Renzulli, J. S. (2001). Using enrichment clusters for performance based identification. *Gifted Education International, 15*(1), 22–28.

Using Enrichment Clusters for Performance Based Identification

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By their deeds ye shall know them!
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Abstract

One of the continuing problems facing programs and services for the gifted and talented is how to identify at risk students and students who ordinarily do not show up well on test scores and other traditional identification procedures. Although "performance based identification" is frequently discussed in the literature, there is limited use of this practice, and very few systematic vehicles have been created to screen general populations for unidentified or under identified students who may benefit from the types of services ordinarily provided by special programs. The enrichment cluster approach described below was designed to create highly challenging learning opportunities that, in a certain sense, allow high potential students to identify themselves! This approach works well with traditionally identified students as well as those who may be overlooked through test oriented identification procedures. The key to successful use of this approach is that whenever a student shows remarkably high interest, expertise, and creative productivity in an enrichment cluster, resource specialists, mentors, or other teachers with advanced level expertise should be available to provide the kinds of follow-up experiences that will support the student's advance work.

The National Research Center on the Gifted and Talented has been experimenting with enrichment clusters in schools that serve diverse, at risk populations as well as schools that serve middle class students. In these schools, educators have created a "place" within the overall weekly schedule that focuses students' attention on authentic learning applied to real-life problems. These two characteristics—authentic learning and real-life problems—are fundamental qualities of enrichment clusters. For this reason, I will discuss those terms in more detail before delving into specifics about enrichment clusters.

Authentic Learning and Real-Life Problems Defined

The key concept in defining authentic learning is application. Authentic learning consists of applying relevant knowledge, thinking skills, and interpersonal skills to the solution of real problems. These real-life problems share four criteria. First, a real problem requires a personal frame of reference for the individual or group pursuing the problem. In other words, the problem must involve an emotional or internal commitment in addition to a cognitive or scholarly

interest. For example, stating that global warming or urban crime are "real problems" does not make them real for an individual or group unless they decide to do something to address the problem.

A second characteristic of real problems is that they do not have existing or unique solutions for persons addressing the problem. If an agreed-upon solution or prescribed strategies for solving the problem exist, then it is more appropriately classified as a "training exercise." Even simulations based on approximations of real-world events are considered training exercises if their main purpose is to teach predetermined content or thinking skills.

The third characteristic of a real problem is best described in terms of why people pursue these problems. The main reason is that they want to create new products or information that will change actions, attitudes, or beliefs on the parts of a targeted audience. For example, a group of young people who gathered, analyzed, and reported on data about television-watching habits in their community were contributing information that was new, at least in a relative way, and that would cause people to think critically about the television viewing actions of young people.

The final characteristic of real problems is that they are directed toward a real audience. Real audiences consist of persons who voluntarily attend to information, events, services, or objects. A good way to understand the difference between a real and a contrived audience is to reflect on what some students did with the results of their local oral history project. Although they presented their findings to classmates, they did so mainly to rehearse presentation skills. Their authentic audience consisted of members of a local historical society and persons who chose to read about their research in the features section of a local newspaper.

To understand the essence of authentic learning is to compare how learning takes place in a traditional classroom with how someone might learn new material or skills in real world situations. Classrooms are characterized by relatively fixed-time schedules, segmented subjects or topics, predetermined information and activities, tests and grades to determine progress, and an organizational pattern largely driven by the need to acquire and assimilate information and skills imposed from outside the classroom.

Contrast this type of learning with the more natural chain of events that takes place in real-world situations including research laboratories, business offices, or film studios. In these situations, the goal is to produce a product or service. All resources, information, schedules, and events are directed toward this goal, and evaluation (rather than grading) is a function of the quality of the product or service as viewed through the eyes of a client or consumer. Looking up new information, conducting experiments, analyzing results, or preparing a report is focused primarily on the present rather than storing it for a distant future.

Although most schools have introduced teaching techniques that go beyond traditional drill and recitation, the predominant instructional model continues to be a prescribed-and-presented approach to learning. The teacher, textbook, or curriculum-guide prescribes what is to be taught, and the material is presented to students in a predetermined manner. Although nothing is inherently wrong with this deductive model, it is based on a limited conception of the role of the learner. It fails to consider variations in students' interests and learning styles, and it always

places students in roles of lesson-learners and exercise-doers rather that authentic, first-hand inquirers.

Authentic learning, on the other hand, focuses on the present use of content and processes. It does so as a way of integrating material and thinking skills into the more enduring structure of the learner's repertoire. And it is these more enduring structures that have the greatest amount of transfer value for future use. When content and processes are learned in authentic, contextual situations, they result in more meaningful uses of information and problem-solving strategies than the learning that takes place in overly structured, prescribed classroom situations. If persons involved in authentic learning experiences are given some choice in the domains and activities in which they are engaged, and if present experience is directed toward realistic, personalized goals, this type of learning creates its own relevancy and meaningfulness.

The Assembly Plant of the Mind

Authentic learning consists of investigative activities and the development of creative products in which students assume roles as first-hand investigators, writers, artists, or other types of practicing professionals. Although students pursue these kinds of involvement at a more junior level than adult professionals, the overriding purpose is to create situations in which young people are thinking, feeling, and doing what practicing professionals do in the delivery of products and services. These experiences should be viewed as vehicles through which students can apply their interests, knowledge, thinking skills, creative ideas, and task commitment to self-selected problems or areas of study.

In addition to this general goal, authentic learning has four objectives:

- To acquire advanced-level understanding of the knowledge and methodology used within particular disciplines, artistic areas of expression, and interdisciplinary studies;
- To develop authentic products or services that are primarily directed toward bringing about a desired impact on one or more specified audiences;
- To develop self-directed learning skills in the areas of planning, problem finding and focusing, organizational skills, resource utilization, time management, cooperativeness, decision making, and self-evaluation; and
- To develop task commitment, self-confidence, feelings of creative accomplishment, and the ability to interact effectively with other students and adults who share common goals and interests.

Authentic learning should be viewed as the vehicle through which everything, from basic skills to advanced content and processes, "comes together" in the form of student developed products and services. In much the same way that all of the separate but interrelated parts of an automobile come together at an assembly plant, so, also, do we consider this form of enrichment as the assembly plant of mind. This kind of learning represents a synthesis and an application of content, process, and personal involvement. The student's role is transformed from one of lesson-learner to first-hand inquirer, and the role of the teacher changes from an instructor and disseminator of knowledge to a combination of coach, resource procurer, mentor, and,

sometimes, a partner or colleague. Although products play an important role in creating authentic learning situations, a major concern is the development and application of a wide range of cognitive, affective, and motivational processes.

Enrichment Clusters

As indicated earlier, our experience with schools has shown that we can guarantee authentic learning experiences for students if the overall weekly schedule devotes some time focused exclusively on the kind of learning just discussed. During enrichment clusters, non-graded groups of students come together for approximately one-half day per week because they share common interests that bind them together and a willingness to work cooperatively within a relatively unstructured learning environment. Information collected in student portfolios assists students and teachers in making decisions about the clusters in which they might like to work. Block scheduling arrangements, or selectively borrowing one class meeting per month from the regular schedule has allowed numerous schools to set aside the time necessary for enrichment clusters.

How It Works

The guidelines for enrichment clusters are easy to follow. First and foremost, all cluster activity is directed toward the production of a product or service. Enrichment clusters are not mini-courses! There are no unit or lesson plans. Rather, a series of start-up activities help students find and focus a problem that the majority of the group wants to pursue.

The facilitation of an enrichment cluster can be illustrated by following a group of students who started "The Video Production Company." Students selected this cluster because of their collective interests in the medium of video and its impact on audiences. The teacher who coordinated this cluster was familiar with the operation of simple video equipment and she also knew community persons who would volunteer assistance in this area. This cluster quickly became interdisciplinary in nature.

Product development required that students deal with scripting, story boarding, drama, set design, and costumes, cinematography, and video editing. A unique feature of clusters is that everyone does not do the same thing. This division of labor models real world productivity, and everyone contributes in his or her own area of specialization. The group is connected by a common purpose, but each person is special because of the unique contribution that he or she makes to the overall enterprise.

Initial Questions

The initial meetings of the Video Production Company focused on answering the following questions.

1. What do people with an interest in video production do?
2. What products do they create and/or what services do they provide?
3. How, and with whom, do they communicate the results of their work?

4. What resources and materials are needed to produce high quality video products and services?
5. What steps need to be taken to have an impact on intended audiences?

Rather than providing students with answers to these questions, the teacher organized and guided but did not dominate the investigative process. General exploratory experiences took the form of guest speakers, displays of typical products from the field of video production, and videos of cinematographers at work. A library trip organized around a scavenger hunt helped students broaden their perspective about the products and process involved in different genre of video production.

Students discovered "How-To" books that provided valuable sources of methodological information. Brainstorming and webbing techniques helped students identify what they knew and what they were eager to discover. Mutual interests are a good starting point for accelerating motivation and promoting harmony, respect and cooperation among group members. Individual interests led to students interviewing local professionals and obtaining career-related literature from professional societies and associations. Resource people ranged from teachers and students involved in a local community-college communication program, to professionals at the local television station.

Once students understood what professionals in video production do, they decided on a project with common interest to the group. Problem finding and focusing is a crucial step, because the nature of the project or service will drive the rest of the investigation. Students may use their own interests to develop a documentary or fictional work, or they may opt to market their services to the student council, athletic association or parent-teacher association and make a school-orientation video or video-yearbook for the school. The enrichment cluster may divide into subgroups based on product selection. In the case of the Video Production Co., they decided to do an all-purpose program about activities taking place in the district's schools. Features such as Kindergarten Corner, the Inventors Forum, and the Science Connection were interspersed with general school news and interviews with students and teachers. The program aired weekly on the local cable-access television station.

The Teacher's Role

As the facilitator of the cluster, the teacher helped students select challenging projects, develop story boards and shooting schedules, and make arrangements for transportation and cooperation with other teachers. She also helped identify the jobs to be done, obtain the required resources, and develop an action plan. The teacher worked with the group on developing interpersonal skills, running effective meetings, and developing time-management skills. These activities should be student-driven, with the teacher playing an advisory role.

Wherever possible the teacher should encourage students to imitate the roles and responsibilities they saw modeled by actual professionals working in the field of video production. This division of labor allows all students to have ownership of a component of the production and to find a niche that compliments their individual abilities, needs and interests. Each person's specialty is valuable because of the essential contribution it makes to the whole.

At all times the role of teacher is to coach, support and escalate the level of the performance to a higher level. Like any coaching position, teachers will quickly develop the experience to predict the problems and needs of the group before they arise. This requires a great deal of patience and restraint. Facilitators must allow students to experience frustration and struggle to turn setbacks into successes. Students must own the problem, if they are ultimately to own the satisfaction of their success. As the work of the Video Production Co. evolved, the teacher helped students run company meetings and assess their progress. One of the most important results of this cluster was that the teacher identified three students who had exceptional interest and talent in various aspects of video production. Two of these three students would never have been identified through traditional techniques for special services in a program for the gifted and talented. Working in cooperation with the school's enrichment specialist, arrangements were made for the students to serve after-school internships with a local television station. The students were so successful in their internships that they were hired by the television station to work part time during summer vacation. This example illustrates how performance based identification works and how two students from underrepresented populations were able to develop their gifted behaviors.

Assessment and evaluation are an integral part of product development and should not be imposed from outside. Students should select criteria that they feel are important and judge their work against them. Assessment should be reflective and the enrichment cluster should provide an atmosphere where students feel comfortable taking creative risks. Product development should always be viewed as a "work in progress," and feedback should be used to improve the quality of the product. The ultimate evaluation is always a function of viewer feedback. When a product is complete, time should be taken to celebrate its success before moving on to another project.

The Importance of Authentic Learning

Authentic learning is important for several reasons. First, schools should be enjoyable and creative places rather than places where students assimilate knowledge but never have an opportunity to apply it. Second, schools should be places where students participate in and prepare for intelligent, creative, and effective living. This type of living includes learning how to analyze, criticize, and select from among alternative sources of information and courses of action; how to think effectively about unpredictable personal and interpersonal problems; how to live harmoniously with one another while remaining true to one's own emerging system of attitudes, beliefs, and values; and how to confront, clarify, and act upon problems and situations in constructive and creative ways. Authentic learning opportunities are important for another reason. Many young people with high, and sometimes even remarkable potential may not be identified through traditional screening and testing procedures. By giving all students an opportunity to participate in authentic learning experiences, we provide a practical vehicle for performance based identification. We have had numerous examples of students who first displayed their gifted behaviors in an enrichment cluster situation, and in cases where resource teachers or mentors were available, they have followed up cluster initiated work with long term and highly advanced studies. Finally, authentic learning is important because our society and democratic way of life are dependent upon an unlimited reservoir of creative and effective people who know how to put knowledge to work in real-world situations.

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Author's Note

The work reported herein was supported under the Javits Act program (Grant #R206R50001) as administered by the Office of Research and Improvement, U.S. Department of Education. The findings and opinions expressed in this article do not reflect the positions of the Office of Research and Improvement or the U. S. Department of Education.