Guidelines for Gifted Programming Volume I: Program Handbook

The State of North Dakota Department of Public Instruction

NORTH DAKOTA DEPARTMENT OF PUBLIC INSTRUCTION

Guidelines for Gifted Programming – Volume 1: Program Handbook

**The State of North Dakota
Department of Public Instruction
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SECTION I: INTRODUCTION

Abstract

Section 1, Chapter 1 of this Handbook provides an overview of the rationale and goals for gifted programming. It also provides an overview of the Guidelines for gifted programming (what they are intended for and how to use them), and a brief description of each additional Chapter. Chapter 2 describes multiple entry points for School Districts, and how to find your entry point. At the end of this Section you will be able to:

A.   Describe the rationale and goals for gifted programming.
B.   Describe and explain what the Guidelines are and how to use them.
C.   Understand the contents of the Guidelines.
D.   Identify multiple entry points for Districts.
E.   Identify the starting point for your District.

Chapter 1
Overview, Rationale, and Goals

Chapter 2
Unique Starting Points for Each District or School

Chapter 1: Overview, Rationale, and Goals

This Handbook concerns a contemporary, inclusive approach to programming for giftedness. Our first "order of business" should be to provide an overview of the basic goals and commitment associated with such an approach. In addition, this chapter will offer an overview of the specific goals and purposes of this Handbook and the other related materials that accompany it. Our perspective departs substantially from "traditional" views of gifted programs ("let's decide which students belong in this category, what tests to use to find them, and what to do with them after we've categorized them…"). Thus it is important to begin by addressing the nature of, and rationale for, **gifted programming**.

Some precise grammarians may object to the use of the phrase "gifted programming", arguing in the strictest usage that programming is neither "gifted" nor "ungifted". In part, we have used the phrase as a simple matter of convenience, to insure that it is understood that the scope of these guidelines extends beyond a narrowly conceived entity called "the gifted program". In a stronger sense it may be accurate, and not too idealistic or simplistic, to urge a concern for "gifted" programming—a vision of education as an experience through which the strongest potentials and talents, or everyone involved in it, are honored and cultivated. The phrase "gifted programming" is, at the very least, then, more economical or efficient than repeating each time the full message we hope the phrase will convey: "*all of the efforts made by a school and community to recognize and nurture the many and varied strengths, talents, and sustained interests of many students.*"

Gifted programming in North Dakota should be viewed as a commitment to create, support, and sustain many services through which educators seek, bring out, and nurture the strengths, talents, sustained interests, and best potentials of our students. The goals and purposes of gifted programming should therefore be considered more broadly (and, we believe, more powerfully) than merely to select and label a single, fixed group of students to be assigned to a single, fixed program. These Guidelines, therefore, do not merely concern "having a gifted program" in your District or school, as much as they address the dynamic and on-going process of challenging many students to become aware of their best potentials, and to fulfill those potentials as fully as possible through the opportunities and services offered throughout the school program.

Given this broad inclusive view of gifted programming, it is important also to clarify and strengthen the relationship between planning for gifted programming and the overall process of school improvement planning. A school's commitment to both short and long range planning should certainly include consideration of deliberate efforts to recognize and nurture the strengths and talents of all students and staff. It is both procedurally efficient and conceptually appropriate, therefore, to approach gifted programming and school improvement as coordinated efforts.

An Important Note!

These Guidelines are about constructive programming, and they are concerned with innovation, improvement, growth, and change—not criticism. If your school or District is already involved in gifted education, we hope the guidelines will affirm many of your present commitments and practices, and provide direction for future growth. If your school or District is *not* presently involved in gifted programming, we hope the Guidelines will give you constructive direction and incentives for beginning such efforts.

Rationale and Goals for Gifted Education

Modern educators recognize that the expectations and demands made of today's schools are greater and more important than ever before in our history. As the complexity of our world increases, as the rate of change with which we must cope increases constantly, and as our children and youth face more and more difficult personal, career, and social challenges than any previous generation, the demands on education also increases. We realize today, more than ever, not only that knowledge, but talent, imagination, problem solving, and judgment are qualities far too important in the world of the present and the future to be wasted or unfulfilled. We recognize the needs for talented accomplishments in many areas that will be essential to progress, to the quality of life, and perhaps to survival, and we recognize that schools share in the responsibility for nurturing many and varied dimensions of giftedness, for example:

- Science, medicine, technology, and engineering, to find solutions to problems of hunger, disease, and the destruction of our living environment;
- Leadership, social and behavioral sciences, and organizations, to solve the problems of justice, equality, diversity, and governance;
- Arts, culture, and entertainment, to bring us new opportunities and to enhance and celebrate create expressions that add joy and meaning to life;
- Ethical and moral principles and philosophical analysis, to guide individuals and groups in understanding and dealing effectively with the most complex concepts and challenges of human existence;
- Personal fulfillment, enabling individuals to live in greater mental, emotional, and physical health and to celebrate their own talents as well as those of others.

We may not be sanguine about our ability to assess and select those young people who display the greatest potential for significant accomplishments in these areas, or in any other specific talent dimensions. In truth, these accomplishments often unfold over many years in an individual's life. They are the products of many complex factors over and beyond one's specific experiences in school. Nonetheless, educators today are rightfully called upon to make every possible effort to discern students' special needs, interests, and potentials, and to provide educational opportunities for their nurture. Increasingly we must deal, then, with the responsibility of serving as important "guardians of the future".

Several major goals can be stated for a contemporary approach to gifted education; these include the need to:

- Promote deliberate and systematic efforts in schools to seek, respond to, and enhance the development of the strengths, talents, and sustained interests of students and staff;
- Support schools' efforts to establish and maintain a culture that values, promotes, and rewards excellence;
- Guide schools in their efforts to create, support and enhance a climate conducive to innovation and the recognition and development of talents, among their students and staff;
- Stimulate and support on-going efforts by schools to recognize individuality and to promote higher levels of thinking, learning, and productivity among students and staff, and to encourage independent, responsible self-direction;
- Foster on-going professional development to enable educators to expand their ability to recognize and nurture students' strengths and talents;
- Support and enhance effective use of community resources to expand learning opportunities and enrichment for all students;
- Encourage all staff members to be aware of the academic, personal, social, and emotional characteristics and needs associated with giftedness, and to support their efforts to respond positively and effectively to such needs when observed among any of their students; and
- Encourage on-going dialogue and actions in schools that will lead to ambitious visions of their goals and mission and promote their attainment.

Fundamental Tenets and Beliefs

The development of guidelines for effective programming has been influenced by a number of underlying principles and beliefs, based on contemporary theory and research from several areas of study, including gifted education, cognitive and developmental psychology, educational administration, curriculum and instruction, and other related areas. These principles provide a foundation on which effective school practice can, and should, be based. Exemplary programming for giftedness is the result of careful planning and on-going review and analysis. It does not come about by chance. The District level structure, leading to a detailed Master Plan for Gifted Programming, should reflect and embody the fundamental tenets and expectations presented on the following pages.

There should be evidence that:
A systematic planning process occurs, involving—

- Careful and thorough self-study, leading to a specific written plan for recognizing and responding to students' needs.
- Commitment and support for adequate professional time for the planning process to occur, and recognition of the need for and importance of gradual implementation over several years.
- Instructional staff, administrative staff, and board members demonstrate commitment to support the planning process.
- Planning for gifted programming is a professional concern which involves a cross-section of staff (e.g., elementary and secondary; varied content areas; curriculum and special areas; instructional and administrative) in the planning process. Provisions are also made for parent and community input and participation.

- The plan reflects contemporary theory and research regarding expanding views of giftedness and talents and effective practices in identification and programming.
- Purposes and goals are clearly stated, emphasizing commitment to meeting the identified needs of all students.

Identification efforts are based on contemporary theory and research, emphasizing that—

- Commitment will be made to identification that is flexible and inclusive, not fixed and exclusive.
- Encouragement and support will be provided for all staff to search deliberately (individually and cooperatively) for the strengths, talents, and sustained special interests of many students.
- Identification of students' needs and programming responses are clearly linked, not treated as isolated concerns.
- Identification stresses recognition of students' unique characteristics and related instructional needs, rather than arbitrary procedures emphasizing fixed percentages, cutoff scores, or funding issues.
- The uniqueness of developmental levels and school organizational patterns is respected and balanced with the need for continuity and comparability across ages or school units.

Programming is comprehensive and multi-dimensional, including—

- Commitment exists to integration, rather than isolation, among various components of the school's program, with involvement and participation by many staff members, working toward the goal of effective integration among **all** components.
- Programming options support and extend, expand, or enhance, rather than supplant the regular program.
- Staff members share ownership and responsibility for effective programming in their own areas of expertise, and support actively the school's efforts to meet students' unique needs through curriculum modification, enrichment, acceleration, and other appropriate services.
- Programming deals with the ways students learn best, and with responding to their identified educational needs; it will not be used as a "reward", nor will its denial be used as a threat of punishment for any student.
- Routine procedures and requirements can be modified (perhaps even set aside) when legally possible, to insure that meeting students' unique needs is a high priority for the school.
- Commitment exists to providing many and varied services—within and beyond the regular school program—to respond to the diverse needs of many students.

Effective implementation will actually occur in practice, evidenced by—

- Explicit provisions are made for on-going professional development for all staff members, consistent with principles of adult learning and effective leadership.
- An appropriate time line for implementation has been adopted.
- Explicit provisions are made for on-going program monitoring and evaluation.
- In the District's written Plan, goals and objectives are clearly linked with: (a) identification; (b) programming policies and (c) program evaluation provisions.

- Systematic steps are taken to build commitment and support for effective programming by the instructional staff, administration, school board, and community.
- Documented activities and services are provided in each school.

This Handbook, and its companion Volume, are intended to provide *guidelines*—practical, helpful resources—rather than to define a mandate or a prescriptive set of policy requirements. Guidelines are general recommendations to help those who follow them to chart their course more accurately, efficiently, and effectively. Guidelines can also serve may purposes; for example guidelines **can**:

- Identify major areas in which decisions should be made;
- Describe significant dimensions of the "foundation" for effective programming;
- Challenge schools to examine existing procedures and practice in the light of contemporary theory and research;
- Encourage schools to conceptualize and define programming constructively;
- Highlight possible areas of concern or omission in local planning efforts;
- Identify important questions that must be addressed and potentially valuable resources for dealing with those questions;
- Inspire schools to investigate challenging new directions and opportunities;
- Stimulate and encourage innovation and progress;
- Encourage and support comprehensive planning for school improvement;
- Offer a foundation for continuity and comparability of general practices from one school to another.

Guidelines for gifted programming **do not**:

- Mandate specific actions, decisions, or models;
- Impose on any school a specific set of methods or materials;
- Require the use of specific identification instruments or procedures;
- Limit or constrain the services which can be offered or the students for whom such services are provided by individual schools.

While the intent of the Guidelines is to provide assistance and resources to facilitate planning and implementation of gifted programming throughout the state, this Handbook and it companion Volume are not intended to comprise a comprehensive textbook on gifted education. They will not take the place of careful study of the literature, nor are they intended to eliminate the need for the service of trained professionals at the local level.

Although we have attempted to provide sufficient explanation and discussion of major topics, many specific concepts and resources from the literature of gifted education will be summarized without detailed descriptions or complete discussion; reference citations are provided for follow-up study.

Overview of the Guidelines Resources

The entire presentation of the Guidelines has been divided into two volumes:

Volume 1: Programming Handbook. [This volume.] The *Programming Handbook* provides an overview of the importance of, and goals for, gifted programming, and presents information about the nature of giftedness, identification, programming, and relationships between gifted programming and other important school concerns. It outlines the rationale for a contemporary inclusive view of gifted programming, and it considers the importance and value of linking this area to the overall school improvement challenge. *Volume I: Programming Handbook* is divided into three Sections and nine chapters with several appendices.

Volume II: Planning Handbook. This volume presents a process model for guiding the planning process, and identifies specific procedures for organizing and for carrying out that process at the district and school levels. It will also assist school teams in linking planning for gifted programming specifically with other long-range planning and school improvement efforts. *Volume II: Planning Handbook* consists of nine chapters and several appendices.

Detailed Contents of This Volume

The specific contents of *Volume I: Programming Handbook* are:

Section I: Introduction

> **Chapter 1: Overview, Rationale, and Goals.** Provides an overview of the rationale and goals for a contemporary, inclusive approach to gifted programming, describes the historical development of the Guidelines, and summarizes the goals and objectives that Guidelines address.

> **Chapter 2: Unique Starting Points**. Addresses the recognition that many districts and schools in North Dakota differ in the nature and extent of their existing commitment to gifted programming. Provides information regarding the specific policies which authorize and pertain to gifted programming in North Dakota, and offers resources to assist educators in describing the present status of gifted programming in their District or school.

Section II: Philosophy and Orientation

> **Chapter 3: School Improvement and Gifted Programming.** Explores relationships between the school improvement or restructuring and expanding views of the field of gifted and talented.

> **Chapter 4: Innovation and Change.** Examines the challenges of recognizing and dealing with diversity and change in today's school context.

Chapter 5: Paradigms and Paradigm Shifts. Provides an overview of the nature of paradigms and paradigm shifts, and their implications for educational and innovation and change.

Chapter 6: Education for a New Era. Focuses on new demands and definitions of "workplace basics"—skills that will be required for future personal and career success, and their impact on general education, school improvement, and gifted programming.

Section III: Programming for Giftedness and Talent Development

Chapter 7: Nature and Definitions. Considers expanding views of the nature of definition of giftedness; distinguishes between "weak and strong" definitions of giftedness; identifies new and constructive ways to define giftedness for program planning needs.

Chapter 8: Identification. Compares traditional and emerging views of identification; links identification concepts and procedures to new approaches in authentic assessment (including the use of profiles and portfolios).

Chapter 9: Programming. Describes four practical levels of service in effective programming, and six major programming areas to be considered in any school program; examines the interrelationships between gifted programming and the total school program.

Reference and Bibliography. At the conclusion of the Handbook, you will find a bibliography to use for locating the references that have been cited throughout the text of the Handbook.

Abstract

This Chapter describes multiple entry points for School Districts, and depending on the steps you have already taken, will help you to determine how to make the best use of this Handbook and the accompanying Volume.

A. Identify your present level of involvement in School Improvement and decide what steps should next be taken.
B. Identify your present level of involvement in gifted programming, and decide what steps should next be taken.
C. Identify the material in this Volume and Volume II that should be examined most carefully as you continue your planning.

Chapter 2: Unique Starting Points for Each District or School

Every school or District has unique characteristics, and a unique history and context that contribute to how it will determine its priorities. In many cases District administration and educators may be uncertain as to where to begin and which kinds of data are **essential** (as opposed to merely helpful or interesting). In this Chapter we will consider some issues to help you to assess the present status of your involvement in gifted programming and to guide you in setting priorities for program planning and development.

An initial question to address is, "What is your District's starting point?" Consider, for example, three possible starting points, each of which might be quite different in its implications for defining and carrying out the tasks of planning, implementing, expanding, or reviewing gifted programming in your schools. Examine the chart on the following page (p.18) to assess the level which most accurately describes your District's or school's starting point.

For each of these three levels, one or more Sections of this Handbook, or one of the companion Volumes, will address topics that will very likely be of immediate concern to you; these are described below. Of course, you will probably find it valuable to compare the steps you have already taken with the recommendations and suggestions in the Handbooks, so the material which **precedes** the recommendations for each level should also be important and valuable to review. You will find that, as you move from one level to another in your planning and implementation, succeeding Sections and subsequent Volumes will include material of increasing importance and value. The recommendations which follow are intended, therefore, merely to assist you in finding a probable starting point to use the Guidelines as effectively and efficiently as possible.

The diagram on the following page (p.19) will also help you to determine the best way to use this Handbook, and the other Volumes, most effectively in your District or school.
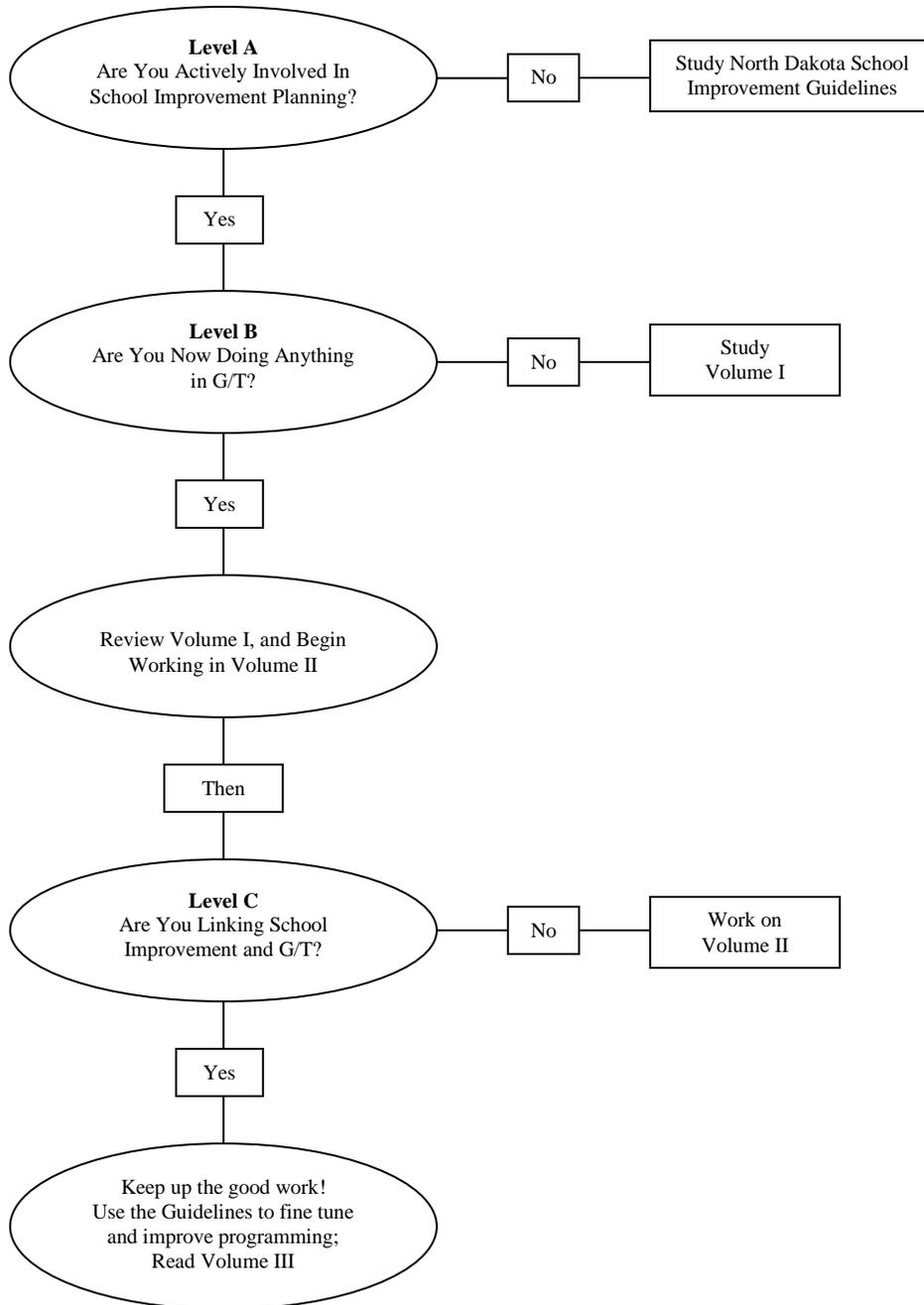
```
          ┌─────────────────────────┐          ┌──────┐      ┌────────────────────────┐
         (       Level A            )───────────│  No  │──────│ Study North Dakota School │
        (  Are You Actively Involved In )        └──────┘      │  Improvement Guidelines  │
         (  School Improvement Planning? )                     └────────────────────────┘
          └─────────────────────────┘
                     │
                 ┌───────┐
                 │  Yes  │
                 └───────┘
                     │
          ┌─────────────────────────┐          ┌──────┐      ┌──────────────┐
         (       Level B            )───────────│  No  │──────│    Study     │
        (  Are You Now Doing Anything )          └──────┘      │  Volume I    │
         (        in G/T?           )                          └──────────────┘
          └─────────────────────────┘
                     │
                 ┌───────┐
                 │  Yes  │
                 └───────┘
                     │
          ┌─────────────────────────┐
         (  Review Volume I, and Begin )
          (  Working in Volume II      )
          └─────────────────────────┘
                     │
                 ┌───────┐
                 │ Then  │
                 └───────┘
                     │
          ┌─────────────────────────┐          ┌──────┐      ┌──────────────┐
         (       Level C            )───────────│  No  │──────│   Work on    │
        (  Are You Linking School     )         └──────┘      │  Volume II   │
         (  Improvement and G/T?     )                         └──────────────┘
          └─────────────────────────┘
                     │
                 ┌───────┐
                 │  Yes  │
                 └───────┘
                     │
          ┌─────────────────────────┐
         (  Keep up the good work!     )
        (  Use the Guidelines to fine tune )
         (  and improve programming;   )
          (  Read Volume III           )
          └─────────────────────────┘
```

Figure 1
Multiple Entry Points

In relation to Gifted and Talented Programming		
If Your District Has:	**But Has Not:**	**You are at Level:**
Implemented School Improvement Planning	Made a specific G/T Commitment	A
Begun Programming for G/T	Made specific links to School Improvement	B

You are at one of five stages in Level C if your District has made specific links between G/T and School Improvement, **and**:

Has:	**But Has Not:**	**Stage of Level C**
Made a commitment to creating Gifted and Talented programming	Made any specific plans for programming	C-1
Developed an initial definition and philosophy statement that includes giftedness and talents	Established specific commitments or support for programming	C-2
Made initial plans and expressed willingness to support programming efforts	Built positive attitudes and support among staff	C-3
Initiated some activities or programming in the G/T area.	Synthesized activities into a comprehensive plan	C-4
Established many successful activities or services	Created the explicit linkage between gifted programming and school improvement	C-5

Multiple Entry Points

As depicted in the chart on the previous page and Figure One, on page 18, you will find it useful to begin with different components or sections of these Guidelines depending on the extent and nature of program planning and implementation and school improvement planning you have already done.

Level A

Are you actively involved in school improvement planning? If you are not, it is important to study the *State School Improvement Plan Procedural Manual* (1991). Implementation of school improvement planning is an essential and integral step in effective long term excellence in gifted programming. To understand the philosophy and paradigm shift involved in this connection, you should also review Section II (Chapters 3-6) in this Handbook.

Level B

Are you now involved specifically in Gifted and Talented Programming? If you are not then your District should begin to discuss why it is important and necessary to do so. Your first priority might focus on finding data to demonstrate a need for programming. The material in Sections II and III of this Handbook will help you to clarify and focus on the importance of, and need for, gifted programming and talent development in your school's long range planning efforts. This information will assist you in developing a definition and a basic philosophy statement concerning giftedness and talent development. Your next efforts should be devoted to gathering data about your District. In essence, your must be a two-pronged search: on the one hand, the search for evidence that programming is needed within your District; and, on the other, that programming is viable and will show good results.

If you are beginning at this Level, this Handbook may serve as the foundation for a year or more of cooperative study and planning by your staff. You will probably find it valuable to study the entire Volume I Handbook carefully.

If you are already involved in Gifted and Talented education your priorities are more likely to center around programming design or planning. If this is your situation, you are indeed fortunate, because you can probably assume a certain level of District support for your efforts. You should *review* carefully the material in this Volume on definition, philosophy, and identification of needs, in order to establish an effective foundation and to insure that the policies and procedures you create will be consistent among themselves as well as with contemporary knowledge and principles of gifted programming. To move to Level C, review Sections II and III of this Volume, and prepare to work on the planning process in *Volume II: Planning Handbook*.

Level C

If you are already linking gifted programming and school improvement you are at Level C and are probably at one of five "Sub-stages" of that level. You should consider very carefully the material in Volume II on the nature of, and steps for, effective planning; these will assist you in

creating an effective District Planning Committee and coordinating their work with school improvement.

It will probably be helpful to Review Sections II and III of this Handbook, and begin your detailed study with Volume II: Planning Handbook.

Stages C1-C5

If your District is at "**Stage C1"**, having developed a philosophy, but not having made specific commitments to programming and resources, your efforts may be directed towards both programming development and to exploring creative ways of developing funding. Your major tasks at this stage may be to build support for the District to commit the level of resources and support that will be required for successful implementation of programming. At Stage 1, you are poised to begin a substantial and on-going planning process. *Chapters 1-6 in Volume II: Planning Handbook will assist you in organizing your planning efforts and addressing specifically the tasks involved in District level planning.*

If you have already worked on the development of a District Master Plan for gifted programming, but not yet begun implementation or staff development, you may be at "**Stage C2**". Your major priorities will be to develop a "grassroots" level of support, through inservice and staff development efforts. You should also review carefully the material in the Guidelines regarding the planning process, the District Plan, and important components of effective programming. This will insure that your planning efforts are consistent with contemporary theory and practice, and are an integral component of the School Improvement Plan. At "**Stage C2**" your major concerns will be to create effective support within the school District through staff development and the creation of Building Level Action Plans. *These are the major topics addressed in Chapters 7-8 in Volume II. At Stages C2-C4 you may find some parts of Volume II will require more attention than others.*

At "**Stage C3**", you are likely to be concerned with very complex and sophisticated challenges, having to do with "fine tuning," expanding, or modifying your existing programming efforts, in relation to your District's current needs and school improvement plans, as well as in view of recent developments in theory, research, and practice. At this Stage, there will be challenges dealing with such issues as changing or preserving existing activities, or examing the impact of possible changes on students, staff, and community members. *These concerns are the focus of Chapters 7 and 8 in Volume II.*

Programming efforts which read "**Stage C4**" are quite likely to be viewed as comprehensive, and successful, and in many ways, may be quite valid to characterize them that way. In the view presented in these Guidelines, however, a very important, long-term system-wide goal must also be addressed: gifted programming's impact on, and contributions to, the overall quality and effectiveness of the school program. Gifted programming should be an important component of an on-going "vision" of an effective school, and thus, should be incorporated into a continuous process of school improvement.

Finally, "**Stage C5**" addresses the need for all school programs to develop and maintain a systematic process of evaluation, in order to document its outcomes and consequences and to provide an effective foundation for revision and change over time. Effective programming is dynamic, not static, and must involve on-going self-study and evaluation. At this Stage you are reaffirming and monitoring direct activity. *The concerns which are most likely to be of immediate relevance at this Stage are addressed in Chapter 8 of Volume II.*

In the face of a task as diverse and complex as programming planning, it is often helpful to set priorities and to break the task down into more manageable segments based on those priorities. We recommend that your District allocates time at the beginning of your planning efforts for setting priorities and discussing the unique characteristics, needs, and concerns in your District. These will influence the kinds of data you will need to gather and study, as well as the subsequent stages of your planning.

SECTION II: PHILOSOPHY AND ORIENTATION

Abstract

Section II includes four chapters dealing with innovation and change in education today. Chapter 3 examines linkages between school improvement and the conception of gifted programming described in Chapter 1. Chapter 4 reviews some important factors in recognizing and managing change. Chapter 5 discusses the nature of paradigms and paradigm shifts, and Chapter 6 summarizes several emerging views of important learning outcomes for modern schools. After working with this Section you will be able to:

A. Explain several important dimensions of change and the importance of recognizing and dealing with them.
B. Explain important ways in which school improvement and contemporary gifted programming are interrelated.
C. Identify specific new learning outcomes for today's needs.

Chapter 3
School Improvement and Gifted Programming

Chapter 4
Innovation and Change

Chapter 5
Paradigms and Paradigm Shifts

Chapter 6
Education for a New Era

Chapter 3: School Improvement and Gifted Programming

> *"We can, whenever and wherever we choose, successfully teach all children…;*
> *we already know more than we need to do that"*
> -Ronald R. Edmonds, *Effective Schools for the Urban Poor*

A modern approach to programming for giftedness begins with the realization that planning for this area does not take place independently, or in a vacuum, but must be integrated and coordinated with many other challenges. In this Chapter, we will examine some of these important connections, as they relate particularly to modern views of school improvement.

The School Improvement Challenge

What are the major challenges and issues that must be considered in a well-designed, effectively-implemented school improvement or long-range planning process? New directions in education are causing many people to look very closely at the school improvement and long-range planning challenges.

A recent publication from the Education Commission of the States, reported in *Education Week*, March 28, 1990, described several essential steps in a "Road Map for Restructuring." These suggestions are summarized on the next page.

A Road Map for Restructuring…

1. The goal is to improve learning for all students.
2. the entire system – from schoolhouse to statehouse – is involved in restructuring and must change.
3. Curriculum and instruction must actively engage students and promote higher-order thinking as well as basic skills.
4. Schools must have the authority and flexibility to create educationally sound programs based on their needs and resources.
5. Accountability for results must accompany authority and flexibility and rest on measures that assess important learning goals.
6. Roles and responsibilities throughout the education system must shift from enforcement and monitoring to facilitating and creating schools as stimulating teaching and learning environments.
7. Restructuring requires consistent and coherent policies across all parts of the system including curriculum, assessment, professional development, teacher and administrator development and accountability systems.
8. Restructuring requires expanded leadership at all levels of the system and new broad-based coalitions of support.
9. Restructuring requires risk-taking and experimentation in order to transform schools into dynamic, self-renewing organizations.

10. Restructuring requires substantial investment in human resource development.
11. Equity and excellence must be treated as compatible and achievable goals.
12. The education system must collaborate with social service agencies to ensure all students are ready to learn when they enter school.
13. Restructuring requires the support of the broader community, including business and industry, as well as the entire education community-every citizen has a part to play.
14. There is no one "silver bullet" to solve our education problems – solutions will be complex and result in schools and education systems which are diverse.

Expressing an interest in restructuring, school improvement, or effective schools does not necessarily insure that all of the most important concerns will be addressed thoroughly, however. For example, many efforts at school improvement have focused specifically on bringing all students to a certain minimum level of achievement. In relation to seeking a rich, comprehensive view of school improvement, this focus is not adequate. To explore why, and some of the ways it might be inadequate, let's examine the "Peaks and Pits" diagram below.

The "Peaks" (Fame and Fortune…Win a Pultizer, an Oscar, the Nobel…)

The "Charlie Brown" Life
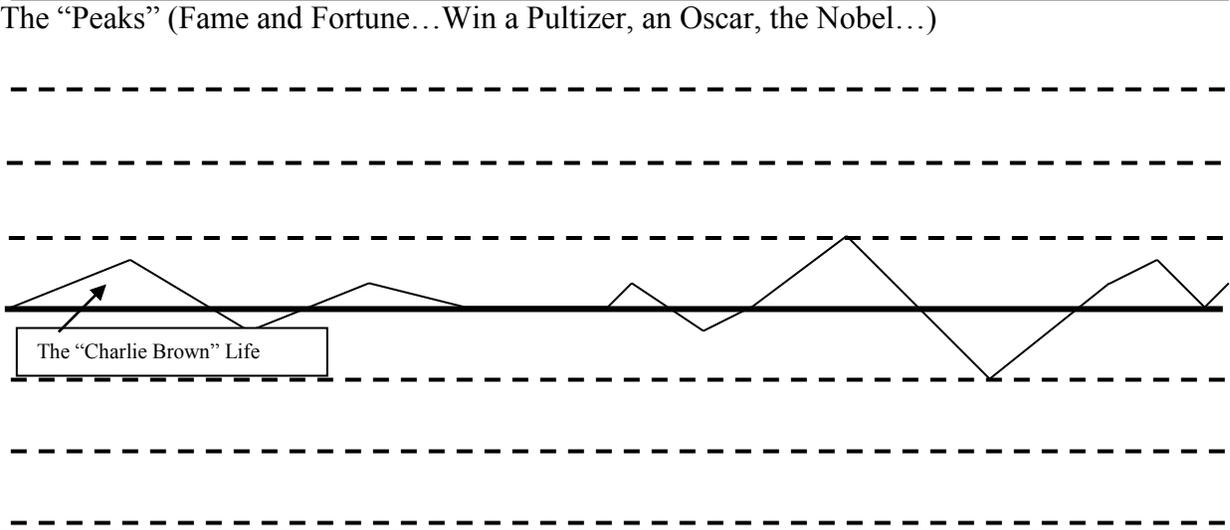
The "Pits" (Making a wreck of oneself and one's life…)

What happens if "school improvement" means only (or primarily) giving attention to the bottom half of the diagram? Is the "Charlie Brown Line" adequate for anyone? For everyone? What might result from deliberate efforts to create opportunities and challenges in the upper half of the diagram-*for all students*?

These are examples of some of the ways in which new paradigms prompt us to seek new and better ways to expand our view of the goals and purposes of school improvement efforts. In this light, some responses to the call for improvement seem weaker, and others more challenging and powerful, in light of this expanded challenge.

Less Powerful Reponses to the Call for School Improvement:

- It's someone's "package" to buy.
- It's someone's "program" for us to adopt.
- It's a cosmetic matter-let's have slogans, banners, and bumper stickers.
- It's a "repair job" that will be a one-time, one-shot event.
- It's getting everyone up to the minimum.
  Would it be enough to "Demand Pretty Goodness!"?
  (Have you noticed how easily minimums become maximum

More Powerful Responses to the Call for School Improvement consider:

- Vision
  (Long range; High goals; Multi-dimensional; Contemporary, Futuristic)
- Consensus-Building
  (Collaborative; Builds Ownership; Involvement and participation)
- Open-ended, on-going, affirming
  (Constructive; Strength-building; Energizing)
- Systematic and Process Aware
  (Deliberate; Recognizes Diversity; Employs Strategies and Techniques)
- Both Adaptive and Innovative
  (Doing things better and…Doing new things)
- Committed to Action
  (Proactive; Dynamic; Challenging and emerging; Self-regulating)
- Rewarding and Renewing
  (Growth-producing; Empowering; Problem-solving; Committed to people; Investing in training)
- Continuously monitoring, evaluating, revising

Today's new directions and pressures for change have many implications for school improvement. It may be helpful, for example, to compare some traditional views of "effective schools" with alternate views that reflect more contemporary process approaches; these approaches are compared in the table on the following page.

Comparing Traditional and Contemporary
Process Views of Effective Schools

Traditional View	**Contemporary Process View**
• Strong leadership by the Principal.	• Contemporary model of Shared Leadership; focus on ownership, involvement, collaboration.
• High expectations for pupil performance; Goals focus on traditional academic skills and outcomes. (Often "reactive" to perceived limitations or weaknesses)	High expectations, but open-ended in seeking definition of goals, problems and solutions. ("Proactive")
• Safe and Orderly Environment	• Constructive environment for productivity.
• Strong emphasis on traditional basic skills, minimum competencies.	• New Basics; Seeking "Peaks" for all students.
• Frequent monitoring by Testing (Focus on meeting standards)	• Continuous monitoring using portfolios, other means of documenting. (Focus is both formative and summative.)
	PLUS: • Context sensitive: Explicit attention to diversity and unique styles; consensus-building • Active Goal Setting- seeking vision, clarify values • Affirming, energizing for all participants • Investment in Professional Development (in new and varied formats) • Commitment to innovation and problem solving

Implications for Gifted Programming

New directions in general education also have significant implications for our ways of thinking about gifted programming. Many of these will be discussed in detail in Section II of this *Programming Handbook*. There are three major areas in which the "gifted-talented education" paradigm is clearly beginning to shift; these are summarized below.

Issue	Traditional G/T Paradigm	Emerging New Views
Nature of giftedness.	A fixed category of percent of the population.	Giftedness describes a person's sustained record of productivity or accomplishments; Strengths, potentials, and talents can be nurtured.
Identification.	Seek, select, and label a fixed group of students.	Identify strengths, talents, and sustained interests among many students; focus on diagnosis of needs and opportunities.
Programs	Place identified students in a designated program with a specified "gifted" curriculum; the *curriculum* is differentiated.	Provide many and varied services or responses to the needs, strengths, talents and interests of students; *Instruction* is differentiated.

Linking School Improvement and Gifted Programming

In traditional approaches to both school improvement and gifted education, there has been little perceived commonality between the two areas. In some cases, there has even been antagonism from one toward the other. At best, it has been common for each to proceed within a school district as a separate, independent activity. There has been little or no effort to identify common goals or concerns, or to seek ways in which one might support or enhance the other.

In the emerging new direction, we believe there are many common goals and concerns, which should be addressed in a collaborative and mutually supportive manner. School improvement planning contributes to the goals and priorities of a contemporary view of gifted programming in many ways, including:

- Building "bridges" with the total school program;
- Recognizing and sustaining existing program strengths;
- Providing an effective starting point for locating and making the best use of many people and materials, for the benefit of all students;

- Enriching education by expanding, extending, and enhancing learning opportunities for all students.

By the same token, new views for gifted programming can also make significant contributions to the school improvement process, including, for example:

- Supporting a focus on student's strengths, talents, and interests that prevents us from becoming "paralyzed" with weaknesses and deficiencies;
- Stimulating the search for ways to "bring out the best" among out students, our staff, our parents, and our community;
- Providing resources and people to expand and support the school's efforts to promote higher level thinking skills, independence and self-direction, and other areas traditionally associated with gifted education that can be incorporated into the total school program in meaningful ways.

As you continue working with this Handbook, and its companion Volumes, you will find a recurring emphasis on coordinating and synthesizing your gifted programming and school improvement efforts in both planning and implementation stages.

Chapter Four: Innovation and Change

> *"It was the best of times and the worst of times…"*
> -Charles Dickens

In this chapter we review some important principles and issues concerning innovation and change. These are concerns with which everyone involved in education today must deal. To be effective in planning any new educational programming, we must be aware of these forces and we must be able to deal with them effectively.

The Challenge of Innovation and Change

American life has changed in many ways in every decade of the 20th Century, and it continues to change rapidly. Every day, we experience innovation and change in a variety of ways: new products, new vocabulary, new questions and issues, new organizations, new opportunities, and new problems and challenges. Children today accept as *ordinary* or *commonplace* many products, experiences, and living conditions that were unheard of, and often beyond the imagination of, their grandparents or even their parents. Today's children, for example, take for granted such things as color television, computers, space travel, and robotics-things that not so very long ago were topics only for science fiction.

Whether any of these changes is "good" or "bad" for our country as a whole, or for any groups or individuals, may be debatable. But the fact that change has taken place, and continues to occur, is not debatable. Rapid change is an inescapable reality to our times.

These changes have had many strong impacts on a variety of institutions in our country and around the world. In all likelihood, every human institution has been influenced in some ways-the family, the political system, the work place, the health care system – and, very dramatically, the schools. It is very easy to see that, in schools today, "the winds of change are blowing." Some of the ways in which rapid change can easily be seen in schools today include:

- Dealing with drug or substance abuse, neglect, and child abuse;
- Increasing numbers of "latch key" children;
- Increasing numbers of students from homes with only one parent or care-giver;
- Pressures to include in the curriculum more information about more and more varied subjects;
- Pressures to deal with many challenges that were previously handled in other settings;
- Increasing attention to social, cultural, geographic, and economic diversity among our students;
- Heightened attention on individual differences and learning styles;
- Pressures to incorporate technology and related skills
- Growing emphasis on new instructional strategies (e.g., cooperative learning) and learning processes (e.g., higher level thinking skills); *…and more!*

In schools everywhere, teachers and administrators can be heard, as if in a common refrain: "Everyone wants us to do more and more. Things are always being added to our platter, but no one ever seems to remove anything from it!" All too often, it appears, the sheer number of new concerns, and the rate at which they appear before us, creates fear and frustration. Even in the best ways we might find to deal with the challenges, there always seems to be too much to do and not enough time or support to do it.

The impact of change on schools and schooling has been so great for several reasons. First, schools themselves have had to deal directly with changes, such as in technology. Student materials have been affected by technological changes, for example, as we moved from the "ditto" or spirit master to today's photocopying equipment. Advances in information and communications technology have taken us from reliance on reels of film or slides to today's video programming, satellite dishes, and laser videodiscs. Computational resources have moved from the slide rule to the programmable calculator and the personal computer. Computer technology has become an everyday component of the school environment, and the use of fax machines, modems, and other networking and communications resources are increasing dramatically.

In addition, changes occurring in other social institutions also have other kinds of impact, extending directly into schools in very powerful ways. Changes in the home and family structure and in the work place have had many influences on what children bring with them into the school experience, on what is expected of schools today, on the outcomes or results that are defined for education, and on how teaching and learning should take place, day in and day out.

Responding to Innovation and Change

Not everyone is enthusiastic about or receptive to the rapid change and innovation we have experienced. Some people are confused or bewildered by change, while others may be rigid in their opposition or resistance to accepting change or doing anything in a new or different way. Many factors can prevent change, including, for example, fear, lack of information and skills, lack of confidence, or lack of resources and support.

Even among people who are not strongly resistant to change, research has shown that individuals, differ, as a matter of style or personal preference, in the ways in which they deal with or respond to change. How do people and organizations tend to deal with innovation and change?

Some people are basically satisfied with the way things are now.

And if their attitude is:	We might describe them as:
Improvement Motivated ("Things are okay now, but they could always be better.")	**Growing!**
Maintain The Status Quo ("Since things are okay now, we should leave them alone.")	**Glowing!**
Over The Hill ("Things are okay; maybe there is room for improvement, but I'll be retiring soon…it will be someone else's challenge.")	**Slowing!**

Other people feel dissatisfied with the way things are now.

And if their attitude is:	We might describe them as:
Improvement Motivated	**Itching!**
("This system is a mess, but I can fix it…")	
Maintain The Status Quo (It's a mess, and no one can make it any better.")	**Complaining!** [Isn't that the word you had in mind?]
Over The Hill ("It's a mess, but I'll be out of here soon anyway.")	**Ditching!**

More seriously, research has shown that people tend to develop and use general styles for dealing with innovation, change, or new ideas. The research of Michael Kirton (1976) and others, for example, has identified two major "styles" of creativity or ways of dealing with change, referred to as the "Adaptor" and the "Innovator."

Adaptors…	*Innovators…*
Stay within existing paradigm or system;	Break away from the existing system or ways of operating;
Accepts problem definition;	Challenges problem definition;
Seen as steady, disciplined;	Seen as undisciplined;
Precise, Reliable, Dependable	Unique, Visionary, Ingenious
Emphasis: "Doing things better;"	Emphasis: "Doing things differently;"
Gradual, incremental change;	Extensive change, action NOW;
Know how to get ideas through the system, gain support.	Know the newest trends and exciting possibilities.
Make goals of means.	Questions or disregards means.

What are the implications of this for us in education today?

- **Balance is important. Both styles "bring value to the party."** There isn't just one right way to deal with new ideas or change. An effective team learns to value both continuity and originality, and to recognize and value the differing strengths and preferences of all its members.

- **Adaptors must work to be open to new possibilities.** If we hold too tightly to the way things are now, or the way they used to be, growth can be stifled, and a program can become stagnant and ineffective. It is important to be able to consider new ideas.

- **Innovators must work towards successful implementation.** Just as those with a more adaptive preference must work to be open to new ideas, those with a more innovative preference must also learn to seek and value the strengths of the current reality, and to know when and how to work for growth within a system.

Fortunately, there has also been very helpful research on how to manage or deal with change successfully. The bibliography in this Volume, and material in *Volume III: Trainer's Handbook* will be useful to you in exploring these topics in greater depth and detail. For the present purposes, it is sufficient that you recognize that *being aware of change* and *managing change effectively* will be very important considerations in your planning efforts for gifted programming and school improvement.

Chapter Five: Paradigms and Paradigm Shifts

> *"And sooner or later, every paradigm begins to develop a very special set of problems that everyone in the field wants to be able to solve and no one has a clue as to how to do it"*
>
> -Joel Arthur Barker, *Future Edge*

This chapter deals with "paradigms," with what they are, why they're important, how they change, and, most importantly, what they have to do with gifted education and school improvement today.

The Nature of Paradigms

Most simply stated, a paradigm is an established procedure – a system or structure for doing something successfully. Barker (1992) identified two basic elements of any paradigm: first, an organizational structure; and second, the set of rules that anyone must follow to be successful in that structure.

You are probably talking about a paradigm whenever you say (or hear) things like:

> You have to work within the system.
> Let me tell you how we do things around here.
> You'll need a copy of our District (or school) Handbook.

A paradigm is the established ways of thinking or operating within a certain organization, discipline, or field. It involves the way that we structure our policies, procedures, roles, rewards, and sanctions for the people who function within the group or field. The paradigm also incorporates the attitudes, beliefs, and images we have about "the system," or its basic design and patterns. Understanding the paradigm involves being able to answer such questions as:

> What are we about?
> What questions are important and worthwhile?
> How do we find or create answers to those questions?
> What methods or techniques are appropriate (or inappropriate) for us to use?
> How are we different from other systems or groups?
> What do we already know about some of our important questions?
> Who's "in" or "out" of our system or field?
> What happens to those who break the rules?
> Where do we look for new ideas?
> How do new ideas enter the system?

Our paradigms define the orthodoxy or "standard, accepted" views and practices of a field. As one gains in maturity and experience, these views are internalized and become second nature to us. We come to know, understand, and accept our system, to feel comfortable working within its boundaries, and to feel confident that it is wise and worthwhile.

Thus, there are a number of benefits that come from understanding one's paradigms and operating within their structure. These include stability, predictability, clarity, continuity, and (in varying degrees) control over one's environment and experiences.

Within established paradigms, it is quite readily possible for a great deal of research, inquiry, and development to take place. In any paradigm, there are many unanswered questions or unresolved issues, so there are always opportunities for inquiry to continue within the paradigm, using the established methods and observing the generally-accepted conventions or "scientific wisdom" of the field.

What Causes Paradigms to Shift?

For any paradigm, there comes a time when questions or issues arise with which the existing paradigm cannot deal adequately. These paradigm-shaking questions can arise from many different sources: major advances in theory and research, value conflicts, new circumstances or the emergence of new questions in the field, diversity and the questions of outsiders, rapid change in other related fields or in the surrounding institutions, or challenges from innovative minds ("mavericks") within a field.

As Kuhn (1970) pointed out, many people have viewed scientific progress and change as a gradual and incremental process, in which theories are formulated, tested, and refined or modified as research evidence accumulates. This view suggests an ordererly, sequential process of growth and change, accompanied by an image of scientists unraveling their puzzles, piece-by-piece, in a painstaking and careful path of inquiry. This may well describe inquiry within a particular paradigm, as accepted methods are applied to established topics and problems.

However, when the questions begin to appear that challenge the paradigm, the orderly, gradual, incremental view of change is not longer accurate. As new questions arise which cannot be addressed effectively by the existing paradigm, they create unrest or even friction. "Stress factures" occur and the established paradigm begins to reveal serious cracks in its structure.

These fractures are often very, disturbing to many people within the paradigm. Naturally, they have been successful within the established rules and boundaries, and they may even have seen themselves as actively involved in research and inquiry into important issues and questions. It is natural and easy for them to dismiss the new challenges as inconsequential, poorly-conceived, or unsubstantiated. These leaders will often be quick to point out any flaws or limitations of the new paradigm, to dismiss their methodologies, or to assert that the evidence is missing or inconclusive. Since the new paradigm is forgoing an entirely new set of rules and boundaries, and since it emerges in a form that is incomplete and fragmentary, not polished and fully-formed, it can be easy to point out its limitations and "rough edges."

But, when the questions are deep and the concerns true, the cracks widen and the breaking up of the old paradigm proceeds inescapably. Eventually, as the new paradigm gathers more evidence and support, the inevitable shift from one paradigm to another will occur.

Barker (1992) proposed that there are three significant parties in the process:

- *The paradigm shifter*. The person (or people) whose vision and insights lead to early identification of the inadequacies of the old paradigm and the general direction the shift will take.

- *The paradigm pioneers*. These are people, playing a critical role, who recognize, often by faith or intuition, the soundness and the potential of the new paradigm, and become actively involved in implementing it and refining it. Without paradigm pioneers to lead the way into action, the paradigm shifter is simply a visionary-a person who sees the new trend but is unable to stimulate the action needed to bring it into reality.

- *The settlers*. These are people who are hesitant and unsure, holding back from action until they are sure the new paradigm is established and it is safe to join it. Barker contended that the settlers almost always enter too late to gain any real rewards or advantages.

Paradigm Shifts and Gifted Programming Today

We believe that there are now clear indications of imminent paradigm shifts in education today, given the rapid change and competing viewpoints that exist. In particular, we believe that the field of Gifted/Talented is on the verge of a significant paradigm shift, in which the major issues are clearly defined and several dimensions of the new paradigm have begun to emerge quite clearly.

Throughout these guidelines, then, we are creating an opportunity and an invitation for North Dakota's school districts to be Paradigm Pioneers. In this Handbook, you are being challenged to look more closely at some of the important new directions and challenges for education today, and specifically at their implications for both gifted education and for school improvement. In Section III of this Handbook, we will describe the major dimensions of the paradigm shift and the emerging new paradigm for gifted programming. We will examine this paradigm shift in relation to three major issues: the nature and definition of giftedness, the identification process, and the nature and implementation of programming. In *Volume II: Planning Handbook*, we will provide resources and strategies to help you to assume the role of the Paradigm Pioneer, successfully translating a new vision or paradigm for gifted programming into practice in your schools.

Chapter Five: Paradigms and Paradigm Shifts

> *"To those who want to see real improvement in American education, I say There will be no renaissance without revolution."*
> -President George Bush, *America 2000*

America's view of education is changing in many ways, and no approach to long range school improvement or effective, contemporary gifted programming can proceed without considering those changes. In this chapter, we will highlight some of the major changes in our views of "basic skills" for all students.

The New Basics

Since the late 1980's, many national reports from governmental agencies, educational organizations, and the private sector have identified new conceptions of "basic skills," or new views of the skills that will be essential for personal and vocational success in the '90s and beyond. There is a relatively high degree of consistency and agreement among these reports as to the nature of these "new basics." We will summarize several of their recommendations, to provide a foundation for examining the paradigm shifts that are occurring in education today.

In 1982, the Education Commission of the States described "The Basics of Tomorrow," which included:

- Evaluation and Analysis Skills
- Critical Thinking
- Problem-solving Strategies
- Organization and Reference Skills
- Synthesis
- Application
- Creativity
- Decision-making, given incomplete information
- Communication skills, through a variety of modes

A 1988 survey, conducted by the American Society for Training and Development (Carnevale, Gainer, and Meltzer, 1988), identified the major areas considered by employers throughout the United States as essential skills or outcomes of education for all people entering the workplace of today. The areas identified were:

- The Foundation (Knowing how to learn)
- Competence (Reading, Writing, and Computation)
- Communication (Listening and Oral Communication)
- Adaptability (Creative thinking and Problem solving)
- Personal Management (Self esteem, goal setting, motivation, personal and career development)
- Group Effectiveness (Interpersonal skills, negotiation, and team work)
- Influence (Organizational effectiveness and leadership

In their report, "The Crisis in American Education," the Motorola Corporation (1991) identified a similar set of important outcomes in their statement of the skills needed by the worker of the future. Their list included:

- **Language/Communication Skill**
  The ability to read and write, to comprehend and easily use a wide range of printed materials, and to speak clearly and effectively.

- **Quantitative Skills**
  The ability to perform basic mathematical computations, understand charts and graphs and apply these skills to analyze or synthesize quantitative problems.

- **Problem-Solving Skills**
  The ability to reason and solve practical problems, follow complex written or oral instructions, and deal with situations in which there may be several variables.

- **Interpersonal/Attitudinal Skills**
  Possession of qualities of self-esteem, motivation, reliability, and punctuality; the ability to deal with and work cooperatively with others; and, acceptance of the concepts of lifelong learning, uncertainty, and change.

- **Job-Seeking/Self-Advancement Skills**
  The capacity to assess one's abilities and ambitions and obtain the skills needed to fulfill them.

Their report also emphasized the need for the life-long learning, teamwork, and problem solving skills:

"Motorola needs employees who are able to continuously learn as our workplace changes, to be flexible, and to work as members of problem solving teams…This need requires every employee to expect that the focus of education will become *learning* rather than simply the recall of facts.

Children…must develop critical thinking and problem solving skills in a collaborative environment."

In addition, their report proposed that learning takes place when:

- The learner enjoys learning and is actively involved
- New knowledge is viewed as relevant and connected to previous experience
- Basic skills are integrated with the thinking process
- Opportunities exist to go deeply into the subject matter
- Opportunities exist to practice and get feedback
- Teams solve problems that have multiple solutions

The Federal "America 2000" Proposals

As an outgrowth of a Governors' Conference on education, the efforts of the federal government, a proposal for extensive educational reform in the United States was released in 1991. The proposed program was called *America 2000*. [The *America 2000* report can be obtained by calling 1-800-USA-Learn; the call and the report are free.]

The report offers some inspirational rhetoric about the reform process:

> "The architects of the New American Schools should break the mold. Build for the next century. Reinvent – literally start from scratch and reinvent the American school. No question should be off limits, no answers automatically assumed…We're interested in finding every way to make schools better."
>
> "We must also foster educational innovation…" "The idea is simple but powerful: Put America's special genius for invention to work for America's schools."
>
> "R&D teams…can be expected to set aside all traditional assumptions about schooling and all the constraints that conventional schools work under."

At the heart of the *America 2000* proposals, however, are six goals for American Education. These are:

Goal 1: Readiness for School. By the year 2000, all children in America will start school ready to learn.

Goal 2: High School Completion. By the year 2000, the high school graduation rate will increase to at least 90%.

Goal 3: Student Achievement and Citizenship. By the year 2000, American students will leave grades four, eight, and twelve having demonstrated competency in challenging subject matter including English, mathematics, science, history, and geography; and every school in America will insure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy.

Goal 4: Science and Mathematics. By the year 2000, U.S. students will be first in the world in science and mathematics achievement.

Goal 5: Adult Literacy and Lifelong Learning. By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.

Goal 6: Safe, Disciplined, and Drug-Free Schools. By the year 2000, every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.

The SCANS Report

The United States Department of Labor established The Secretary's Commission on Achieving Necessary Skills to prepare a report on what the work place will require of schools in order to attain the American 2000 goals. Released in June, 1991, this report identified five broad competencies and a three-part foundation of skills and personal qualities that will be essential for all students. These competencies and foundations are summarized on the following page.

COMPETENCIES – effective workers can productively use:
- Resources-allocating time, money, materials, space, and staff;
- Interpersonal Skills – working on teams, teaching others, serving customers, leading, negotiating, and working well with people from culturally diverse backgrounds;
- Information-acquiring and evaluating data, organizing and maintaining files, interpreting and communicating, and using computers to process information;
- Systems-understanding social organizational, and technological systems, monitoring and correcting performance, and designing or improving systems;
- Technology-selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies.

THE FOUNDATION – competence requires:
- Basic Skills-reading, writing, arithmetic and mathematics, speaking and listening;
- Thinking Skills-thinking creatively, making decisions, solving problems, seeing things in the mind's eye, knowing how to learn, and reasoning;
- Personal Qualities-individual responsibility, self-esteem, sociability, self-management, and integrity.

North Dakota's Graduation Outcomes

Consistent with these national trends and directions, the State of North Dakota has also identified six key graduation outcomes for all students. These are summarized below.

Each student will have the ability to:
1. Apply concepts, generalizations, processes, and strategies considered important to specific content areas.
2. Work in a cooperative/collaborative manner.
3. Regulate oneself in a variety of situations.
4. Communicate through a variety of products.
5. Gather information in a variety of ways.
6. Use complex thinking processes.

New Approaches to Teaching and Learning

Many of the important components in school improvement today come from within new research and development efforts. Contemporary work in education, psychology and cognitive science, management and organizational behavior, and other related fields offer today's schools a wealth of information and opportunities for innovation. These include:

1. **Different ways that students learn.** Major advances have been made in identifying students' unique learning styles and using those data in instructional planning. While teachers have always been admonished to "recognize and respond to individual differences," progress in this area has enabled educators today to translate the admonition into practice effectively.

2. **Different ways that students think.** There have also been many advances in our ability to define and translate into instructional practice specific skills relating to creative thinking, critical thinking, decision-making, and problem solving. These advances enable all teachers to be more effective in challenging students' thinking beyond recall and recognition.

3. **Expanding views of human talents and abilities.** New research on the nature, variety, and development of human intelligences and talents has challenged educators to expand their views far beyond the traditional reliance on IQ and related constructs. Research clearly documents that human intelligence and talent potentials are considerably richer, more diverse, and more amenable to nurture than had previously been envisioned.

4. **Varying dimensions of the learning environment.** Extensive progress has been made in the last decade in research and development on group dynamics, characteristics of effective teams, organizational climate, leadership, and collaborative or cooperative skills. These efforts have provided significant new insights into classroom organization and structure, instructional delivery, and classroom management.

5. **Students' strengths, talents, and sustained interests (not just their weaknesses and deficiencies).** Educators today are increasingly called upon to be aware of, and responsive to, students' affective and self-esteem needs, and to find ways to recognize and nurture students' best potentials.

6. **Many and varied settings or environments and instructional resources.** Advances in technology and learning resources, and an expanding concept of where and how worthwhile learning takes place, have also had major impacts on the emergence of new paradigms in education. New technologies bring powerful new learning opportunities into any classroom. In addition, however, increasing focus on school-business partnerships, mentoring, community resources, and other resource-based approaches to teaching and learning have challenged educators to expand their views beyond textbooks and classrooms.

7. **Deliberate efforts to promote transfer, including dealing with real problems and challenges.** Educators today are increasingly aware that transfer does not occur automatically, and that if we expect students to be able to apply and use their knowledge, we must provide for both instruction and assessment that is similar to the experiences and challenges students will encounter in real life situations outside school.

SECTION 3: PROGRAMMING FOR GIFTEDNESS AND TALENT DEVELOPMENT

Abstract

Section III, Chapter 7, of this Handbook provides an overview of the nature and definition of giftedness, and changing paradigms. Chapter 8 examines issues in definition, and Chapter 9 deals with blending gifted programming with the total school program.

A.   Develop a definition of giftedness for your District.
B.   Develop appropriate identification guidelines.
C.   Identify practical approaches for gifted programming.

Chapter 7
Nature and Definitions

Chapter 8
Identification

Chapter 9
Programming

Chapter 7: Nature and Definitions

> *…[Because] we believe that the great majority of people are capable of using their competencies in a skillful way, we need to explore how such use can be encouraged…Once we recognize that intelligence evolves through a dynamic of individuals' competencies and society's values and institutions, we are more likely to devise policies and to support initiatives that effectively engage more people's minds.*
> Kornhaber, M., Krechevsky, M., and Gardner, H. (1990)

One of the most complex problems encountered by many educators or educational planning committees is dealing effectively with definitions. It is complex because words such as "gifted," "giftedness," "bright," "capable," "talented," "precocious," or "genius" (or many others you could generate easily!) mean so many different things to different people. This is true in everyday conversation, in the media, or even in professional use. Many efforts at planning gifted programs have floundered over the issue of finding a mutually-agreeable definition.

Many different definitions have been offered in the literature, and it must be acknowledged that there an be very substantial and honest differences among responsible professionals. It is unlikely that there is any single definition that meets with universal acceptance. This does *not* mean, as the cartoon character Linus once observed (speaking about "The Great Pumpkin") that "it doesn't make any difference what you believe, as long as you believe *something*."

There are some principles regarding the nature and definition of giftedness today that we consider undebatable – essential to be considered by any school or District examining gifted programming today. In this Chapter, we will review some of these important basic considerations.
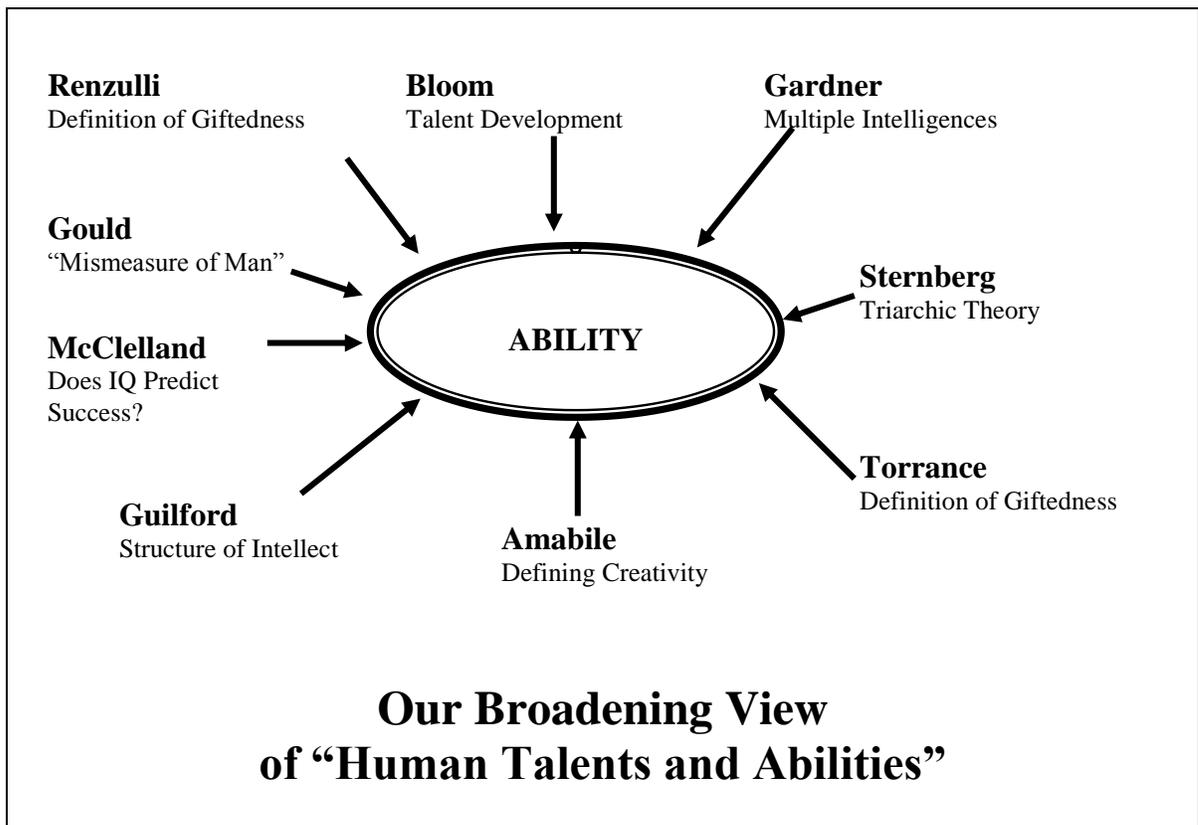
Broadening Conceptions

Our view of human talents and abilities has broadened considerably in the last three decades. Major theorists and researchers in intelligence and human behavior have stimulated today's practitioners to expand significantly their understanding or definition of giftedness. Bloom, for example, studied giftedness through talent development, Gardner formulated a view of multiple intelligences, Sternberg proposed the Triarchic Theory to describe intelligence, Torrance researched creative abilities, Guilford proposed the multi-faceted Structure of the Intellect, and so on. These studies are illustrated in the diagram on the following page, and referenced in the bibliography at the end of this Handbook. Through the work of many scholars, from a variety of perspectives and disciplines, we have come to the unambiguous and no longer avoidable conclusion that giftedness can no longer be defined in relation to a single score or simple quantitative index or cutoff point.

Renzulli (1978) defined giftedness as the interaction among ability, creativity, and task commitment. Amabile (1989) and Torrance (1989) emphasized that creative productivity arises from a synthesis of abilities, skills, and motivation. Treffinger (1991) proposed that giftedness is

represented through achievement and creative productivity, over a sustained period of time (perhaps years or even decades), in a domain that matters to the person.

Strengths and Talents Can Be Nurtured In People

The components of many new, broader conceptions of giftedness include constellations or sets of characteristics or traits which can be nurtured or enhanced through appropriate instruction and experiences. When expressed and focused in a particular area or direction, and when recognized and nurtured through appropriate instruction and guidance, these skills and abilities provide the foundation for creative, productive behavior.

Renzulli
Definition of Giftedness

Bloom
Talent Development

Gardner
Multiple Intelligences

Gould
"Mismeasure of Man"

Sternberg
Triarchic Theory

McClelland
Does IQ Predict Success?

ABILITY

Guilford
Structure of Intellect

Amabile
Defining Creativity

Torrance
Definition of Giftedness

Our Broadening View
of "Human Talents and Abilities"

Although each set of characteristics includes factors which may be *naturally present* and even readily observable at an early age in some individuals, they are not simply "you have it or you don't" dimensions of human ability and talent. It is quite evident from many research studies that each cluster also involves many skills which can be developed through instruction. In addition, it is also evident that each of these dimensions may become evident, and may be stronger or more active, at different times and for different durations, under varying circumstances, among many people. Therefore, we believe it is important not to view giftedness as a single, fixed trait which any given individual permanently possesses or lacks.

Focus on Creative Productivity.

We believe it is also important to emphasize, as expressed in many contemporary definitions, that giftedness involves what people are able to do with what they know, and how they make new and valued contributions to any area in which they work. It is more than good memory, an impressive array of trivial information, or merely "knowing about…" something. When we speak of someone as gifted, it is most appropriately a statement of their "track record" or history of productivity and accomplishments over an extended period of time.

Stronger and Weaker Views of Giftedness

It is also important to distinguish between a *strong* or *weak* view of giftedness. The stronger view is closely linked to the real world and the person's actual accomplishments and productivity over an extended period of time. It is closely linked to action, and to events or products that capture our attention, challenge us, synthesize ideas, transform work or events, or improve the quality or appreciation of life.
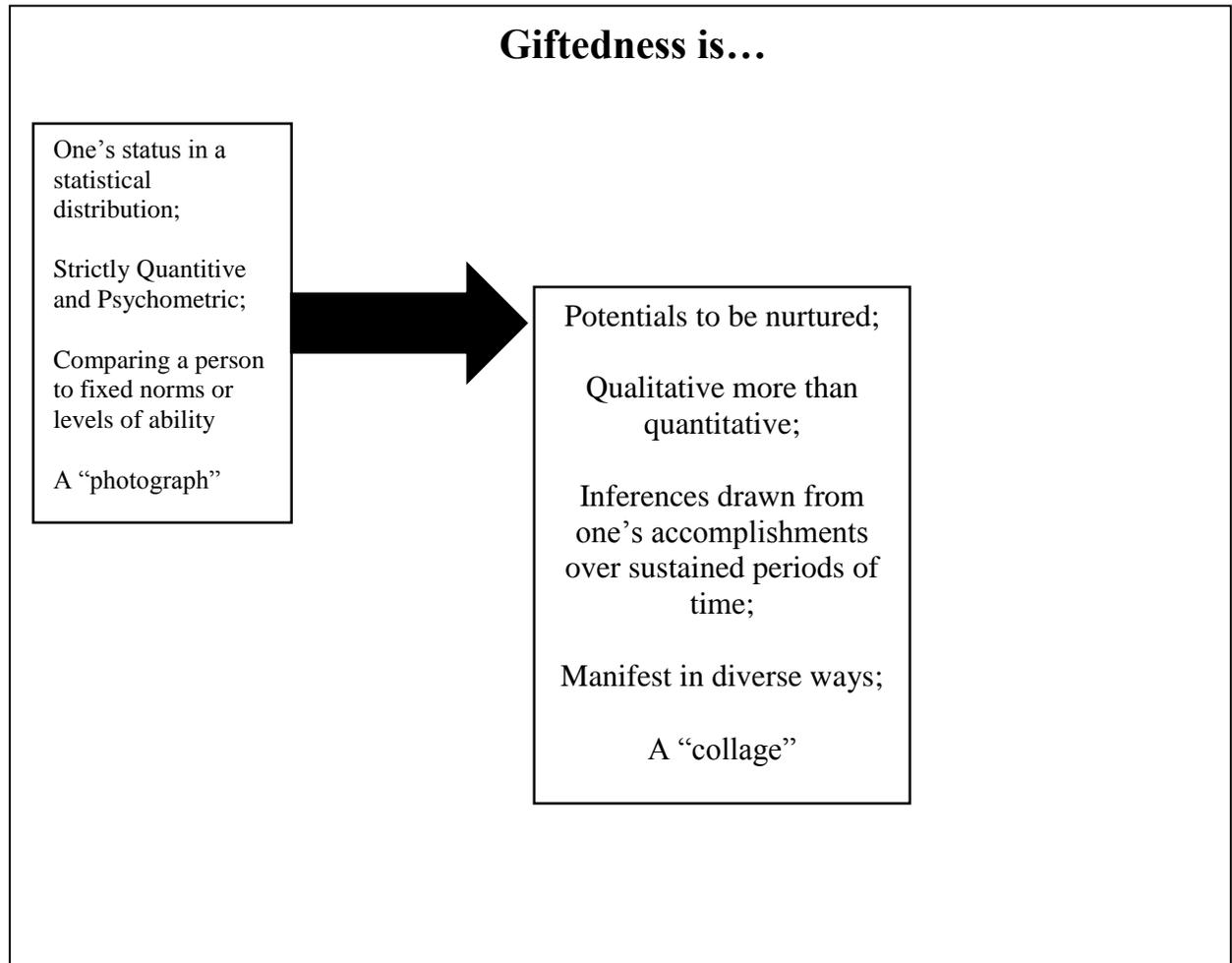
By contrast, weaker views focus only on high scores on a test, or using the designation of "gifted" as a label or categorical placement based on a fixed set of data about a person's knowledge or status in a statistical distribution. We believe it is preferable to view giftedness in the stronger sense than to depend on the weaker view.

Six Key Questions

Whatever the definition your District creates (and it very well may be one which draws upon and synthesizes several viewpoints), you should consider the following six important questions.

- Does the definition reflect contemporary knowledge of the nature and diversity of human talents and abilities?

- Does the definition take into account the importance of environmental impact and developmental differences?

- Does the definition describe giftedness in relation to meaningful, well-documented personal traits or characteristics?

- Does the definition reflect appropriately the variability in human performance over time or in various situations?

- Does the definition take into account the possibility of expanding human talents or abilities through effective instructional interventions? (That is, does it recognize that many –perhaps all – important components of giftedness might be nurtured?)

- Does the definition provide a clear and effective foundation for practical instructional planning, rather than merely leading to categorical inclusion or exclusion decisions?

Summary: The Changing Paradigm for Understanding the Nature and Definition of Giftedness

Giftedness is…

One's status in a statistical distribution;

Strictly Quantitive and Psychometric;

Comparing a person to fixed norms or levels of ability

A "photograph"

→

Potentials to be nurtured;

Qualitative more than quantitative;

Inferences drawn from one's accomplishments over sustained periods of time;

Manifest in diverse ways;

A "collage"

Chapter 8: Identification

> *"Although most people will not admit it, up to this point in our history, we continue to view giftedness as an absolute concept – something that exists…by itself without relation to anything else…This absolute conception causes us to act as if giftedness is something that "you have" or "you don't have" and consequently, we still think in terms of a child being "in" or "not it' a program."*

Although there are many different points of view about, many models for, and much continuing discussion of identification, there is great need for a very substantial shift in the paradigm. Many discussions still focus primarily on ways to tinker with traditional screening and selection procedures. There is a pressing need to create and implement new, flexible, diagnostic conceptions of identification, rather than retaining a focus only on in/out placement or selection criteria.

Some approaches are, at least in theory in not always in practice, stronger in their emphasis on diagnosis then merely on selection, but most approaches still place more emphasis on a clearly-identified student population than on identification of students' instructional needs. A talent pool approach, such as that proposed by Renzulli and Reis (1986) in the *Schoolwide Enrichment Model*, a multiple programming options model such as the Purdue Three Stage approach (Feldhusen and Kolloff, 1986; Feldhusen and Robinson, 1986), a *Talent Identification and Development in Education* view (Feldhusen, 1992), or an *Individualized Programming* approach such as IPPM (Treffinger, 1986), are all examples of contemporary approaches in which there is much greater emphasis on flexibility and student needs than in traditional models.

Implications of Definitions for Identification

Many of the principles of a "stronger" definition of giftedness, as discussed in Chapter 7, have significant implications for identification. For example, consider the principles and pitfalls listed below.

Principle	Identification Pitfalls
• Giftedness describes one's accomplishments over an extended or sustained period of time.	• Making "in/out" decisions that place students rigidly in categories or assign labels.
• Giftedness involves creative productivity and real-world behavior.	• Using a single test score, or even a composite of several scores, to select or classify.
• One's accomplishments are influenced by many factors in one's environment or context, by other people, and by skills or tools one knows and uses.	• Identifying in ways that suggest we believe giftedness is entirely based on factors within the individual.
• Giftedness can be expressed in many ways.	• Identifying only academic strengths and skills.
• Many dimensions that contribute to gifted behavior can nurtured or developed.	• Treating giftedness as a fixed, "present/absent" trait within an individuals.

In view of current research and theory, then, we consider questionable a number of traditionally common practices in identification of giftedness. These include:

- using "cutoff" scores on a single test as criteria for inclusion or exclusion from programming;
- arbitrary inclusion or exclusion of students from gifted programs on the basis of numerical indexes or combined scores (such as identification matrices);
- random or rotating assignment of students to programs ("so everyone will get a chance…").

These concerns may well be matters of considerable difference of feeling and belief among members of any planning committee, as well as among members of the board, administrators, staff, and even members of the community at large. They are very likely to be issues about which strong positions will be held. Your ability to reach appropriate, supportable decisions may influence greatly all the other decisions which must subsequently be considered!

Given the contemporary philosophy and definitions of giftedness that have been presented in these Guidelines, with an explicit commitment to encourage Districts to create programs that will "nurture gifted behaviors," we believe a strong case can and should be made that your identification efforts must be designed to seek our a wide variety of talents and to couple that search with an effort to provide appropriate programming based on observed behavior or potential. *Your goal should be to create and sustain opportunities for nurturing students' potentials, rather than creating labels and programs which are designed for a single, fixed group which would be designated as "the gifted."*

Too often, narrow, fixed identification policies which focus solely on selection or placement become a Procrustean bed, with the various participants being either stretched in order to make them fit the program, or worse, having several interests "chopped off" in order to make them fit the program.

This does not mean that their specific selection or placement criteria are always inappropriate. They may be very appropriate, for example, in an effort to identify participants for an instructional service or activity for which there are clear and well-established prerequisites for successful performance, and the identification criteria are valid and reliable indicators of those prerequisites. The criteria must be shown to be explicitly or directly relevant t successful performance in the instructional program. For example, in selecting students to participate in a particular advanced mathematics or science program, the criteria should be related specifically to the students' skills, reasoning ability, motivation, and interests in the areas of science or mathematics that will be the focus of the activity. In contrast, global indicators, such as IQ scores or a composite "G/T matrix" score, should not generally be considered adequate criteria in that context.

Effective identification policies and procedures must be *flexible, diagnostic,* and *ongoing*. The task should be viewed more as one of "miners," prospecting for potentials, rather than "inspectors" with laboratory coats, who tattoo children with indelible labels like "gifted" or

"non-gifted." Productive identification efforts should pose several fundamental questions, such as those presented on the following page.

Important Questions for Identification of Strengths and Needs

- What strengths or talents do we see in this student?
- What is happening now in the student's program?
- What modifications (if any) are necessary or desirable?
- What data give us a full picture of this student?
- What additional data are needed?
- What particular interests and accomplishments tell us about this student's learning needs?
- How does information about the student's ability, interests and motivation guide us in instructional planning?

It is important to look for ways in which existing data can be used. A student who has straight "A"s and a Statewide Science Fair Award probably does not need to be tested to see whether she or he needs enrichment programming in science! A more diagnostic view would address such questions as, "What activities or services will best continue to extend, expand, or enhance learning for this student? What will best serve this student in school? How might we best provide those opportunities?" This is what we mean by identification procedures that are flexible, inclusive, and diagnostic; they are more concerned with extending the student's strengths and talents than with determining whether or not the student "fits" in a certain category. If one asks, "But is the student really gifted?" our answer would be, "Time will tell." In a very real and important way, if we find students' strengths and ways to respond more appropriately to them, the question of "being really gifted" or not becomes virtually irrelevant.

Gathering and Using Many Kinds of Data

Several kinds of data have traditionally been incorporated into identification procedures. These data fall into four broad categories, each of which will be discussed below.

Tests. Test data may be useful in some ways in a diagnostic approach. For example, test results can help you to compare student' achievement levels with appropriate norms. Criterion-referenced test data can inform us regarding the student's actual grasp or mastery of a well-specified knowledge base (or the objectives within a certain content domain). Test data also provides information about the student's general knowledge, memory, various reasoning abilities, or even about how quickly and well students perform under specific testing conditions. Rather than using these data to categorize or label the student (average, slow, bright, or gifted, for example), these data can be used to help us plan how best to conduct instruction, and what specific content may be most appropriate for the student at a particular time and setting. Test data may also help to recognize significant strengths of students whose classroom performance suffers for various reasons; these potentials might otherwise go unnoticed. The value of test data, then, rests in the information it provides, not simply in overall indexes or total scores to be used to qualify or disqualify students or establish their eligibility for a program.

Ratings or Referrals. Information from people, in the form of checklists, rating scales, recommendations, or referrals, can be quite valuable in identifying students' interests, special talents, and unique characteristics. For example, how would you know that a certain student has a strong interest in electron microscopy, and has been reading about it on her own for years, if no one told you? No test of general knowledge, IQ or creativity will give you this specific information about the student. Even many of the teachers the student sees each day may be unaware of it. But one person-a science teacher, a parent, or the student-may alert you to a very significant strength. Referrals or persona ratings and recommendations an offer unique insights into behavior that might otherwise go unnoticed and unnutured. To be as useful as possible, rating scales, checklists, or referral forms should ask specific questions that are directly related to understanding the student's strengths, learning preferences or styles, interests and activities, and accomplishments. Ask questions for which the answers will help you better to understand the student's instructional strengths and needs, and be sure that the respondents are being asked for information they can actually provide (rather than merely for global opinions or impressions of the student's abilities).

Products and Accomplishments. Identification data can also include consideration of student products or work samples. Often, if the products extend beyond displays of completed worksheets with gold stars, of course, these products can reflect the student's rask commitment, creativity and ability levels, expressed directly through the student's actions, rather than through a formal assessment or test. Events such as PTA meetings or programs, library fairs, or open houses can offer opportunities to display and observe student products. Your efforts to find "audiences" for students' products, and to make note of exceptional projects or activities that students have completed, will provide valuable insights into your students' potentials and talents.

Classroom Performance Data. These data include feedback from teachers, classroom test results, report card grades, anecdotal records, or other similar data. These data can help you recognize specific accomplishments or achievements on a day-to-day basis among some students in certain subject area(s).

For any data, keep in mind an important note of caution. These data can be used to identify strengths and talents present in a student. The absence of certain strengths at one time does not mean that there are no strengths or talents in the students, or that there will not be in another area of at another time.

Authentic Assessment

Many educators today are concerned with the need for "authentic assessment." This involves assessing students' skills and performance on tasks, and under conditions, which approximate the way the outcomes will be used or applied in the real world, rather than relying heavily or exclusively on paper and pencil tests and measures. This is a valid concern, and it is especially important to keep in mind when assessing students' talents and interest areas, and when assessing higher level outcomes (i.e., beyond the levels of knowledge and comprehension alone). The use of performance demonstration tasks for individuals or small groups, project assessments,

and open-ended tasks, for example, can by very important in evaluating student progress and in identifying and documenting students' significant strengths, talents, and interests.

Work in this area has also led to increasing interest in the development and use of student profiles and portfolios. These can also be very important components in a contemporary approach to identifying students' strengths and talents.

Profiles. A student profile is intended for several purposes, including:

- Identifying areas of sustained interest;
- Finding emerging strengths and talents;
- Understanding the conditions under which one works or performs best;
- Relating past learning to future experiences and needs;
- Providing a planning foundation for active learning;
- Guiding instructional planning and decision-making.

The student's profile might contain:

- Interest assessments
- Test data (especially criterion-referenced)
- Anecdotal data
- Prior grades, evaluations

- Learning Styles data
- Personal characteristics data

- Ratings, references
- Observational data

It may also contain:

- Data about transferable process skills (e.g., thinking skills, writing skills, computer skills, etc.);
- Personal goals and self-identified challenges
- One's portfolio.

The major purposes of a profile are to guide assessment of strengths, talents, and sustained interests as input for effective instructional planning. A profile might be appropriate to develop for any (or even "every") student. It is essential to develop when, for any reason or from any source of data, we become aware that there is a "gap" between a challenging instruction and the student's present program.

Portfolios. While student profiles are intended to serve primarily as diagnostic or planning aids, the portfolio's major purposes have to do with record-keeping and documentation. Some of the purposes for developing a portfolio include:

- Documenting one's own activities and accomplishments over a period of time;
- Charting one's course and growth;
- Monitoring and adjusting one's path and actions;
- Verifying efforts and outcomes;

- Communicating one's work with others
- Expressing and celebrating one's creative accomplishments;
- Providing a foundation by which to assess growth and change and set future goals.

The student's portfolio might contain many kinds of items:

- Product or work samples
- Testimonials
- Self-evaluations or evaluations of one's work by others
- Biographical or journal records
- Documentation of participation in events or special activities
- Honors, Prizes, Awards or other recognitions
- Published reviews
- Photos, audio or video cassettes
- Scrapbooks

The portfolio is created, and most often maintained and retained, by the person whose work is represented. It can be displayed, presented, or even (in whole or in part) reproduced for others to incorporate as part of a profile or learning plan. Although the use of portfolios is common in the fine arts, it need not be restricted only to those areas. A portfolio can be created in any area of creative productivity, and by any student with material to include in his or her portfolio at any time.

Summary

Identification is the process of recognizing students' strengths, talents, and sustained interests, in order to design effective ways to nurture or develop them. It is not simply selecting, labeling, or placing a single, fixed group of students; avoid "pre-designating" some students as "gifted," in which case everyone else thus becomes "non-gifted." Talents, strengths, and sustained interests should be sought and nurtured. These talents may take time to "emerge" or be observable. They can't show up if opportunities aren't provided for them to be expressed. Therefore identification must be both flexible and ongoing; you need to look continuously for students who have unmet potentials, or for whom the present instructional program is not sufficient or challenging. The figure below summarizes many of the key differences between traditional and contemporary identification paradigms.

Identification is…

Selection; Exclusive-find only the "right" or "truly gifted" students; Emphasis on "Gate-Keeping;" Establishing an index or score; Justifying who's "In" or "out:	→	Diagnostic; prepares for improved or enhanced instructional planning; Flexible; on-going view of student's needs Inclusive-seeks to nurture students' best potentials; Deliberate, positive: finds strengths; Developmental or growth-oriented.

Chapter 8: Programming

*"There is no single "best" program. The thoughtful planner should consider…
[many]…models…along with acceleration, enrichment, grouping, counseling, career
education, creativity training, critical thinking…and other possibilities….There are many
alternatives; aim for the best combination for the particular situation."*

-Gary A. Davis and Sylvia Rimm (1986)

In Chapters 7 and 8, we discussed contemporary views (or "a new paradigm") for the nature and definition of giftedness and for identification. To complete our overview of the new paradigm, we will now consider one other important area: programming. Programming has to do with the activities, services, or instructional practices that exist in any school to respond to students' characteristics and needs-what you actually *do* with students, day in and day out. It has to do with what happens in every classroom, and beyond-in the library, the gym, the auditorium, or anywhere in the community.

A modern, progressive view of programming differs in many ways from traditional views and practices. The key to the paradigm shift is that contemporary approaches are moving away from "THE PROGRAM" (as a single, fixed entity), toward "programming," which is dynamic and multi-dimensional.

This major shift challenges older views in many ways; these are summarized in the chart on the next page.

Traditional Views	New Paradigm	Why?
• Adopt a model.	• Draw on many models, according to your circumstances and goals.	• Context, needs of every school differ; not a "one size fits all" matter.
• Create a gifted program.	• Offer a variety of different activities and services in response to varied student needs, talents, and interests.	• The diversity of strengths and talents among students requires varied responses.
• Provide a special, separate program (e.g., pull-out, resource room, or special class) or identify "cluster groups" to be served more effectively in the regular program.	• Strengthen the regular program for all students, and augment it as needed to provide for students' talents and interests.	• No individual teacher can be "everything to everyone." However, many aspects of traditional G/T programs are important and appropriate for all students.
• Provide a Gifted/Talented Teacher who attends to the instructional or program needs of identified students.	• Create a team effort, including one or more staff with appropriate training and experience.	• Create balance of collaborative instructional responsibility with leadership and coordination by trained personnel.
• Create and follow a "differentiated curriculum" for the identified population.	• Provide differentiated instruction.	• Giftedness is in the response-what people do with what they learn and know-not in the material we present to students.
• Provide services only to identified students.	• Provide services that are appropriate and challenging for all students, based on their characteristics as learners.	• Design instruction for students' actual characteristics, not stereotyped assumptions about categories of people.

Davis and Rimm (1986, p. 154) identified four major purposes for examining varied programming models or approaches. They proposed that programming models help educators to:

"1. …Clarify and simplify important components of gifted education,…[student] characteristics…and…higher level needs, or the content of a worthwhile educational program;
 2. Explain why particular recommended activities are useful and predict benefits for students;
 3. Supply a point of view and a set of related concepts regarding the purpose of gifted education…;
 4. Make specific recommendations and prescriptions for activities providing theory based direction and structure to program planning."

Similarly, Kaplan (1974, p.45) proposed:

"Program prototypes are organizational patterns which become the setting for a learning environment that accommodates the needs of the [students]…The decision to utilize one prototype over another is based on careful examination of the degree to which each fits into the institution and matches the objectives developed for the program…No one prototype will do everything. Each prototype should be reviewed in relationship to how it can be molded and varied to the advantage of the students and the total program. A program can be a composite of several prototypes which combine and adapt what is possible with what is practical and feasible."

It is important, then, to consider the unique dimensions of your setting, and the potential positive or negative impact of such factors on the applicability and usefulness of many programming approaches.

An in-depth review of many programming models or approaches is beyond the scope of this Handbook. To learn more about contemporary models, there are many published resources that provide valuable information. These include general textbooks, such as Gallagher (1985) or Rimm and Davis (1986), among others, or professional books dealing specifically with descriptions and comparisons of various models, such as Maker (1982), Renzulli (1986), or Colangelo and Davis (1991).

For our present purposes, it is important to provide a brief overview of several fundamental dimensions of effective programming. First, we will consider four "levels of service" that are important components of an effective school's instructional program. These are summarized in the chart below.

```
┌─────────────────────────────────────────────────────────────────┐
│                    Gifted Programming:                           │
│                   Expanding Dimensions                           │
│                                                                   │
│  ┌──────────────────────────────────────────────────────────┐   │
│  │            I.  Services for ALL Students                  │   │
│  │  ┌────────────────────────────────────────────────────┐  │   │
│  │  │         II. Services for MANY Students              │  │   │
│  │  │  ┌──────────────────────────────────────────────┐  │  │   │
│  │  │  │     III. SOME Students-need alternative       │  │  │   │
│  │  │  │              opportunities.                   │  │  │   │
│  │  │  │  ┌────────────────────────────────────────┐  │  │  │   │
│  │  │  │  │    IV. A FEW Students-benefit from     │  │  │  │   │
│  │  │  │  │      services that are highly          │  │  │  │   │
│  │  │  │  │          individualized.               │  │  │  │   │
│  │  │  │  │                                        │  │  │  │   │
│  │  │  │  │  (Activities planned through careful,  │  │  │  │   │
│  │  │  │  │   detailed assessment of student's     │  │  │  │   │
│  │  │  │  │       unique characteristics)          │  │  │  │   │
│  │  │  │  └────────────────────────────────────────┘  │  │  │   │
│  │  │  │  (Planned modifications which extend beyond   │  │  │   │
│  │  │  │            school program)                    │  │  │   │
│  │  │  └──────────────────────────────────────────────┘  │  │   │
│  │  │     (e.g., OM, FPS, Inventing, Science Fair…,       │  │   │
│  │  │        based on interests and emerging talents)     │  │   │
│  │  └────────────────────────────────────────────────────┘  │   │
│  │    (e.g., thinking skills, learning styles, group        │   │
│  │                      projects…)                          │   │
│  └──────────────────────────────────────────────────────────┘   │
└─────────────────────────────────────────────────────────────────┘
```

Some specific examples of school activities or services representing each of these four levels of service are provided below.

Illustrative Activities and Services at Four Levels of Programming

Level I: Services for All Students:

- Creative and Critical thinking in the regular curriculum
- Higher levels of Bloom's Taxonomy – regular curriculum
- Independent projects-individual and small groups
- Accommodation of student learning styles
- General exploratory activities (speakers, field trips, assembly programs, interest development centers…)
- Individualized progress in basic skill areas
- Exposure to new topics/areas e.g. foreign language introduction; fine arts…
- Activities based on student interests

Level II: Services for Many Students:

- Great Books
- Odyssey of the Mind (OM)
- Future Problem Solving (FPS)
- Real Problem Solving (RPS)
- Young Authors
- Readers' Theatre
- Young Inventors
- Computer Lab
- Science fairs, math competitions,…
- Performing and visual arts, band, chorus, theatre, debate
- Clubs and academic interest groups
- Personal and career counseling services
- Curriculum compacting
- After school and/or summer enrichment courses on programs

Level III: Services for Some Students:

- Newspapers, literary magazines…
- In-depth follow-up seminars with guest speakers
- Individual music, drama, or art lessons
- Advanced classes or sections in academic areas
- Community problem solving
- Internship or "shadow" experiences
- Complex or extended projects individual or small group
- Talent search participation
- Test out or credit by examination
- Peer teaching opportunities
- Participation in special programs sponsored by colleges and universities for talented students

Level IV: Services for a Few Students:
- Students enroll in higher level courses e.g., high school or college courses or dual enrollment in programs
- Grade level acceleration or multiple grade advancement
- Mentors
- Presentation of student work to outside groups e.g., historical society, governmental agencies
- Publication of student work in outside sources
- Develop, conduct research or service projects

Indicators of Excellence

There are many criteria for assessing the overall quality or effectiveness of any school program. We have found that, in relation to the instructional program and a concern for establishing a solid foundation for programming that nurtures the strengths and talents of many students, six general "indicators" are important (Treffinger, 1986; Dunn, Dunn, and Treffinger, 1992). Within these six broad areas, several specific criteria can also be described. These six indicators, and illustrative criteria for each, are presented below and on the following pages. (More detailed illustrations, with examples of each from varied classroom settings and content areas, area included as an Appendix in Volume II of these Guidelines.)

Indicator A: Individualized Basics

This indicator involves accommodations made to individualize instruction on the basis of students' characteristics, background, or learning styles, and to provide instruction at higher levels of thinking (beyond memory and recall).

Criterion #1. Modifications of instruction are made based upon student's unique characteristics, sustained interests and talent areas.

Criterion #2. Learning Activities employ higher level thinking skills (e.g., Bloom's Taxonomy).

Criterion #3. Learning activities provide opportunities for creative thinking (e.g., fluency, flexibility, originality and elaboration).

Criterion #4. Learning activities provide opportunities for critical thinking (e.g., inference, deduction, comparing, classifying, observing, decision making).

Criterion #5. Learning activities include opportunities to master and apply systematic problem solving and decision-making methods.

Criterion #6. Learning activities recognize and respond to the student's learning style preferences and needs.

Criterion #7. Instruction involves many and varied student activities and groupings within the classroom.

Indicator B: Appropriate Enrichment

This indicator involves the ways to provide appropriate enrichment activities for students. It includes opportunities for students to explore new topics, training opportunities in appropriate process skills such as creative problem solving, research skills, etc. and opportunities for student to pursue independently their individual interests and to conduct individual or small group investigations.

Criterion #1. Students are provided opportunities to explore many topics, extending beyond the regular or prescribed curriculum.

Criterion #2. Student's interests are used as the basics for exploratory activities.

Criterion #3. Students have opportunities to develop and practice research, inquiry and investigate skills.

Criterion #4. Students have opportunities, individually or in small groups, to investigate real problems.

Critierion#5. Students have the opportunity to conduct first hand investigations leading to original products.

Criterion #6. Students have opportunities to share their products and accomplishments with appropriate audiences or through appropriate outlets.

Criterion #7. Students have access to many and varied resources including materials (books, media, technology) and people from within the school or throughout the community.

Indicator C: Effective Acceleration

This indicator involves insuring that students spend only the amount of time they need to master materials. It can involve continuous progress, learning for mastery, or other approaches through which students progress at their own rate or pace rather than in a fixed, whole group "lockstep." It can also include more extensive (or "radical") forms of acceleration, such as multiple grade advancement, early entrance, dual enrollments, or early graduation.

Criterion#1. Students are placed in appropriate instructional activities based on their actual needs and abilities.

Criterion#2. Students are encouraged and given opportunities to pursue learning activities at their own pace.

Critierion#3. Different individuals and groups of students may be working on varied tasks or activities at any specified time.

Criterion #4. Advanced resources, materials and learning activities are provided or are available to students according to their actual needs and abilities without rigid grade level locksteps in the curriculum.

Criterion #5. Deliberate steps are taken to diagnose or identified accurately the actual instructional levels and needs of students at higher levels of progress or accomplishment.

Criterion#6. Students have opportunities to interact with others who share similar abilities and accomplishments in areas of common interest.

Criterion#7. Students have an opportunity to participate in challenging courses or instructional activities across grade levels or school units.

Indicator D: Independence and Self-Direction

This indicator concerns ways to encourage students to be in charge of their own learning. It involves giving them the process skills they need to set goals, carry out projects, and evaluate their work. It concerns experiences necessary to promote self-direction and lifelong learning. It also includes decision making, research skills and evaluation skills.

Criterion #1. Students have opportunities to establish their own goals and objectives for certain projects and tasks.

Criterion #2. Students have opportunities to learn and use appropriate methods for locating their own materials and resources.

Criterion#3. Students have opportunities to work with their peers to establish criteria make decisions and evaluate progress and products.

Criterion #4. Students are guided in learning and using appropriate methods for realistic self-evaluation.

Criterion #5. Students are encouraged to apply independent learning skills to plan conduct, evaluate and share individual and small groups projects and products.

Criterion #6. Students learn to use contracts, learning agreements and other management or record keeping resources accurately and effectively (in small groups and independently).

Criterion #7. Students work in an environment which promotes opportunities to learn and apply cooperative group processes and skills.

Indicator E: Personal Growth and Social Development

This indicator has to do with the ways in which the curriculum and the environment foster high levels of self-esteem and a strong sense of the worth of all individuals. Students should feel a sense of self-worth and confidence, but they should also have respect for and tolerance of individual differences in style ability and temperament.

Criterion #1. Students have the opportunity and encouragement for the development of a positive self-image.

Criterion #2. Students are encouraged to work individually and cooperatively on challenging tasks to advance both individual and group goals.

Criterion #3. Students are encouraged to recognize and accept their own strengths and needs and those of others.

Criterion #4. Students have opportunities to express, clarify and demonstrate respect for feelings and values.
Criterion #5. Students are encouraged to develop and demonstrate positive attitudes towards learning and thinking.

Criterion #6. Students have opportunities to help and support each other, to learn with and from each other and to work cooperatively on commonly held important goals.

Criterion #7. Students are encouraged to develop confidence in their own ability to think creatively and critically and to solve problems.

Indicator F: Career Perspectives and Future Orientation

This indicator has to do with preparing students to live in the future. Today's students must all be aware of the nature of change in our world, and of its personal and career implications for them. Students should be aware of changing career opportunities, and also of ways to accept and manage change constructively…

Criterion #1. Students have the opportunities to consider the nature and consequences of change in our world.

Criterion #2. Students have opportunities to predict, assess and investigate various alternative futures and their implications for the future.

Criterion #3. Students are encouraged to become aware of many career possibilities.

Criterion #4. Students are encouraged to consider and appreciate the value of lifelong learning and appreciate the value of lifelong learning and futuristic thinking.

Criterion #5. Students have opportunities to investigate the nature, causes and possible solutions for both present and future problems in the community country or world.

Criterion #6. Students are encouraged to read and examine many historical views of the future and to compare these views with current trends, events and projections.

Criterion #7. Students have opportunities to observe, interview and analyze experiences and events of the past, present and future from many perspectives.

As you review these indicators and criteria, it will be very important to consider such questions as:

- Is our school program "healthy?"
- How can we determine its health in several areas?
- How might we use these criteria to take stock of, and subsequently to enhance, the health of our school program?

These issues are fundamental to school improvement *and* to programming for giftedness. The greater your concern and commitment to programming which nurtures and expands the strengths and talents of many students, the stronger your total school program will become. All efforts to enhance or strengthen the regular program will lead to a more constructive or productive foundation for gifted programming, and, we believe, the reverse is also true, when gifted programming is viewed in an inclusive, contemporary way.

Linking Identification and Programming

Identification and programming, as they have been defined and discussed in this Volume, are closely related, interdependent concerns. Too often in traditional approaches to gifted education, they have been treated as separate or unrelated issues. A group of students is "identified" as "the gifted," and the identification data are then filed away for safe keeping. Next, "the gifted program" is planned, presumably on the basis of some general set of principles or strategies for differentiating instruction for "the gifted," and delivered to the identified students.
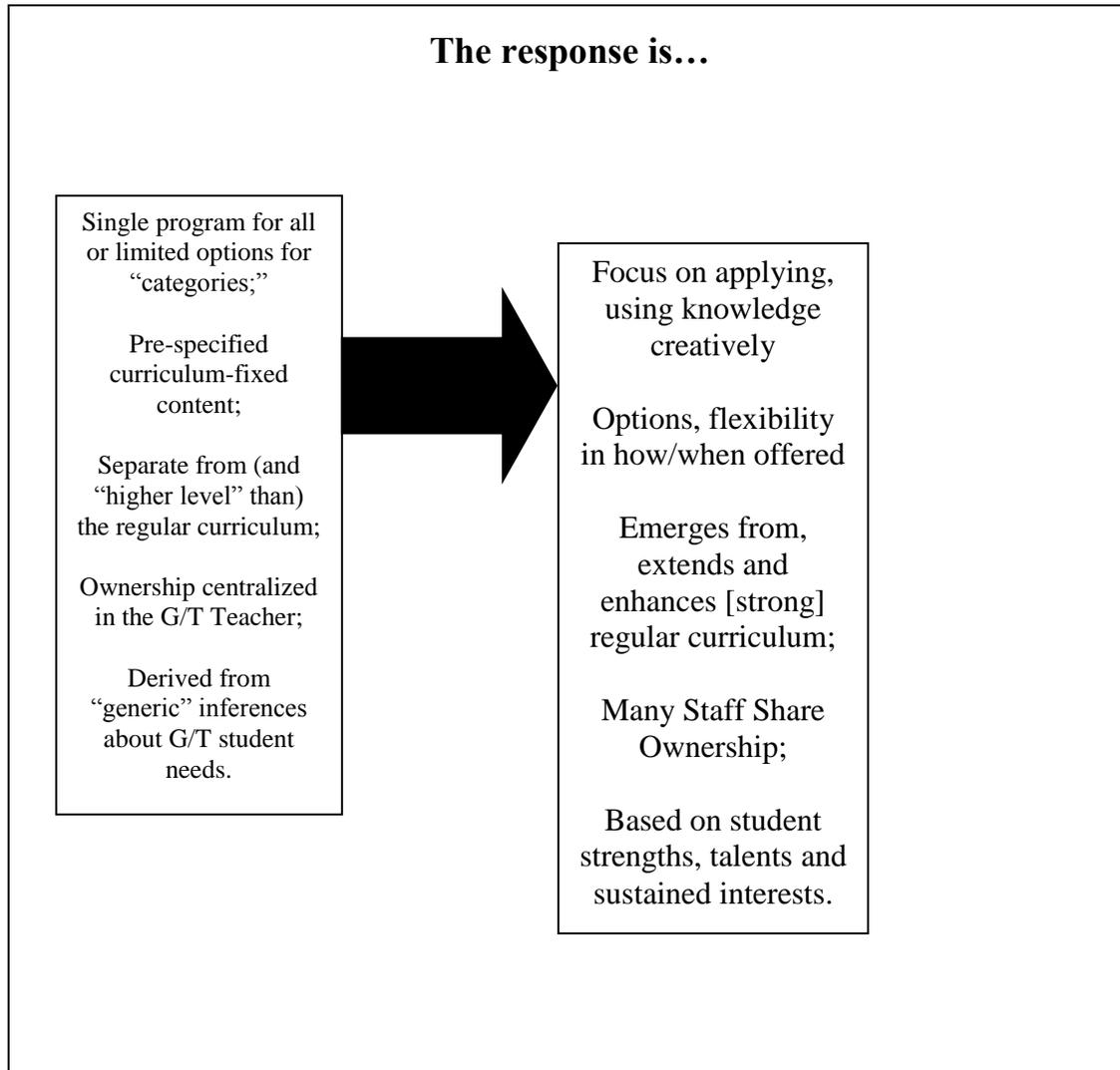
A more contemporary approach holds that programming decisions should be made on the basis of the best available data regarding the student's characteristics, strengths, talents, and interests 0 that programming should be responsive to the student!

The following chart illustrates, for example, how identification and the four levels of service are interrelated.

"Identification"	Level of Service
All Students No formal identification process is appropriate or needed.	**Level I – Services for *All* Students** Focus on expanding, extending, and enhancing learning opportunities for all.
Many Students Identification often based on student interest (self-selection); If there is "selection," it is based on criteria that are clearly and specifically related to successful accomplishment in the activity, and may include "try out" or actual performance data.	**Level II – Services for *Many* Students** Focus on enrichment or expansion of experiences for students beyond the "exploration" level. *Almost any student might be involved in Level II, but not every student will*.
Some Students Identification based on students' demonstrated and sustained interests and their specific unmet needs. Teacher nomination, grades and academic achievement, other test data may be used if clearly and specifically related to instructional activities!	**Level III – Services for *Some* Students** Focus on extended or "in-depth" work to provide a high level of challenge and appropriate pace for learners who show extended interest and ability.
Few Students Based on any evidence or data supporting or documenting the student's unusual unmet needs, exceptional interest, or outstanding performance in areas specifically related to the proposed services.	**Level IV – Services for a *Few* Students** Focus on individually-designed responses to unusual needs of students, carefully planned on the basis of detailed review of diagnostic data and conferences.

Summary

Rather than creating a single, fixed program for one selected group of "identified gifted" students, a new paradigm-"programming for giftedness" challenges schools to plan and employ many services to find and develop the strengths, talents, and interests of many students. The paradigm shift is summarized in the figure below.

The response is…

| Single program for all or limited options for "categories;" Pre-specified curriculum-fixed content; Separate from (and "higher level" than) the regular curriculum; Ownership centralized in the G/T Teacher; Derived from "generic" inferences about G/T student needs. | ➡ | Focus on applying, using knowledge creatively Options, flexibility in how/when offered Emerges from, extends and enhances [strong] regular curriculum; Many Staff Share Ownership; Based on student strengths, talents and sustained interests. |

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