domain project extensions and reflection instruments and adapts or invents others
- establishes an environment in which the assessment of work is ongoing, is integral to the dialogue in the classroom, and is fully documented and shared with students and parents as well as supervisors and principals
- serves as mentor to a first-time teachers and/or as a resource leader to "encore" teachers
- participates in cross-class scoring sessions and regular collegial discussions about projects and students, about standards for work and criteria for judging work

Figure 5.1 Stages in becoming an Arts PROPEL teacher

New Relationships to the Curriculum

As they become adept at using the concepts and procedures of Arts PROPEL, teachers find new ways to focus on the standard curriculum. They note that their job is to focus on creating authentic, assessable projects that explore concerns which are central for all musicians. This shift of focus dramatically changes the teaching-learning exchange. Now, the emphasis in assessing the curriculum is on understanding through the student's own view. Jim Charlton, a general music teacher, notes in an interview:

Since PROPEL, I do less paper and pencil testing, like memorizing the definitions that before would have been a priority, but no longer seems to be. Now, instead of being sure that the students have their little textbook definition of sonata, rondo, minuet, blues, I'm more interested if they can hear a piece of music and discover through their own representations that it's sonata form, even if they have to paraphrase some of the terminology. It is one sense in which PROPEL has shifted my expectations on the part of the students as more geared toward student experiences rather than students' acquisition of facts.

As curriculum goals are re-approached through assessment based projects, teachers discover new bonuses. Taking a very traditional goal of the general music class, e.g., learning standard music notation symbols, teachers do not begin with the elements of the conventional system. Instead, they first ask students to invent their own symbol systems. This supports an entire range of contexts for learning notation: understanding general properties of notation systems, making tools for recording impressions of music, and a personal way of composing music. In addition, the conventional system is introduced only when it is most likely to be relevant for the student, i.e., when a more flexible or more inclusive system is needed for the purposes of the class assignment. According to Jim Charlton, beginning with the student's sense of what a notation could be, invented notations then evolve to fit the needs of the particular task at hand:

Ultimately students' invented notations take on the look of traditional notation, at which time it is reinforced by examples, teacher input, and conventional drills and activities. This way the curriculum goal of teaching standard notation is achieved, but with some bonuses — the students' grasp of the historical perspective in the development of notation is enhanced due to the parallels that appear in their own inventions and the students' understanding of notation is more deeply meaningful due to authentic experience with the musical qualities notation reflects. In addition, they are much more open-minded about nontraditional notational systems they encounter in subsequent class work (such as Gregorian mensuration and very experimental contemporary systems of notation) since their original experience with the notational system is not the traditional 'memorize-and-begin-to-use' paradigm. The activities were generative and emphasized (and documented) perceptual and reflective skills along with traditional knowledge-recall skills. So you see, after the brief period of time where the procedure of graphing was introduced and explored, it remained available later to be used as an analytical tool in studying other musical elements.

Changing Roles in Classroom Teaching

Teachers committed to portfolio assessment begin to change their role in the classroom. Shifting from the role of leader/director to that of mentor/coach of the ensemble depends on a reconceptualization of the teacher's role. Instead of checking on how well students have responded to the directives of the teacher, the critique, journal and questionnaire vehicles of assessment create dialogues which stimulate and document reflection between student and teacher. For example, rather than correcting the student's intonation directly, Ms. Ross-Broadus uses the journal to encourage students to express their understanding of the scope of the problem, together with a range of possible solutions. One of her students enters the following comment in his journal right after choir rehearsal:

I've really improved my intonation in my quartet singing. Before when Ms. Ross-Broadus told me I sang out of tune, I wasn't sure what she meant. Now I know when I concentrate on my breathing, my diction, and sing out with confidence, I no longer sing flat the way I usually did last year.

This journal entry during a rehearsal begins a dialogue that permeates and changes the fabric of the rehearsal process altogether. Teachers who encourage critiques and journal entries do not always have to rely on formal written sheets. Once the practice of journal writing is supported, teachers are more likely to respond constructively to student comments as a matter of course. Comparing this process to previous rehearsal habits, Ms. Ross-Broadus notes:

It is the opposite of the way I used to teach. In the past, I'd tell them everything that should be done and how to correct it. Sometimes now I forget and revert, especially if we are pressed, with a concert coming up. But recently, we were having trouble. I couldn't get a good sound from them. I went over and over the a section, dictating to them. Then I remembered and I said, 'Let's stop. If you were critiquing this in your journal, what would you say? What could we do to improve?' I gave them a few minutes, and then we went back and did the same section over again. The difference was phenomenal. They had engaged their own thinking processes, and they were problem-solving. They were being musicians themselves.

As a result of taking portfolio projects and reflective writing exercises seriously, the teacher is more likely to adopt the role of collegial coach rather than authoritarian director of the class or ensemble. Why? Many teachers with widely differing teaching techniques report that portfolio assessment projects creates opportunities for students to take responsibility for their work. Fred Taylor from Brookline Elementary Schools points out:

It is important to note that the overall strategy of portfolio assessment — more responsibility by the student, less intrusion by the teacher — is not something reserved for one or two meetings a year but is in fact a reflection of what goes on in the classroom from day to day. ...As a coach, the traditional role of the teacher changes. In place of simply disseminating information, he now prompts, criticizes (constructively), senses and asks just the right questions, and gently nudges his students along. This is the role of the teacher who uses portfolio assessment.

Now the teacher has a new role — to help, to give advice, to facilitate — while the student assumes a different kind of responsibility: to make judgments, to imagine new solutions, and to respond to constructive criticism. For many teachers, this means engaging students in new ways:

Very often I'll ask questions in situations where prior to PROPEL I would have made statements. I'll ask the students questions - not really opinion questions, it's not that. I'll ask the how should this be done, or altos, what was wrong with the sopranos, how should they fix it.... It has the effect of getting the students more involved in the rehearsal. They really feel that they have more ownership of the rehearsal.

New challenges emerge for the teacher. Asking questions, reshaping tasks, and making clinical judgements all become part of a teacher's new repertory of skills when interacting with domain projects over time. Fred Taylor reflects that:

It can be a tricky business. When asking a student to 'shape a musical phrase' in her interpretation project, I have realized that I have gone beyond her ability to problem solve. Retreating, I ask her something more specific. 'Since you noticed that the last and first phrases are the same, what do you think the dynamic level of each should be?' Now the problem is better understood. The student is able to make and defend a musical judgment, and a teacher learns a little more about the skill of coaching.

In what ways do students prosper in this new relationship with the teacher? When students regularly engage in assessing their work through written reflections buttressed by verbal on-the-spot critiques, many teachers report new evidence of student engagement. A choral director, who often takes time to jot down her own reflections in a notebook, tells the following story:

When I found out that Ben - one of my best tenors - wasn't going to show up for our concert, I resigned myself to the inevitable balance problems in the performance. As it turned out, I was surprised how well the tenor section did throughout the piece. After the concert, Eric, one of the basses, asked me how well I thought the tenors did. I told him I thought it went surprisingly well. There was a big smile on his face. As it turned out, Eric switched to singing the tenor line off and on during the entire performance. I was bowled over that he knew the music well enough to go from part to part. But more than that, it was his ability to anticipate and compensate for the balance problems of the entire ensemble.

When students perceive the director/teacher as collaborator rather than dictator in the rehearsal, they are empowered to work together toward common goals in performance.

The Changing Nature of Evaluating Student Work

With Arts PROPEL, there is a new commitment to taking student work more seriously. "More seriously" means considering a wider range of student input and evidence of learning. Legitimizing the role of independent thinking in the classroom stimulates students to remain attentive to the tasks at hand, and more, to make a commitment to and an investment in their own education. The following comment from an Arts PROPEL teacher illustrates the effect of this degree of personal stake:

They can't wait for me to respond. They can't wait to read what I've written, but I think it goes beyond my just responding to them. I'm seeing self esteem. Students are proud of what they're saying, about the work they are doing, whether it is with their journals or just discussion, you can see that they are proud of what they are doing.

For many music teachers, transformations in assessment practices represent an opportunity for refocusing on musical values that may not match traditional methods of evaluation of music programs or individual students. In the rehearsal ensemble this means focusing on a wider range of skills that support the rehearsal process rather than assessing only the technical aspects of performance, as Jim Charlton notes:

We, as musicians, know that the concert represents only one part of the learning process.

In individual assessment, this also means expanding our notions of what constitutes "good" assessment practice Music teachers, who in the past have relied on paper-and-pencil tests, look to portfolio assessment as an alternative that can provide a closer match between what is taught and what is tested in the performance ensemble.

More often than not, if examinations are required, they are modelled on typical academic practice — a period of instruction followed by a break in learning while we test what we hope students have learned. Typically, evaluation occurs outside the context of learning, and freezes or shortens the period of activity to a relatively brief moment. Not only do we construct isolated occasions for evaluation, but we also tailor our evaluation process to meet the confined dimensions of that occasion. During that moment students are expected to provide, find, and use answers to problems which were selected by someone else. In addition, the sharp distinction between moments of learning and assessment creates an artificial distinction between learning and reflection upon what is learned.

Many teachers implementing and assessing domain projects rediscover the mentor/apprentice relationship usually found in master classes or the private music lesson. Assessment in apprenticeships takes place in a production - oriented, real world context. The novice is watched constantly; watched for special abilities and strengths, watched for areas of weakness and shortcomings. Assessment of personal working style, ability to learn quickly from coaching, efficiency in applying old lessons to new tasks, social awareness and ability to get along with people are all evaluated by the watchful master.

Making Assessment More Public: Portfolios in Concert

Portfolio assessment provides numerous opportunities for connecting the learning processes with performance achievements. In Brookline elementary schools, for example, Fred Taylor now produces 'Not ANOTHER CONCERT, CONCERTS' which publicly display a wide range of student work. At intermission, for example, the audience members can view videotapes of past rehearsals. Written critiques reveal the rehearsal strategies behind the final performance. Program notes taken from students' journals reveal their perceptions and aesthetic judgments about the music they play.

"NOT JUST ANOTHER CONCERT, CONCERT"

Performed By

THE HEATH SCHOOL SENIOR BAND

Mr. Fred Taylor, Conductor Mrs. True Burley, Piano Accompanist

TUESDAY, MAY 21, 1991 HEATH SCHOOL AUDITORIUM

7:00 p.m.

Featuring

Instrumental Solos

Student Compositions

Guest Conductors

and

Display of Student Projects

Figure 5.2A Program for PROPEL "concert"

A GUIDE TO THE PROJECTS DISPLAYED IN THE CAFATERIA

For the last year and a half, members of the Heath Band have been involved in a number of musical projects. This work goes beyond but complements each student's work in weekly lessons and/or band rehearsals. The projects may take as little as a single period to do or as long as five to six weeks.

Each of the projects is modeled after a process we understand musicians and musically educated people to be typically engaged in. For example, a student might be asked to write a review in the manner of a music critic or be a composer and write a melody or prepare a performance tape as if for an audition. They are designed in this way to encourage students to think and critically listen as a musician must.

The skills and understandings we look for in project work include:

Critical Thinking

Exercising and Justifying Musical and Aesthetic Judgments Musical Perception and Listening Creative and Imaginative Thinking Understanding of Musical and Aesthetic Concepts

The goals of the Instrumental Music Curriculum, therefore, should be seen to include not only performance skills but the various ways we can experience and value music.

Each project begins with a musical problem or task which students must solve" to the best of their ability. Please take a moment to view the quality and breadth of work Heath Band members have produced this year.

Figure 5.2B Guide to intermission display

PROGRAM

	— 1
Norland M	larch
Simple Gi	fts
Solos: Do	on't Get Around Much Anymore Ellington
	Jake Honoroff, trumpet
	The tempo Jake has decided to perform his solo is fast. He writes: "My song is a jazz song, and most jazz songs sound good fast."
Co	ollege Drag
	Judy Smith, snare drum
	Regarding the tempo she decided to play her piece, Judy said;
	"I decided to play it fast because if it was slower, then the ruffs sound like rolls and the accents wouldn't stand out."
<u>F</u> :	iesta
	Michelle Dean, flute Mrs. True Burley, piano
	In writing about her interpretation, Michelle says: "I start to play louder in the middle and towards the end. I also get slower toward the end of the piece. The piece imitates itself so I want to change it so it sounds different."
Chariots	of Fire
•	Rebecca Segel, Student Conductor
	After her second time rehearsing the band, Rebecca had this to say about what was easy and what was difficult about being a conductor. "It is easy to see if the band has the right rhythm because I've heard the piece. It is hard to keep my hand going in the same pattern. It is also hard to spot problems with the flutes. (and) clarinets because the loud instruments drown out the soft ones. It is also hard to follow the score."
Four Melo	dies Composed by Students
Ro	ck Adventure Composed and performed by Elyse Fenton, clarinet.
	Commenting on what she learned form writing music this year,
	Elyse wrote: "The composer has to like the music she writes."

Figure 5.2C Program notes taken from student journals

Rocks Composed and performed by Andrew Dean, alto sax.

Andrew writes: "I like the pattern of the music (I wrote) because it's so alive."

May Morning Composed and performed by Patty Murphy, flute.

In writing about what she learned from writing her own music, Patty said: "I learned how to anticipate what the listener is expecting, and I learned how to write a song with two endings."

Teeth Composed and performed by Alice Burley, French horn.

When asked what she learned this year from writing her own music, Alice wrote; "You need a big eraser. It takes a long time to be even half satisfied with your work."

Michael Mahoney-Pierce, Student Conductor

When asked to think about what both the expressive and formal elements of his piece implied about how he would conduct it, Michael said: "My piece is sort of a pop song and the mood is rather sad. I try to keep it slow and fairly soft dynamics up until the climax. . . I symbolize (the climax) by getting both louder and faster. Throughout the song I try to keep the melody louder than the harmony."

Solos

Adi Bar-Lev, clarinet Mrs. Burley, piano

Writing about her interpretation process, Adi said: "I tried several ideas. Overall, my speed stayed slow, but I decided to play a little faster at some places. I also changed my mind about dynamics as well, because I need to bring out the melody more. I think it sounds best (medium slow) because the notes are a bit monor, which makes the piece flow sadly and expressively, which wouldn't happen if I play fast."

Julie Sneddon, flute Mrs. Burley, piano

Writing on her interpretation process, Julie said: "After the first time I played the piece I pretty much knew how I wanted to play it. I did, however, change things around and experiment. I changed speeds a few times--slow, then fast, then slow again. Eventually, I tried giving the piece more "personality" by putting variety into it."

Figure 5.2D Program notes taken from student journals

What do these new assessments suggest to parents and administrators?

First, teachers pose real musical problems to students. Thus, students are engaged in problems which musically educated adults or professional musicians encounter. Students learn to make music, listen to music, and evaluate music.

Second, assessment of ensemble classes can be individualized. Ensemble or collaborative projects can now yield concrete examples of student work: a composition, a taped performance, a critical review. Students can continually shape, revise, assess, perceive, and critically examine this work. The student's work is, in short, the documented reference to his or her musical thinking, and becomes the vehicle for teacher and parent assessment over time.

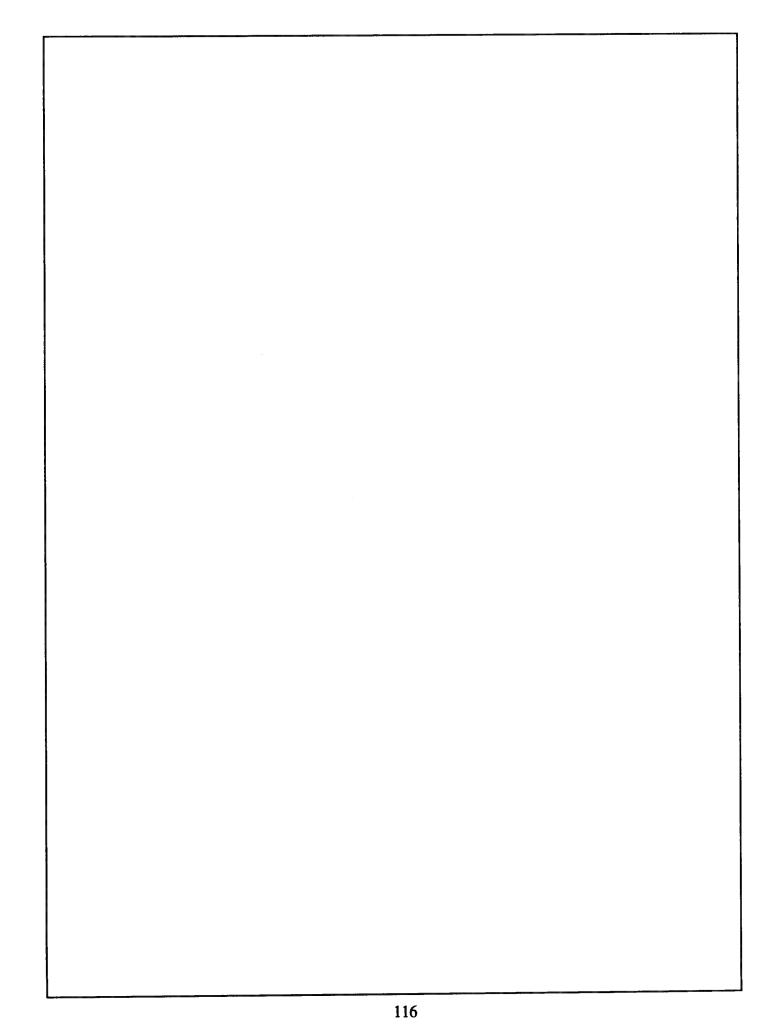
PROPEL projects were originally developed for middle- and high-school students. But we have found these projects to be easily adapted for situations beyond those. Reports from elementary schools, Artist-in-Residence programs, and schools for severely at-risk children provide important evidence for the feasibility and generalizability of Arts PROPEL beyond the original model developed in Pittsburgh. Harold McAnaney reports considerable success getting at risk children to compose music collaboratively at Timothy Murphy School in San Rafael, California. Jim Smith at Mercersburg Academy in Pennsylvania reports doubling the enrollment in his general music program after changing his approach to "hands-on" composing projects and extensive "process journals". Linda Squire in Provincetown, Massachusetts, reports on how students in music classes now take their journals to live concerts or contests. Fred Taylor in Brookline, Massachusetts, records elementary age children creating radically different interpretations of their pieces in lessons on their own for the first time. Richard Bowers, the Fine Arts Coordinator in Methuen, Massachusetts has, on the basis of Arts PROPEL portfolios in both visual arts and music, convinced his district to hire three additional music teachers. An artist-in -residence program in Maine is developing portfolio projects to maximize and document the learning that occurs between the visiting artist and the general music and band students K-12. The list goes on.

These examples signal a more telling change: the reformulation of what it means to create and support a <u>culture of learners</u>. The ideas in this project are not original to PROPEL, nor are they only applicable to the arts. Rather, they are a collection of good teaching practices organized through the Arts PROPEL portfolio assessment approach. It is up to the individual district or teacher to adapt this model to particular needs and goals. Doing so involves taking risks. A teacher's commitment to reflection means

taking the student's view of learning very seriously, guiding students in their learning goals, and helping students respond to criticism.

Teachers working with other teachers are able to create an atmosphere where professional development means sharing student work and creating new standards of assessment and learning. Whether the standards for assessment reflect only a local context or are informed by standards suggested by professional associations or national assessment programs such as Advanced Placement, they must be standards for <u>all</u> participating students and they must be tied not to assessments that say what students have failed to learn, but to assessments that profile what students have learned.

Finally, administrators and parents should realize that portfolio assessment yields rich and informative learning. These dimensional profiles documenting the abundance of learning that occurs in a class are far more useful to students, next year's teacher, parents, and the community than are single, global grades. Portfolio assessment places an emphasis on developing profiles of learning within a classroom, a building, and a district.



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