

## Part II

# Academies of Inquiry and Talent Development

*Being consistent with both the academic goals and the emphasis middle schools place on personal and social development, Academies of Inquiry and Talent Development promote academic rigor through instructional differentiation.*

By Joseph S. Renzulli

**Editor's Note:** In the November 2000 issue of *Middle School Journal* (pp. 5-14), Prof. Renzulli explained the concept of Academies of Inquiry and Talent Development.

### How Does an AITD Program Get Started?

#### 1. General orientation for students and parents

Prior to students entering the middle school, a booklet describing the AITD program is sent home to them and their parents. The booklet contains information about the mission, goals, and structure of the program, and a brief description of the general Academies of Inquiry and Talent Development around which the program is organized. In addition to the main focus of the respective academies, a few examples of potential clusters and cluster activities should be described. Initial year examples can be borrowed from other successful middle school cluster programs. In subsequent years, local examples should be described, and students who have been involved in clusters



Students engage in "hands-on" inquiry.

should be asked to present examples of their work at the orientation sessions.

Emphasis should be given to the diversity of options that will be available over the three or four years of middle school enrollment. If students have been in an elementary school that uses the Total Talent Portfolio, the booklet should provide directions about analyzing their portfolio with their parents and teachers in order to make a decision about which AITD they would like to join. If students have not experienced a portfolio assessment at the elementary level, an interest assessment instrument can be sent home with the booklet, and students can be asked to spend some time analyzing their interests and making plans for the AITD they would like to join upon entering middle school.

In addition to the orientation booklet, an assembly for students and an orientation night for parents should be provided at the beginning of each year. After the first year of the program, students who have previously participated in clusters should be asked to make brief presentations about some of their cluster activities at the orientation sessions. The outstanding products of students should also be displayed throughout the building or in an "academic trophy case."

## 2. Teacher planning

Although many teachers have well-defined interests associated frequently (but not always) with their teaching assignment, we were surprised to find in our research on enrichment clusters that many teachers also had interests in a wide variety of other areas. Regardless of present levels of interest, we recommend that teachers begin by completing an interest assessment instrument entitled *Inspiration: Targeting My Ideal Teaching Situation* (Gentry & Renzulli, 1995). An analysis of the responses to this instrument, and perhaps some discussion with friends and colleagues, will help teachers identify the AITD with which they would like to be associated. Teachers can, of course, make changes over time, and it is not unreasonable for some teachers to be associated with more than one of the AITDs.

Following this introspective process, teachers organize themselves into AITDs around the general areas of knowledge (mathematics, science, art, etc.). They have informal meetings to develop a compatible philosophy, working relationship, and plan for team governance. They brainstorm some of the activities they would like to consider for short-term

and long-term offerings using a planning format that is consistent with the mission and goals of the program and the pedagogical rationale underlying the three types of enrichment described in the first part of this article (Renzulli, 2000). It is essential at this point to emphasize that this program does not involve another preparation in the traditional way that teachers prepare to teach a new course. There are no prescribed lesson plans or unit plans. Various start-up activities have been suggested in descriptive material about this approach to teaching and learning, but it is also important for each AITD faculty to create its own *modus operandi* within the overall goals of their area of study. Figure 3 (Renzulli, 2000, p. 10) illustrates an example of an AITD devoted to the social sciences.

During the first year of the program, the early part of the school year should be devoted to Type I experiences that are designed to answer the six critical questions listed in Part I (p. 12), especially questions 1 and 2. Students should continuously be reminded that Type Is and IIs are invitations to various opportunities for individual or small group follow-up; and a debriefing guide (Renzulli & Reis, 1997, p. 150) should be used following each Type I and II experience in order to assess follow-up possibilities. Debriefing sessions result in clarifications of student interests, which in turn lead to the natural formation of groups that may eventually become enrichment clusters. Whether or not a group with a common interest becomes an ongoing cluster is dependent upon group consensus regarding a specific problem they want to investigate, a product or performance they want to produce, or a service they want to provide.

Keeping the focus on creative productivity is absolutely crucial! One of the major problems we have encountered in the enrichment cluster concept is a tendency on the part of some facilitators to turn the clusters into mini-courses. Mini-courses are designed to teach a prescribed set of content or thinking skills to students. The topic(s) may differ from regular instructional units in that they deal with material not ordinarily covered in the regular curriculum, and they may use teaching strategies that are different from traditional recitation, drill, and testing practices. But the ultimate purpose of a mini-course is to "put into the heads of students" a pre-selected set of content and/or process objectives. While this is not an unworthy goal (indeed, such is the make-up of most school learning experiences),

we have something different in mind when it comes to the central purposes of an enrichment cluster.

An enrichment cluster is a learning situation that is purposefully designed to produce a product or service that will have an impact on an intended audience. All learning that takes place within a cluster, whether that learning is new content, new or improved thinking processes, or new interpersonal skills is learned within the context of a real and present problem. We purposefully avoid pre-specifying content or process objectives because we want students to follow the investigative methodology used by practicing professionals in the real world. If we approached clusters by pre-specifying what and how students are going to learn, we would be returning to a traditional instructional model rather than a model that places primary responsibility for learning on the students.

Planning an enrichment cluster is, in many ways, an easier and more natural process than planning for traditional teaching. We need only determine (through discussions with students) a product or service and an intended audience, and then go about acquiring the resources and know-how needed to produce the product or deliver the service. Whatever information, materials, problem solving skills, or assistance is needed to solve the problem automatically becomes relevant because these things are required to produce the product or deliver the service. Imagine for a moment all of the things about arithmetic, geometry, geography, architecture, purchasing, aesthetics, computer graphics, advertising, photography, accounting, cooperativeness, leadership, and ornithology that a group of middle school students learned simply by deciding that they wanted to design, construct, and market “environmentally friendly” bird houses and feeders. And notice how this topic became naturally interdisciplinary, rather than having to artificially look for ways to involve related disciplines.

Although enrichment clusters are modeled after natural learning situations, most of our teacher training has taught us that we must begin by “first stating our objectives and learning outcomes,” and then “designing lessons to achieve these objectives.” This traditional approach to pedagogy is a difficult habit to break. But it is essential that we move to an inductive approach to pedagogy rather than the prescribed/presented approach that typifies most traditional curriculum and mini-course activities. The teacher’s role at this juncture is crucial. Rather than

serving as lecturer or disseminator of knowledge, the teacher assumes the role of facilitator and coordinator of inquiry. Through the use of a planning guide called the *Management Plan for Individual and Small Group Investigations* (Renzulli & Reis, 1997, p. 223), the teacher assists students in framing investigative questions, locating resources, and identifying potential outlets and audiences.

## All learning that takes place within an enrichment cluster is learned within the context of a real and present problem.

The enrichment cluster titles listed under Type III Enrichment in Figure 1 are examples of various offerings that have been developed over the years within the general domain of literature, language arts, and the humanities. The number and type of specific clusters that any given AITD might want to develop should be decided upon collectively by the AITD faculty and students. These decisions should represent a blend of information based on (a) the strengths of teachers and their interests within the general area of knowledge around which the AITD will be organized, and (b) a general sense of the strengths and interests of students as expressed in their Total Talent Portfolios or interest assessments.

Using a brainstorming/webbing technique (Renzulli, 1994, p. 232), teachers can start to “flush out” what might be some of the specific areas of opportunity for creative productivity within the general cluster theme. Thus, for example, a group of teachers and students in an AITD that they chose to call the “Academy of Literature, Languages and Humanities” came up with ideas for possible subgroups and product outlets related to six different groups of literature that can be categorized as: personal writing, imaginative writing, informative writing, drama, popular forms, and media composition. This brainstorming activity can be carried out with other subdivisions within the AITD (e.g., languages and humanities).

### 3. Maintaining high academic standards

A second problem we encountered in our research on enrichment clusters is a failure on the part of some facilitators to escalate the level of knowledge pursued within a cluster. We have observed many exciting, fun-filled activities, and this kind of enjoyment of learning is unquestionably one of the most

Figure 1 **The Academy of Literature, Languages, and the Humanities** (Prepared by Nancy Bickley)

<b>Potential Areas of Study</b>	<b>Type I Enrichment General Exploratory Experiences</b>	<b>Type II Enrichment Group Training Activities</b>	<b>Type III Enrichment Individual and Small- Group Investigations of Real Problems (Enrichment Clusters)</b>	<b>Outlets/Products/ Audiences for Type III Enrichment</b>
<p><b>Personal Writing</b> Journals, diaries, autobiography, monologue, writer's notebook</p> <p><b>Imaginative Writing</b> Fiction, fantasy, adventure, science fiction, poetry, short story, songs, dialogues, plays</p> <p><b>Informative/ Persuasive Writing</b> Essay, letter, report, editorial, news story</p> <p><b>Drama/Oral English</b> Storytelling, debate, mime, discussion, choral readings, interviews, conversation</p> <p><b>Popular Forms</b> Posters, propaganda, reviews, criticism, ads, satire</p> <p><b>Media Composition</b> TV scripts, radio programming, tapings, recordings, commercials, storyboard, bulletin boards</p>	<p>Presentations by people in each discipline</p> <p>Writer-in-residence</p> <p>Speakers whose careers depend on language</p> <p>Communication with authors through letters, videos, guest presentations</p> <p>Writers' symposium</p> <p>Internet communication with various regions/dialects</p> <p>Exploring ideas</p> <p>Stories told/read by school personnel, community leaders, parents</p> <p>Listening to excellent recordings of poetry/prose</p> <p>Discussing books that all have read</p>	<p>Interviewing techniques</p> <p>Observation</p> <p>Data collection</p> <p>Primary research skills</p> <p>Analysis</p> <p>Listening skills</p> <p>How to get published</p> <p>Writing skills</p> <p>Speaking skills</p> <p>Keeping a writer's notebook</p> <p>Brainstorming strategies</p> <p>How to make recordings</p> <p>Guidelines on how to invite guest speakers/presenters</p> <p>How to make a speech</p> <p>Decision making</p> <p>Defining purpose and audience</p>	<p>The future language inventors</p> <p>The worldwide language guild</p> <p>The "other worlds"</p> <p>Communication research team</p> <p>The "teen talk" investigators</p> <p>The professional terminology collectors</p> <p>The ancient writings Discoveries</p> <p>The script/play writers group</p> <p>The journalists team</p> <p>The reference preference</p> <p>Searchers (collecting quotable quotes expressly for kids, selected by kids)</p> <p>The rewriters society</p> <p>The diary detectives</p> <p>The story recorders</p> <p>The movie critics</p> <p>The consumer and school resource guide compilers</p> <p>The advertising team</p> <p>Portmanteau word inventors</p> <p>The speech writers society</p> <p>The songwriters guild</p> <p>The "great books" club for kids</p> <p>The language game creators</p> <p>The folklore collectors</p>	<p>Family folklore festival</p> <p>Anthology of student writing</p> <p>School/community newspaper</p> <p>Literary magazine</p> <p>Writing contests for kids</p> <p>Poster campaigns</p> <p>Poetry reading events</p> <p>Storytelling troupe (cross-age)</p> <p>Lexicon of "teen talk"</p> <p>The language of professionals handbook</p> <p>Feature articles in local newspaper</p> <p>Word origins quiz bowl</p> <p>Cable TV news broadcast</p> <p>Public address communique</p> <p>Literary fair</p> <p>"Talking books" production</p> <p>Play production</p> <p>Bulletin board displays</p> <p>Book of quotations for kids</p> <p>A guide to local emporia</p> <p>Adopt a senior citizen pen pal</p> <p>Story calendars</p> <p>Portmanteau olympics</p> <p>Pop-up books</p>

desirable features of a good cluster. At the same time, some critics have said that certain clusters are nothing more than “fun-and-games,” and others have said that the clusters are “soft on content,” that they do not represent “real school.” We can guard against these criticisms by examining each cluster with an eye toward what constitutes authentic and rigorous content within the field or fields of study around which clusters are organized. For example, in the cluster on bird houses and feeders mentioned earlier, the teacher/facilitator began by helping the students obtain some books on ornithology, marketing, and advertising as well as how-to books on birdhouse and feeder construction. The students studied maps to learn about birds indigenous to their area of the country and their migratory habits; they learned about anatomy in order to determine the sizes of bird houses and openings; and they studied different kinds of preferred diets, colors, mating habits, and optimal locations. Display boards with attractive drawings and photographs were prepared to help market their products, and printed material (produced with the aid of desktop publishing software) accompanied each bird house and feeder that was sold. The students became specialists in the various subtopics, the tasks required to develop high quality products, and the procedures for researching, constructing, and marketing their products.

The teacher/facilitator’s role is crucial in escalating the content level of a cluster. Although it is not necessary for the teacher/facilitator to be thoroughly familiar with the content area(s) beforehand, it is necessary (a) to have an interest in the topic and a “feel” for content escalation, (b) to know how to find the resources that will advance the level of study, (c) to organize cluster activities so that knowledge escalation is pursued as part and parcel of the hands-on activities, and (d) to document the extent and level of the advanced resources used and the advanced content that was pursued in the cluster.

Left to their own devices, the students in the bird house cluster might have skipped the underlying research in ornithology and marketing in favor of the sawing, hammering, and painting that was involved in the bird house construction. If such were the case, the cluster experience would have prevented students from having opportunities for higher levels of learning. Indeed, it could have easily fallen prey to the “fun-and-games” criticism that a casual observer might have made.

*Guidelines for Planning Enrichment Clusters* (Reis, Gentry, & Park, 1995; Renzulli & Reis, 1997) offer suggestions for raising questions and obtaining resources that will assist teacher/facilitators in the process of content escalation. This process is obviously more demanding than merely guiding the hands-on aspects of a cluster, but it is also an opportunity for offering creative suggestions about the direction that the work of a cluster can take and for guaranteeing that powerful learning is the hallmark of any cluster.

#### **4. Finding time for AITDs**

The assassin of most new ideas for school improvement seldom has anything to do with the ideas themselves. The literature on strategic innovation has identified the major barriers to successful

Wanting to design, construct, and market environmentally friendly bird houses and feeders leads to naturally occurring interdisciplinary inquiry, as opposed to creating artificial connections between disciplines.

change: structural and cultural inertia, internal politics, complacency, weak or unimaginative leadership, fear of cannibalizing pet projects, satisfaction with the status quo, and a general lack of incentive to abandon a comfortable present for an uncertain future. However, the biggest problem we have encountered in implementing the ideas discussed above is time. In spite of almost universal acceptance of the objectives and the potential benefits of a comprehensive enrichment model, there is frequently an unwillingness on the part of many educators to “mess around with the schedule.” We have, however, seen some very innovative ways for dealing with the time issue. At a middle school in North Carolina, for example, a double period per week is set aside for the enrichment program by eliminating the home room/advisement period on what students called “cluster day” and shaving nine minutes per period from each of the other classes on that day. At

a school in Connecticut, the principal “tightened up” the Friday schedule so that Friday afternoons were free for the enrichment program. She said that Friday afternoons “were formerly a down time, you know, TGIF; but the enrichment program turned that attitude around, and everyone left school on a

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high for the weekend!” Some schools have allocated time for the program through block scheduling arrangements, and still other schools have dropped one class meeting of each major subject area per month to yield a double time block once a week. Some schools have used their activity block for the program, others have carried out the program after school, and a few schools have made the “enrichment class” a part of the regular daily schedule. Other schools have devoted two half-days per month to the enrichment program, rotating the time blocks so that the same classes will not be missed.

There is no right or wrong way to schedule any program that requires a variation from the status quo. What is needed is a willingness to experiment with various scheduling options, a sincere belief that the experiences gained through an enrichment program are as valuable as what is being “missed” from the regular program, and an openness to the collective creativity of all persons who are willing to share their ideas about scheduling options. Scheduling options should always be pursued on an experimental basis, and input should be obtained from all persons involved (including students) following the conclusion of a trial period.

## Getting Started and Creating Your Own Unique AITD Program

### All roads lead to Rome!

There is no right or wrong way to implement a program based on the ideas and suggestions discussed above; however, the selection and use of a program development model must meet two essential

requirements. The first requirement is consensus about objectives on the part of persons who will implement the model. Everyone (or at the very least, almost everyone) involved in the selection and implementation of a model should agree that the mission and objectives represent a “destination” that they would like to reach. If an agreed upon goal is “to get to Rome,” then there is no ambiguity, vagueness, or misunderstandings about where everyone wants to go.

This first requirement of a model means that a great deal of front-end time should be spent exploring alternative models, discussing and debating the advantages and disadvantages of various approaches, and examining related factors such as underlying research, implementation in other schools, and the availability of supportive resources. Reaching consensus before embarking upon a journey will help ensure that everyone involved gets to Rome rather than to Venice or Moscow!

### There are many ways to get to Rome

A second requirement of a program development model is unique means for implementation. Although I believe that programs based on the AITD model should strive to accomplish an agreed upon mission and set of objectives, I also believe that any plan for program development must allow for a great deal of innovation and flexibility in the achievement of these objectives. This flexibility is necessary because no written plan or set of procedures can take into account the variations that exist at the local school level. Differences in school populations, administrative leadership, faculty motivation, financial resources, the availability of persons from the community at large, and a host of other local variables must be considered in the implementation of this or any other approach to school improvement. A model that does not allow for such flexibility could easily become a straightjacket that simply will not work when one or more of the local considerations is not taken into account. Some schools will have supplementary resource teachers for advanced level students and others will not. Some school districts will have an abundance of community resources readily available and others, perhaps more geographically isolated, will have limited access to museums, planetariums, colleges, and universities. Some schools may serve larger proportions of culturally diverse students than others, and

certain schools may already be embarking on major school improvement initiatives.

Another reason I believe that a model for program development must maintain a large degree of flexibility is that educators tend to quickly lose interest in “canned” programs and models that do not allow for local initiative, creativity, and teacher input. New and better ways to provide enrichment experiences to students will be discouraged if program development does not encourage local adaptation and innovation to occur. The AITD plan provides a certain amount of general direction in both the development of program objectives and in the procedures for pursuing these objectives. At the same time, however, the specific types of activities that educators select and develop for their programs, and the ways in which they make these activities available to various populations of students will actually result in the creation of their own unique programming model. Educators will, in effect, be writing their own resource guide, because the actual content of the enrichment experiences will be developed locally by their own school personnel. I believe that if the AITD objectives are maintained, even in a slightly modified form, a school will achieve the integrity that is sought in this approach to increased levels of challenge within the context of the middle school philosophy. In this regard, the AITD model that educators develop locally will attempt to achieve the best of two worlds! First, programs will benefit from the theoretical and research developments and the many years of field testing and practical application that have led to this type of enrichment model. Second, the ideas, resources, innovations, and adaptations that emerge from local situations will contribute to the uniqueness and practicality of programs that are developed to meet local needs.

### **Making change at the top of your game**

John Maynard Keynes, the noted economist said, “The real difficulty in changing the course of any enterprise lies not in developing new ideas but in escaping old ones.” Studies of strategic planning and innovation among the world’s most successful companies (Markides, 1998) provide excellent guidance for the timing of innovative changes in schools. Most organizations wait until there is a crisis before they strike out in new directions; and in many cases,

they are too late to overcome the disruption caused by the crisis. The result is usually a takeover by external forces and a devaluing of the people in the organization. Educators are all too familiar with this routine. Any shortcomings in our schools or education system, whether real or perceived, are usually met with external, top-down pressure that has little

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regard for the opinions of the persons who carry out the day-to-day operation of a school. Witness the almost endless proliferation of guidelines, standards, state regulations, and test-driven curriculum that are imposed on teachers and schools because somebody in the policy hierarchy thought we were not doing a good job! Trying to change in the middle of a crisis is the worst time to do so. It is much better to think about introducing innovative practices in a proactive, long-term way when times are good and the majority of our constituents think we are doing a good job.

The small but growing lack-of-challenge criticism directed at middle schools has not yet reached epidemic proportions, but professional publications and the popular press are already beginning to raise questions that we need to take seriously. A recent article in a major education newspaper (Bradley, 1998) entitled “Muddle in the Middle” extols readers to consider how middle schools are “supplanting academic rigor with a focus on students’ social, emotional, and physical needs” (p. 38). An earlier article in the same publication entitled “A Crack in the Middle” (Killion & Hirsh, 1998) reports that “recent national and international student test results [for the middle grades] reveal the depth of academic problems and the decline between 4th and 8th grade” (p. 44). Unless we are creative and proactive in the ways in which we respond to these criticisms, the external forces mentioned above will undoubtedly put pressure on middle schools to substitute our concerns about a conceptually challenging and

enjoyable learning environment with simplistic solutions such as hosing kids down with vast amounts of factual material in the hope that it will improve test scores.

The most successful and innovative companies did not wait for a crisis or a state of “blissful stability” to occur before venturing out into new directions. They were not afraid to introduce changes into a smooth running machine, or to “shake things up a little” in order to revitalize their organizations and inspire their personnel. They made changes when their companies were the most successful, at the top of their game, so to speak, and these changes inevitably paid off in a big way. This is not to say that the leaders of these companies did not perceive early warning signs that trouble was brewing. In some cases these warnings were simply a recognition of complacency and an acceptance of the status quo on the parts of company personnel. In other cases the threats were external to the organization.

Although the middle school movement is currently enjoying a high degree of success and popularity, there are some early warnings that should cause us to sit up and take notice. The majority of these warnings relate to the lack of challenge issue and the use of a one-size-fits-all curriculum. Some schools have responded to this issue by reexamining their curriculum, and others have reverted to homogeneous grouping, especially in the areas of math and reading. But the overall success that most middle schools are experiencing is the best reason to experiment with new initiatives at this time. Like the successful companies mentioned above, a big challenge for middle schools is to develop the commitment, the know-how, the mind-set, and the underlying environment to continually examine current success while promoting continual experimentation. The AITD plan is consistent with both the academic goals and the emphasis middle schools place on personal and social development. The plan does not make unreasonable new demands on teachers or administrators; and with the exception of small changes in the ways we schedule school time, there is minimal disruption in the way schools operate, and virtually no changes in present day middle school philosophy. Someone once said, “You will never discover new lands if you don’t venture outside the safety of the harbor.” The strong foundation on which the current middle school movement rests is the best reason to venture outside the harbor and to search for new ways of serving our unique population of young people.

## References

- Bradley, A. (1998, April 15). Muddle in the middle. *Education Week*, 17(31) 38-42.
- Gentry, M., & Renzulli, J. S. (1995). *Inspiration: Targeting my ideal teaching situation*. Storrs, CT: The University of Connecticut, The National Research Center on the Gifted and Talented.
- Killion, J., & Hirsh, S. (1998, March 18). A crack in the middle. *Education Week*, 17(27) 44-48.
- Markides, C. (1998). Strategic innovation in established companies. *Sloan Management Review*, 39, 31-42.
- Reis, S. M., Gentry, M., & Park, S. (1995). *Extending the pedagogy of gifted education to all students*. Storrs, CT: The University of Connecticut, The National Research Center on the Gifted and Talented.
- Renzulli, J. S. (1994). *Schools for talent development: A practical plan for total school improvement*. Mansfield Center, CT: Creative Learning Press, Inc.
- Renzulli, J. S. (2000). Part I, one way to organize exploratory curriculum: Academies of inquiry and talent development. *Middle School Journal*, 32(1), 5-14.
- Renzulli, J. S., & Reis, S. M. (1997). *The school-wide enrichment model: A how-to guide for educational excellence* (2nd. ed.). Mansfield Center, CT: Creative Learning Press, Inc.

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