Levels of Service (LoS): A Contemporary Approach to Programming for Talent Development

Donald J. Treffinger and Edwin C. Selby
Center for Creative Learning

From:

The fundamental premise of this chapter is that gifted education is concerned with students: their characteristics, their strengths and talents, and their needs for instructional services that are stimulating and satisfying. Our basic vision is, that in an educational world that is working the way it should, there will be significant attention to students' unique strengths, talents and needs. There will be opportunities for students of promise in any area to reach as high as they are able, to be creators and problem solvers (not just regurgitators), and to function effectively and independently.

Successful programming for talent recognition and development demands that
we establish and maintain such a vision. Such matters as programming models, curriculum writing, identification policies and procedures, and administrative arrangements are *means*, not *ends*, although they frequently seem to be treated as though they were the ends in themselves. Too often our "vision" seems so shallow or myopic that the effects or impact on students are all but forgotten in the process. We must not neglect the critical question, "*In what ways will this benefit students?*"

The Levels of Service (LoS) approach to programming for talent development seeks to identify and develop high-level abilities, talents, and sustained interests (Treffinger, Young, Nassab, & Wittig, 2004). It involves collaboration among educators, students, parents, and community leaders to ensure that every learner’s educational experience is appropriate, challenging, and differentiated. LoS focuses on providing opportunities that recognize, express, nurture, and celebrate students’ strengths, talents, and sustained interests. It addresses the importance of meeting the needs of all high-ability students, acknowledging the fact that significant potential exists among many more students than have traditionally been identified and served in academic content areas and many talent domains. LoS focuses our attention on the future and what is important for students. It supports effective instructional practices for all students, and is consistent with current research on human abilities and styles, as well as with contemporary views of curriculum.

The purposes of this chapter are to describe the rationale for the LoS approach, to highlight the ways in which it contrasts with many common practices and procedures, and to describe the major considerations in translating the model into practice.

**Foundations of the LoS Approach**

The foundations of the LoS approach are multidimensional and draw from a
The Levels of Service (LoS) Approach

variety of disciplines and domains of theory, research, and practice. These include educational and organizational leadership, human development, educational psychology, curriculum and instruction, cognitive psychology, personality, creative studies, and social science. Figure 1 illustrates nine factors that contribute to the rationale, development, and implementation of the LoS approach.

Figure 1: Theoretical and Research Foundations for the LoS Approach

Expanding Conceptions of Giftedness and Talent

Our view of human talents and abilities has broadened considerably in the last three decades (Reis & Renzulli, 1982; Treffinger, Young, & Nassab, 2005). Major theorists and researchers in intelligence and human behavior have stimulated today’s practitioners to expand significantly their understanding or definition of giftedness. Since the 1950’s, research by many pioneers, including J. P. Guilford (1967) and C. W. Taylor (1968) expanded our thinking about the nature and assessment of cognitive
abilities and skills. More recently, the theories of R. J. Sternberg (1985) and Howard Gardner (1983) have reinforced our understanding that traditional conceptions of ability or intelligence have been far too narrow in scope and definition. Renzulli (1978) defined giftedness as the interaction among ability, creativity, and task commitment, while both Amabile (1983) and Torrance (1979) also emphasized that creative productivity arises from a synthesis of abilities, skills, and motivation. Dunn, Dunn, and Treffinger (1992) proposed that giftedness involves achievement and creative productivity, over a sustained period of time (perhaps years or even decades), in a domain that matters to the person.

Through the work of developmental scholars, such as Piaget and Bruner, for example, we have also learned that human cognitive abilities grow and change over time, and that different abilities mature, change, and decline quite differently, which suggests that it is more fruitful to think of “giftedness” as a qualitative, dynamic construct, rather than as strictly quantitative and static. One’s score on a test (such as an IQ test) is a “snapshot” of a person’s responses to a particular set of questions, in a certain context, at a given time; that is much less than the more complex, richer, more varied “collage” of a person’s strengths and talents that yields insights into the person’s giftedness over time and experience.

Through the work of many scholars, from a variety of perspectives and disciplines, then, we have come to the unambiguous and unavoidable conclusion that giftedness can no longer be defined in relation to a single score or simple quantitative index or cutoff point. The LoS approach builds on the need to recognize that talents are complex and multifaceted.

**Instructional Design, Individualization, and Differentiation**
**The Levels of Service (LoS) Approach**

Emphasizing students’ strengths, talents, and sustained interests reflects a commitment to build upon positive dimensions of human potential and ability (Cramond, 2005; Taylor, 1985; Torrance, 1974). The LoS approach emphasizes the need to affirm and to build upon the strongest and most powerful motivations and skills of the learner, and to respond to each learner’s unique characteristics, interests, and needs. The central challenges of appropriate and challenging education for talent development involve differentiation of basics (Tomlinson, 1999, 2001) and engagement in higher-level cognitive activity, such as application, analysis, synthesis, and evaluation in one’s field of interest and expertise (e.g., Treffinger & Feldhusen, 1998).

**Style-based Instruction**

In order to promote the development of effective teaching and learning based on students’ strengths, interests, and talents, it is necessary to be able to define and recognize the important ways in which individuals differ in their characteristics and needs. These efforts take into account the student’s unique strengths and talents in specific areas, as well as more general characteristics relating to creativity, motivation, learning styles and preferences, and particular interest areas. The role of learning-style based instruction (Dunn & Dunn, 1975, 1978; Dunn, Dunn, & Treffinger, 1992; Selby, Treffinger, Isaksen, & Lauer, 2004) has been investigated extensively in relation to talent development, effective instruction, problem solving, and change management. Growing evidence suggests that there are significant benefits for many students by using learning styles to individualize instruction and that gifted students may demonstrate unique learning style profiles which can be important to consider in planning appropriate educational programs for them (Dunn & Price, 1980; Griggs & Dunn, 1984; Griggs & Price, 1985; Ricca, 1984; Selby & Treffinger, 2003).
Productive Thinking

The next factor contributing to the theoretical and conceptual foundations of the LoS approach is productive thinking. The LoS approach builds on recognition that students must be able to think *creatively* and *critically*. As they develop and apply their strengths and talents in any domain, students are also called upon to manage change and to deal with complex, open-ended opportunities and challenges (Isaksen, Dorval, & Treffinger, 2000; Treffinger & Isaksen, 2005; Treffinger, Isaksen, & Dorval, 2006). Students must also learn and be able to use the research and inquiry tools required in investigations of real problems and in making real-life plans and decisions. These skills include: using library resources; conducting reviews of literature, and learning basic procedures of data collection, using the internet effectively and wisely, conducting data analysis and data presentation. They also include higher-level knowledge of the specific methods, instruments and techniques related to inquiry in a certain discipline (e.g., an astronomer must be able to use a telescope, or an engineer must be able to conduct a particular kind of stress or strength of materials analysis).

Teachers do not hesitate to teach their students how to take notes, how to study for a test, how to use mnemonic devices or memory aids to review knowledge or other "process technology" for the knowledge and comprehension levels of learning. By the same token, learning and applying the appropriate "technology" for higher level processes is also important. Students cannot be expected to be able to engage in independent creative and critical thinking, problem solving or developing and sharing products with real audiences without instruction and practical experience in the methods and techniques helpful for those purposes. If we expect students to learn to solve complex problems and to develop and carry out effective plans of action, we must
accept the responsibility to help them acquire and apply the necessary tools.

**Personal and Affective Factors**

The LoS approach also builds on an understanding of personal characteristics and affective factors and their contribution to the development and effective expression and applications of students’ talents. Students who seek to become effective independent, productive learners are able, within the areas of their particular strengths and talents, to learn quickly and easily, to be highly curious and interested in a variety of topics and to pursue learning about new concepts and topics eagerly on their own. Characteristics associated with creativity often play an important role in the talent development process; these include four major categories: generating ideas, digging deeper into ideas, openness and courage to explore ideas, and listening to one’s inner voice (e.g., Selby, Shaw, & Houtz, 2005; Treffinger, Young, Selby, & Shepadson, 2002).

When students are pursuing their strengths and talents, they are often very proficient at dealing with complex or advanced material, and commonly can deal with abstractions and generalizations readily. They often prefer to be able to organize and structure their own learning, and to experiment with new possibilities and methods. They can easily learn through presentations in different media or formats, and are not dependent upon a single "channel" or perceptual mode. They may be significantly advanced in their knowledge of their own areas of greatest interest, in comparison with other students of their own age or even with their teachers. They may have strong motivation (cf., Clinkenbeard, 1994), and wish to devote a large part of their time' and energies, to the topics which interest them, to the exclusion of other topics to which teachers or parents seek to direct them. They may also seem to lack knowledge, make errors or behave uncooperatively when they are bored with instruction dealing with
topics they have already mastered.

Interpersonal and social-emotional needs are also important to consider (e.g., Moon, 2004; Neihart, Reis, Robinson, & Moon, 2002). It is often proposed that “gifted students need to spend time in interaction with other gifted students.” The LoS approach refines this argument, holding that the need for social or interpersonal interaction and stimulation relates closely to one’s passions or interest and talent. Effective programming should offer students a variety of opportunities to pursue, expand, express, and celebrate their strengths, talents, and sustained interests.

**Environmental and Contextual Factors**

Environment or the context in which learning occurs is also an important factor in talent development. This component has traditionally received less attention than any of the others, although it is a very important concern for both the students and the program. From the individual’s viewpoint, the nature of the learning environment can be extremely important. Creative productivity can be facilitated by some environmental conditions and events and inhibited by others (Feldhusen & Treffinger, 1985; MacKinnon, 1978; Torrance, 1962, 1965; Torrance & Myers, 1970). For example, it has often been shown that tolerance of complexity and disorder, unconditional acceptance and positive regard for the individual, support for unusual ideas, freedom from arbitrary external evaluation, and time for incubation are among the environmental conditions that can facilitate creative behavior. The student’s challenge is to find an environment or climate in which his or her talents and interests will not only be tolerated but will actually be encouraged or facilitated. In addition, it involves awareness of the "blocks" or obstacles that can inhibit creative inquiry, and knowledge of ways to remove or circumvent them (Isaksen, Treffinger, & Dorval, 1996).
The Levels of Service (LoS) Approach

At a programmatic level, the context or environment for talent development is also important in the LoS approach. Research has indicated that nine important factors can enhance or inhibit a school’s climate for innovation and creativity in its approach to talent development (Isaksen, Treffinger, & Dorval, 2000; Isaksen & Ekvall, 2006). These factors are:

Challenge & Involvement. The degree to which students are involved in the daily operations, long term goals, and in sharing a vision of the school or classroom as a learning environment.

Freedom. The extent to which students have the opportunity for independence in their behavior.

Trust and Openness. The extent to which the students feel there is emotional safety in their relationships with each other and with the teacher.

Idea Time. The amount of time students can use (and do use) for identifying, exploring, and elaborating new ideas.

Playfulness and Humor. The extent to which the school and the classroom provide a setting for spontaneity and comfort or ease of behavior.

Conflicts (Low). The presence (or absence) of personal and emotional tensions in the school or classroom; the presence (or absence) of fighting and aggressive, hostile behavior among students, or overly-stern, shouting, angry behavior by the teacher. (This is different from the tensions among ideas that is represented by the “debates” dimension.)

Idea Support. The extent to which new ideas are treated with interest and respect.
Debates. The extent to which encounters and disagreements among viewpoints, ideas, differing experiences, and knowledge will be encouraged in the class.

Risk-Taking. The extent to which there is tolerance of uncertainty and ambiguity in the school or classroom.

The context for talent development in the LoS approach also draws on contemporary, inclusive models of leadership (e.g., Kouzes & Posner, 1995) and studies of models for change and effective facilitation (e.g., Isaksen, 2000).

Autonomy and Self-Direction

The LoS approach recognizes the importance of empowering individuals to become actively engaged in recognizing, nurturing, applying, and celebrating their own strengths, talents, and sustained interests and in managing their own talent development. LoS builds, for example, on self-directed learning (Knowles, 1975; Tough, 1979; Treffinger, 1975, 2003; Treffinger & Barton, 1973), studies of the Autonomous Learner (Betts & Kercher, 1999), and student involvement in creating and managing “talent growth plans” (e.g., Feldhusen & Wood, 1997).

Students must be able to succeed in many self-management tasks to assume active leadership for their own talent recognition and development. For example, they need to learn how to set reasonable but challenging goals, identify needed resources, gather and use those resources, develop a worthwhile product or outcome and communicate the results to others (Gross, 1982; Treffinger, 2003; Treffinger & Barton, 1979). Students must also be concerned with effective time management when pursuing their passions and personal talents, because resource and energy limitations, project requirements, and deadlines are unavoidable challenges for all talented, creatively
productive individuals at all ages. Record keeping and documentation of one's activities and products are also a necessary part of the challenge.

In the LoS approach we recognize that students do not necessarily or “automatically” know how to manage and direct their own learning, but that they are capable of learning to do so. Many factors can complicate the challenge. It often seems faster or easier, for example, for adults at home or in school to say, "Here, let me do it." or, "Just do it this way." Working with many students at different levels within a classroom can also seem easier to the teacher if all of them are working on the same task at the same time, despite the teacher's recognition that one task does not meet the needs of every student equally well. And, some adults merely say, "This child is just too young to make such important decisions for himself (or herself)." Students need opportunities to learn gradually to become self-directed learners as part of the process and experience of talent development.

Gifted Education and Talent Development

The LoS approach is also informed by other models and research in gifted education. For more than three decades, many scholars have contributed to our understanding of the nature, recognition, and nurture of talent among children, young people, and adults. Examples of work that, over a sustained period of time, has had particular influence on the development of LoS include: Kaplan’s (1974, 1985) early work on program and curriculum development; Renzulli’s (1977) enrichment triad model; Bloom’s (1985) studies of talent development in young people; the Richardson Foundation’s Pyramid Project (Cox, Daniel, & Boston, 1985; Cox, Kelly, & Brinson, 1988); Feldman’s (1979, 1986) writing on talent and non-elitist conceptions of programming; work by Feldhusen and his associates on the Purdue three-stage and TIDE models (e.g.,
The Levels of Service (LoS) Approach

Feldhusen, 1994a, 1994b; Feldhusen & Kolloff, 1978); recent descriptions of innovative approaches to enrichment (e.g., Renzulli, Gentry, & Reis, 2003); and, NAGC’s Parallel Curriculum Model (Tomlinson, Kaplan, Renzulli, Purcell, Leppien, & Burns, 2001).

Educational Basics, School Improvement, and Effective Schools

Many changes in the landscape of education at all levels, and for all students, have also had an impact on our thinking about the appropriate course and direction for gifted education, and these changes have, therefore, influenced the design and development of the LoS approach. Studies of rapid change in many parts of society and the business world (e.g., Smith, 1996) emphasized the importance of both continuing improvement and innovation, and the importance of responding to fast-paced growth and change. Education also experienced significant pressures to grow and change. The United States Department of Labor’s (1991) SCANS report identified a number of important “new basics” for all students (many of which were previously thought to be intended only for gifted students) as did the extensive “workplace basics” survey research of employers (Carnevale, Gainer, & Meltzer, 1990). Many writers and researchers who consider the nature of, and need for, effective schools initiatives also challenged us to build bridges with the LoS approach to talent development (e.g., Champlin, 1987; Davis & Thomas, 1989; Lezotte, 1992, 1997; Patterson, Purkey, & Parker, 1986; Treffinger, 1991, 1995).

Nature and Structure of the LoS Approach

This section summarizes the need for a contemporary, inclusive approach to talent development, the important goals for students, and the structure of the LoS model. Taken together, many of the factors that contributed to the development of the LoS approach pointed to the need for new models or approaches. Despite its
widespread popularity and use (Oglesby & Gallagher, 1983), it became clear that traditional "resource room or “pull-out" approaches were inadequate to respond to many significant programming opportunities and challenges (Treffinger, 1998; Treffinger & Feldhusen, 1996).

The relationship between gifted education and other components of the school program has often been strained, and sometimes openly hostile. In many school districts, informal reports from gifted education specialists have indicated stresses such as: competition between programs, placing undue pressure or unrealistic expectations upon students who participate, overloading students with unnecessary busywork, refusing to nominate students for programs and other similar concerns. However, conversations with administrators and teachers from regular classrooms have also reflected concerns that include: excessive labeling and creation of separate, isolated groups of students; lack of communication and coordination of program content and activities; disregard for basic skill areas; overemphasis on "fun and games" activities, with little purpose or value; and, constant interruption of other classroom activities. Are all these concerns valid? Of course not! But, when the same concerns are expressed time and time again, in one school building after another, they could not all be simply dismissed as the unfounded biases of individuals who opposed gifted programs or who did not really want to do their job. These experiences, too, led to the conclusion that there was a significant need to reexamine the relationship between gifted education and the rest of the school program. It did not seem too much to assume that all components of the student's school experience should be planned and conducted in ways that work together for the students’ benefit, and to ensure that all students have learning opportunities that are appropriate and challenging!

From its origins in the IPPM approach (Treffinger, 1981) to its contemporary
expression today as LoS, this approach does not begin with the assumption that programming must start with a psychometric identification process that will lead to the designation of a single, fixed group of gifted students who will be placed in a unitary gifted program. It does not assume that services will be provided only by one person, in one place, or at one fixed time each day or week. It does not take the popular "resource room/pull-out" prototype as a given. This has led some people to assume, quite incorrectly, that the approach therefore advocates that all services to high-ability students, or to students with a variety of talents and strengths, can and should be provided by the regular classroom teacher, alone, in his or her own classroom. To put aside such misunderstandings, let us attempt to clarify the relationship between gifted education and other parts of the school program, as viewed in the LoS approach.

Effective talent development programs should not spend time conducting, for a small group of pupils in a separate setting, activities that should be offered to nearly all pupils in a regular classroom setting. Unfortunately, many of the most common, popular activities of countless gifted programs seem to fall in this category: basic critical thinking tools, divergent or creative thinking activities, library and reference skills, computer literacy activities, higher level cognitive skills (e.g., Bloom, 1956), problem solving methods and a wide variety of enrichment activities. Many gifted specialists find that their time and energies are almost completely absorbed by such activities—activities they know should be conducted in an effective regular classroom for the benefit of many children. The proper business of gifted education is not to be involved with "remediating" the deficiencies of the regular program. What can be done in the regular classroom should be done there.

This does not mean, of course, that one teacher can adequately meet all the needs of all the pupils. Even in the best of all possible worlds, the regular program and the
The Levels of Service (LoS) Approach

classroom teacher will need the assistance and support of specialists with training and experience in gifted education. Effective talent development programming requires resources and services that extend beyond those that it is reasonable to expect the classroom teacher to provide. The LoS approach does not suggest, then, that services in the regular classroom should take the place of effective talent development programming; instead, it emphasizes the importance of an effective blend of services through the regular program and the school’s varied and diverse talent development activities and initiatives. The LoS approach challenges us to begin our efforts by asking, "What services should be provided in the regular program?" Effective programming for talent development necessarily considers the role and responsibilities of the regular classroom instructional program, since students will be very likely to spend some (or most) of their time in this setting for many years. Talent development should be concerned with the effectiveness of the student’s total program, not just a small portion of the time during which special activities or services are being provided.

The next question to be considered (and it should follow closely in proximity to the first) will then be, "What services or activities that extend beyond the regular program should be considered in light of this student’s characteristics and needs?" Students of outstanding talent or potential in any area are very likely to display characteristics, and concomitant needs for challenging services, which extend beyond the capabilities of the classroom teacher. In LoS, however, our response is not merely to collect a single group of "designated gifted" students into a fixed program that is presumed to be satisfactory to meet all their needs. Rather, LoS challenges us to consider the most appropriate decisions for the student (Colon & Treffinger, 1980; Treffinger, 1998; Treffinger, Young, Nassab, & Wittig, 2004).

In any school or school district, of course, there will be many different ways of
providing services to meet the needs of various students. The LoS approach calls upon educators to use a variety of different responses or services as necessary and appropriate to respond to the unique needs of individuals or small groups of learners. Educators employing the LoS approach learn, as second nature, to pose the challenge with an invitation to creative thinking: "What are all the options and alternatives that might be available to various students in this school district or community?" Then, instead of asking, "Is this student in or out of our program?" it will be possible for them to ask, "Given this student's characteristics and needs, what choices from among our many options seem to be most appropriate and promising?" It is neither necessary nor appropriate to assume that there must be one gifted program in a school system through which all gifted students will be served in an identical manner. Given the educators' knowledge of the characteristics associated with abilities, skills, motivations, learning styles and interests of their students (with input from many sources to help them assess the students' strengths, talents, and interests), it is possible for the school to identify some general programming categories or descriptive areas to guide their planning (cf., McCluskey, Treffinger, & Baker, 1995).

**Six Foundational Programming Areas**

Although there are many ways to expand, extend, or enhance learning opportunities for students, we can describe, as a starting point, six broad themes or areas of educational programming with which educators can organize their work in planning programming for talent development: differentiated basics; effective acceleration; appropriate enrichment; independent, self-directed learning; personal growth and social development; and, career orientation with a futuristic perspective. In each of these six areas, many provisions can be made quite effectively in the regular
classroom (e.g., Treffinger, Young, Nassab, Selby, & Wittig, 2004; Treffinger, Young, Nassab, & Wittig, 2004); let us examine each of them briefly.

**Differentiating Basics.** Concern for differentiating basic instruction involves recognizing and responding to students’ learning styles and interests, adjusting the content and the rate and pace of instruction according to the student’s needs, and providing opportunities for students to use a variety of "higher level" thinking skills during instruction in content areas. This area includes many provisions that should be addressed within the regular school program.

**Effective Acceleration.** Students who display outstanding ability or talent in any area need access to teachers, mentors, and materials for advanced learning opportunities. If they have not already mastered the standard, age-in-grade curriculum in an area in which they excel, they are probably able to do so very efficiently.

"Compacting" the regular curriculum (Renzulli, Smith & Reis, 1982) can also provide time for advanced or accelerative learning opportunities. Students with exceptional ability, skills, and motivation in a certain area need to be able to escape the boredom and repetition that may accompany long periods of classroom drill on topics they have already mastered. Through advanced curricula and instructional activities (e.g., VanTassel-Baska, 2003) and deliberately planned accelerative strategies (e.g., Brody, 2004; Smutny, 2006; Stanley, 1980), content instruction can be more stimulating and challenging for learners.

**Appropriate Enrichment.** Another important goal of programming for gifted and talented students is to enrich students' learning experience. Renzulli (1977) emphasized, for example, the need to provide students with opportunities to explore a wide variety of topics outside the regular curriculum, to develop the process and investigative skills necessary to pursue independent inquiry, and to pursue individual
or small group investigations of real problems. Many of these forms of enrichment are reasonable to expect in an excellent regular school program.

**Independent, Self-Directed Learning.** As we noted in the rationale for the LoS approach, one important component of talent development programming is to foster effective, independent learning. Students may exhibit high potential for the attainment of this goal, but we cannot assume that they will necessarily possess the skills that are needed to manage and direct their own learning effectively. Students need systematic instruction in such areas as setting and defining goals, locating and using appropriate resources, defining appropriate learning activities, creating and evaluating products and locating and communicating with appropriate outlets and audiences.

**Personal Growth and Social Development.** Again, as noted in the LoS rationale, the affective and social-emotional needs of students should not be overlooked in the talent development commitment. Students must be able to develop a healthy perspective about their own talents and limitations and those of others, a positive self-image, positive regard for the processes of growth, learning and inquiry, and commitment to a set of moral and ethical values to guide their lives.

**Career Exploration With a Futuristic Perspective.** When learners are engaged in discovering and developing their strengths, talents, and interests, they will also need assistance in becoming aware of career perspectives, sources of information, and methods of dealing with rapid change and the uncertainty of the future. They may need help in assessing or constructing alternatives consistent with their strengths and talents.

**The Four Levels of Service**

The operational “heart” of the LoS approach consists of four, interrelated levels of services that, taken together, guide educators in organizing, carrying out,
documenting, and evaluating talent development programming. Figure 2 provides a graphic description of the four levels.

**THE LEVELS OF SERVICE [LoS] MODEL**

I. Services for ALL Students
   Providing foundational skills and tools
   “Discovering and Building”

II. Services for MANY Students
    Engaging and verifying interests
    “Curious and Exploring”

III. Services for SOME Students
     Meeting the need for alternative opportunities
     “Enthusiastic and Performing”

IV. Services for a FEW Students
    Responding to blossoming expertise and the need for highly individualized services
    “Passionate and Soaring”

**Figure 1: The Four Levels of Service**

*(Treffinger, Young, Nassab, & Wittig, 2004)*


The four Levels of Service are structured to first stimulate, then identify and develop, the interest and passions of individual students. Level I emphasizes Services for *All* Students. These services provide foundational skills and tools designed to help all students discover and develop their personal strengths and talents. Level I activities are usually short in duration and provide appropriate and challenging experiences, while exposing students to a broad array of domains, content, and talent fields. Teachers differentiate instruction in order to respond to unique learner characteristics.
The Levels of Service (LoS) Approach

while being alert for talent potential that sets an individual student ahead of his or her peers in specific interest area.

Level II services are provided for Many Students. Students are invited to engage in activities through which they explore interests and investigate areas of possible strength and potential talent. Anyone might take part in Level II activities, but not everyone will. The duration of these experiences is usually pre-defined, lasting a day or a semester. Often the experience ends in some culminating activity (a written product, science project, or concert performance) after which students evaluate their level of interest in the field and their desire for continued involvement.

Level III offers services for Some Students. These students are enthusiastic about a particular field of study or talent area and aspire to perform at a consistently high level. In order to be eligible for Level III, students demonstrate readiness as well as the ability to perform or produce at a level beyond the expectations for the average student of the same age. They sustain their participation over extended periods of time, devoting considerable effort to study, practice, or preparation. The focus shifts from foundation-building or exploratory activities to instruction, differentiated to match maturing strengths and talents.

Level IV programming responds to the exceptional needs of a Few Students who have outstanding records of expertise, experience, dedication and passion. Student involvement in their chosen field approaches the “professional” level of performance, accomplishment, self-management and self-development. Students often share the results of their work, including authentic products with others in their field and with the public. They may receive recognition and support for these products with advanced academic credit, publication, having their work patented, performing professionally, and selection for highly competitive programs or groups.
Field Experience, Evaluation, and Action Research

Research and evaluation are difficult but important tasks for gifted and talented programming. These include efforts to determine the quality, effectiveness, or impact of programming and to document the results or outcomes of programming. Complex outcomes of talent development programming are not easy to measure, and in LoS programming, a sense of incompleteness can also be healthy—recognizing that accomplishing one’s goals and attaining excellence in one area of programming is an ongoing process. The full impact or benefits of programming for students will require an extended period of time to become evident. There are also many unique challenges in evaluating LoS programming, in contrast to traditional gifted programming approaches. These include:

1. **LoS programming does not have a single, unitary focus that can be defined as a “treatment” or experimental condition.**

   LoS programming strives to be integrated as seamlessly as possible into students’ total school experiences, rather than existing as a separate program with a fixed, “stand alone” identity.

2. **LoS programming serves a shifting population of students.**

   In the LoS approach, depending on students’ unique characteristics and needs, many students may be served at one or more levels, unlike traditional programs that deliver a defined services to a fixed group of students who are “in or out.”

3. **LoS involves a variety of different services that may not be directly comparable.**

   LoS programming involves a broad array of diverse activities and services, unlike traditional programs, in which schools provide the same services for all students.
who are “in the program.” In LoS programming, services may also vary substantially in location and duration, unlike traditional programs in which all participating students are served for specified times and usually in common locations.

4. **LoS involves many different people in different ways.**

   In the LoS approach, many people, from within or outside the school, with different expertise and roles, may be involved in providing services, rather than having a program that is delivered by a fixed set of G/T teachers.

5. **LoS programming addresses varied outcomes and results.**

   In the LoS approach, curricula, goals, and objectives vary in relation to students’ strengths, talents, and needs, rather than having a specifically defined curriculum and comparable objectives for all participating students.

6. **LoS programming strives to be “woven” into the school.**

   The LoS approach emphasizes integrating the four levels of service into the school’s total program. The more this leads to “invisible” or seamless programming in operation, some people may be unaware that it is operating at all, compared with highly “visible” pull-out or resource programs that are always identifiable in operation.

   Given both the importance of evaluation and its complexity, we have carried out a variety of initiatives to document its effectiveness and impact. These have tended to use naturalistic evaluation approaches that extend beyond traditional designs from experimental research.

   Our field experiences, evaluations, and action research to date have involved several structured initiatives. These focused on participating schools’ documentation of services offered and student involvement at each level of service; structured evaluations using survey data from multiple stakeholders; development of case studies to
document impact at the student, school, and district levels; and, documentation of impact through logs, committee records, and work or product samples in a variety of other forms, including samples of letters or memos to or from varied stakeholders, brochures, or publicity pieces and media reports, and presentations at professional conferences.

The initial development and implementation of the LoS approach (initially known as the “IPPM” approach, or Individualized Programming Planning Model) began in 1979 - 1981, through a collaborative project with the Williamsville, NY Central School district in work sponsored by a state grant and later extended through a USOE graduate training project. Additional pilot implementation work with the IPPM approach took place in the Orchard Park, NY schools, and subsequently, several other school districts in the greater Buffalo, NY area participated in a number of pilot implementation activities. In 1986-87, training and support for gifted programming with an inclusive emphasis took place in a state-supported training project in New Hampshire. The transition from IPPM to the current “Levels of Service” (LoS) language to describe our approach took place in 1990 - 1992, and was facilitated by a new statewide training initiative (sponsored by a Javits Grant) in North Dakota in 1992. Through the first decade of implementation, participating school districts and state education agencies carried out several independent, unpublished evaluation projects. These evaluation efforts focused on obtaining data to guide program implementation and improvement at the local level, or documenting the effectiveness of training and professional development initiatives, rather than on “testing” the IPPM/LoS approach in comparison with traditional approaches or alternative models or evaluating the effects of the approach across implementation settings.
The Levels of Service (LoS) Approach

Since 2003, the Center for Creative Learning and the Indiana Department of Education have partnered to establish, prepare, and support the LoS Project, an initiative that involves multiple districts throughout the state. The project involves training and supporting teams of school leaders to guide LoS implementation in their schools or school districts. Over a multi-year period, the project’s activities have evolved from providing initial awareness and training for key teams and administrative leaders, to guiding and supporting implementation, to the project’s current focus on establishing and supporting several model or demonstration sites for LoS implementation. (Some participating sites have been involved in the project for three years, and others for two years, since new sites were added after the initial pilot year. Continuing work now focuses on six sites that have been most actively involved in the initial activities and are now emerging as potential model demonstration sites. These range from small, rural school districts to large, urban settings.) During the first three years of the project, our activities have included providing:

- Four to six days of training each year for teams of key leaders from participating sites, including presentations, structured activities, and opportunities for networking among the participating sites. Training included the LoS approach and its implementation, problem solving methods and tools (for adults and for student applications), style assessment and its implications for adults and students, Needs Assessment and climate assessment, and other topics to facilitate effective LoS implementation by the participating sites.

- A variety of books, planning guides, support media, data collection resources, and other support material for each site.
The Levels of Service (LoS) Approach

- Awareness presentations for school and district level administrators from participating sites.
- On-site consultation and support for each site by a project staff member (augmented by structured contacts through phone, mail, email, and internet support).
- Collaborative involvement among project staff and participating teams in the development of new resources and in presentations at state and national conferences.

The Project’s participating teams have reported a variety of successful outcomes. The following seven examples are representative of the efforts and experiences of the project’s participants. (Contact the Center for Creative Learning or the G/T consultant’s office at the Indiana Department of Education for more information about the participating sites and the contact information for the emerging model demonstration sites.)

1. The participating districts created and adopted a variety of mission statements or other professional commitments that embraced the LoS approach. For example, one district wrote:

   We believe that all students have unique interests and strengths. Our mission is to recognize, nurture, and enhance the development of those talents by providing educational experiences that will allow students to pursue their interests and reach their greatest potential.

2. The participating districts have provided LoS awareness sessions, professional development workshops, and extended courses in a variety of formats for staff members, parents, Board of Education members, and administrators. Each district reported either new or extended efforts to train staff members in the basics of
differentiated instruction. For example, one participating district offered a series of in-service options on “Differentiation through Levels of Service.” Workshops included “Differentiation 101”, “Learning through the Habits of Mind”, Levels of Service 101”, “Levels of Service: Levels II-III Options,” and “Creating Critical and Divergent Thinkers Through Rigorous Instruction.”

3. The project schools have disseminated information with their staff and in their community by newsletter, memo, as part of the School Improvement Planning Process, newspaper stories, staff book study projects, the creation of DVD and video resources, and community-wide “talent fairs.”

4. Training sessions also addressed issues surrounding the use of data analysis to identify student needs. Through their involvement in the LoS approach, several sites have modified or extended their use of student achievement assessment data to determine students’ specific areas of strength as well as areas of need. They have expanded their ability to share information, strategies, and practices designed to nurture the talents of all students (and to organize plans using the LoS framework). Districts have reported enhanced ability to understand services that had already been offered as well as provided expanded and improved opportunities for a larger number of students. In a more naturalistic and qualitative approach to student assessment and planning, one site has instituted a Talent Fair featuring workshops in several different domains: music, dance, art, writing and technology. Interested students sign up for one of several workshops in specific areas and, after receiving instruction, work alone or in groups on a product or performance that is presented during an annual Talent Fair, an opportunity for sharing and celebration that is open to all community members.

5. A number of districts have incorporated the responsibilities for LoS implementation and program evaluation into their already existing planning
committees (relating to gifted education and/or to school improvement). Several sites have worked with their committees, for example, to identify and document services at all four levels at the elementary, middle, and high school levels. Sites have reported benefits for programming, coordination of activities across schools, enhanced participation by staff and community members, and improved functioning of their committees.

6. Sites have reported gains in their ability to plan and carry out an expanded array of academic and enrichment activities, with significantly expanded opportunities for students to discover, develop, and apply their strengths, talents, and interests, and for greater opportunities for effective parent and community participation in talent development. These have included opportunities for people to share their expertise in topics as diverse as knitting, Tae kwon do, Wrestling, Race Car Driving, Flying RC Planes, Culinary Arts, Civil War and the War of 1812, singing, and lawnmower engine repair!

7. Implementation of the LoS approach has also had a direct impact on the number of students that a school or district was able to service, and the quality of the students’ school experience. Several of our early pilot districts, as well as a number of districts in our current project, realized that a limited number of students were being served on an “all or nothing” basis that was inadequate. Often, for example, they found that they completely overlooked or disregarded many students with specific talents and sustained interests, that they denied some students access to valuable services because of arbitrary “inclusion/exclusion” or headcount criteria, or that they placed some students in programs that were not well-suited to their specific characteristics and needs. Existing programs sometimes led to competition and conflict among teachers, caused students to miss educational and enrichment activities occurring in the regular
classroom, and caused some students to feel “disconnected and excluded.” The districts often reported dramatic increases in the numbers of students receiving services (and in the quality of the “fit” between the students’ characteristics and the services offered). One site reported, for example, moving from serving 35 middle school students in a single content area program to programming for more than 600 students in a variety of different activities. Opportunities for students included: Academic Super Bowl, LA Research; Show Choir; Reading Group; Service Learning; Spelling Bowl; and Novel Study. Rather than viewing their efforts as “diluting” services to gifted students, the staff and community recognized that valuable enhancements had been made in providing appropriate and challenging talent development opportunities for their students. Another site’s elementary program, in the words of its team leader, “blossomed from serving 27 students at two elementary schools to serving upwards of 68 at just one of our elementary schools. Teachers who once could not bring themselves to tier lessons are now serving numerous levels of students within one classroom. Students no longer get a “GT shot” one day per week. Students are being academically challenged everyday within their own classrooms! … Our high ability students no longer pass their time in class reading books when they finish their unchallenging assignments. Students are now challenged at their own level and excel to their potential on assignments and testing. … Our identification process has become more fluid. Students receive services when they need them, not just if they are [labeled] gifted once a year. We have impacted many more students in their own instructional levels. This in turn has made a positive impact on standardized test scores.”

8. LoS sites have also reported important advances in their ability to identify and respond to the advanced needs of individual students (Level Four services) than would have been possible to do when relying on traditional pull-out or resource room models.
The Levels of Service (LoS) Approach

Most schools, from the initial IPPM pilot years to contemporary LoS model sites, have developed and documented numerous case examples of individualized Level IV services for students at all grade levels. Treffinger, Young, Nassab, & Wittig (2004) provided examples of case studies at all four levels of service, and a variety of new case descriptions are currently under development.

As the participating sites gain in experience and confidence in LoS implementation, and as work progresses on the development of demonstration sites, this Project is prepared to provide significant opportunities for more extensive, quantitative evaluation and documentation. We have created an extensive collection of data-gathering instruments to support those efforts.

In addition to the early IPPM/LoS pilot projects and the current Indiana LoS Project, other related talent development initiatives have also been conducted. For example, talent development, integrated with training in Creative Problem Solving for adults and students, with a major emphasis on serving at-risk children and youth, has also been the focus of a series of innovative multi-year projects involving a consortium of several Canadian school divisions (e.g., McCluskey, Baker, O’Hagan, & Treffinger, 1995, 1998). Educators and researchers in these projects have documented a variety of positive outcomes for students, including attaining academic success, gaining personal confidence to engage productively in activities in several talent and vocational areas, and preparing to engage in future studies rather than “disconnecting” from the educational process (McCluskey, Baker, Bergsgaard, & McCluskey, 2001; McCluskey & Treffinger, 1998). In one study, deliberate efforts to engage at-risk youth in talent development and CPS skills and experiences led to significant reductions in contacts with the juvenile justice system and in recidivism rates among participants who had previously had such contacts (Place, McCluskey, McCluskey, & Treffinger, 2000).
The Levels of Service (LoS) Approach

In summary, based on field experiences, program documentation, and action research from schools in several states and two countries, spanning more than two decades, we conclude that implementation of the LoS approach has had positive effects on students, teachers, and communities.

Implementation Considerations

Through the combination of experience in many school settings, observation, interviews, evaluation projects, and action research, we can now identify a number of "keys to success," or considerations that contribute to the likelihood of success in implementing the LoS approach. As a foundation, it is important to keep in mind that the LoS approach involves levels of services, not level levels of students. LoS is a framework for organizing and delivering programming for talent development; it is not a description of different groups or categories of students or levels of "giftedness." In implementing LoS programming, our 13 guidelines for success are:

1. Commitment to the vision. There is no doubt that one of the most important factors contributing to success in implementing the LoS approach is commitment to the vision of flexible, inclusive, individualized programming to nurture students’ diverse and varied strengths and talents. The entire framework is built upon assumptions and values about student’s strengths and talents that must be recognized and accepted as a challenge, and an opportunity, by the school, not merely given lip service through empty phrases in "philosophy statements." The school (and to a large extent the supporting community) must be willing to address these values in theory and in action.

2. Explicit Plan of Action. Effective programming does not fall into place by luck or accident; it is the result of very deliberate, extensive planning. Schools or districts that are successful in blending regular education and talent development programming
have invested from six months to several years of careful efforts in developing and implementing plans for gradual development of programming over at least a three to five year period.

3. The regular program must be healthy. Programming for talent development cannot take the place of all the things that we recognize should be happening in any school but fear may be missing. It cannot successfully bear the sole responsibility of striving for excellence or attaining more responsive and stimulating instruction for all children, even though it will contribute to such goals. We have found that the healthier the regular program, the easier it is to initiate LoS programming and the more successfully LoS programming can be integrated with the total program. A healthy regular program seems to be characterized by a high level of activity and support for the six general programming areas described in this chapter. In a healthy regular program, administrators and teachers not only express their interest and support of these areas, but observers can readily detect specific activities that represent them. A healthy regular program is evident, not only in what people say (because no school says to its visitors, “This is a pretty grim and dismal place”) but also in what they do. It does not take very long or very detailed observations to recognize healthy, individualized regular programs.

4. There is effective needs assessment. The role of deliberate, structured needs assessment should not be overlooked in the development of effective programming, although it is important to ensure that the task is properly structured. After a decision to develop LoS programming has been reached (or mandated), it is not really "needs assessment" to ask the staff whether or not they support the concept of talent development. Nor is it productive to ask staff their preferences for various models, prototypes, or procedures when there is no reason to believe that there is a
sufficient level of information or understanding to give meaningful evaluations. Polling
the staff about their personal opinions concerning enrichment or acceleration, for
example, without detailed explanation and in-service training is not likely to provide
useful information for program planning or development. Several successful districts,
on the other hand, have initiated their programming efforts by engaging staff and
community members in a structured program of reading, study, discussion, and
observation prior to embarking on a commitment to develop an implement LoS
programming. They have also used a variety of structured tools for needs assessment
and climate assessment (e.g., Treffinger, Young, Nassab, Selby, & Wittig, 2004).

5. There must be a core support group. Successful programming requires a
nucleus of supportive, actively involved teachers with whom program design and
implementation can begin. These core participants can also help to build support and
involvement in the program among other staff members.

6. There must be ongoing, professionally sound in-service. Many
teachers have never had any assistance or training in recognizing and responding to the
strengths and talents of students, differentiating instruction, assessing learning styles,
or nurturing thinking skills. In addition, teachers must contend with large classes and
limited resources. Each year seems to bring new mandates to serve many different
special populations in the regular classroom, to respond to new curricular imperatives,
and to address declining test scores, equality of education, and the press for excellence.
Small wonder that countless in-service days now include popular programs on stress
management and teacher "bum out!" There is often a tendency for teachers to say,
"Dealing with talent development is just one more in the parade of special interests and
concerns bombarding me from every side; this, too, will pass!"

We cannot avoid or dismiss these concerns. First, we must make efforts to insure
that LoS programming does not turn out to be only a fancy term for "dumping" the entire responsibility on the individual teacher. This means commitment of resources to support personnel, training, and materials. But, equally important, there must be a commitment to a high quality, professionally sound staff development. This includes involving the staff in setting their goals and concerns, providing opportunities for staff input in planning activities and courses, committing "real" time (i.e., time during the school day) to work, encouraging teachers to develop projects that will be directly useful and applicable in instruction, and evaluating rigorously the outcomes and impact of the projects.

7. **Administrative leadership is essential.** To implement the LoS approach, it is essential to have administrative leadership and support, both at the central office and the individual building levels. In districts in which there have been extensive efforts to integrate LoS with other components of the school program, there has been extensive involvement, commitment, and support by central office administrators. Central administrators, and often School Board members, too, have been involved in formulating the philosophy and goals for programming, in planning committees, and in developing policies and procedures. At the building level, the principal is a critical force in determining the success of programming efforts in his or her building.

8. **The individual building is the critical unit of intervention.** Although district-wide planning and coordination of policies, activities, and resources are important and valuable, the individual building is the most important arena in which programming occurs. The principal and staff of an individual building can work together to create and maintain a favorable climate, to develop and implement a wide range of options and alternatives and to support and promote effective programming.

9. **Specialized professional services are needed.** There must be a strong, well-
The Levels of Service (LoS) Approach

trained, well-accepted professional who has responsibility and time to devote to LoS programming. This does not merely mean time to provide direct services to children; we must not be trapped into thinking that the "gifted program is what the gifted teacher does to a certain set of students in the gifted room each week." The specialist, who is sometimes referred to as a "catalyst" or a “talent development specialist” in the LoS approach, provides important services for the staff of the school. He or she provides assistance as staff, parents, and community members (and often the students themselves) search for students’ strengths and talents (which we describe as “talent spotting”), analyzing the needs of students, locating appropriate resources, and helping to arrange or “orchestrate” many different kinds of activities and services that extend beyond the regular classroom program. The LoS programming specialist works as a "consultant in residence" with the staff, to help them provide for talent development among their students and to help arrange a variety of other learning opportunities. He or she must have enough time to be present in a building to provide these services and to be viewed as an integral part of the instructional program; it is not a position involving “dropping into the school” once a week to do a few activities with selected students. Ideally, there may well be a full-time catalyst in a building, although when resources do not make this possible, a part-time catalyst may be able to work closely with an on-going building committee to insure continuity of activities and services to students and teachers.

10. There must be willingness to deal with "squiggliness." In developing an individualized approach to programming, many problems and challenges will inevitably arise that will require patience, tolerance of ambiguity, the ability to cope with difficulties, the strength to deal with change, and the tools to facilitate effective problem solving. A well-blended program is not a neat package that can be carefully
The Levels of Service (LoS) Approach

constrained · and controlled; it involves the skills, commitments, and contributions of many people from within and outside the school, and it addresses the needs of many students in a variety of ways. It may not always operate smoothly, especially during the early stages. It will be necessary to make changes and adjustments and to adapt to unusual situations and challenges that will always arise. It will also be necessary to explain the approach patiently to those who expect only to see one group of students, with a single, stereotyped set of characteristics and needs, meeting together in a single room doing their "gifted lessons."

11. Hard work will be required. It is not easy to achieve a comprehensive school program in which the strengths and talents of students are recognized and nurtured in many different ways. The process of program development is long and arduous. There may be resistance or opposition from unexpected sources and for unanticipated reasons. There will likely be unevenness of support and participation by staff members for a variety of reasons, many of which are not under your control and which are unrelated to your program. But there win also be benefits and victories with the students and with the staff. These will make the job worth the effort.

12. Collaboration and communication are essential. LoS programming services may vary among students and across buildings within a district. As a result, collaboration and effective communication are critical factors in successful programming. LoS services may involve a variety of other people and locations throughout the community. Many activities involve the support and coordination of a number of people and groups. Some services that might require the assistance of a specialist in gifted education in one building or in working with a particular teacher in a certain building might be readily conducted by a classroom teacher in another setting without such assistance. The specific interests and skills of individual teachers and their
comfort or confidence in conducting certain activities can be expected to vary considerably, and each building within a school district may have a unique character or style. The activities subsumed by LoS programming can therefore be expected to be as diverse as the students, teachers, administrators and communities involved.

13. Document, evaluate, and be ready to modify your programming. The nature and operation of the LoS approach involves programming that is dynamic and varied, rather than uniform and static. Over time, LoS programming evolves, grows, changes, and becomes stronger through both continuous improvement and commitment to innovation. This calls for carefully planned evaluation efforts, involving a variety of different sources of data, and extending over several years, involving many stakeholders. The purpose of careful, ongoing documentation and evaluation is not only to make judgments about the program or determine its adequacy, but more importantly, to provide information that will be useful in modifying and strengthening programming.

Resources and References


The Levels of Service (LoS) Approach


The Levels of Service (LoS) Approach


The Levels of Service (LoS) Approach


Discussion Questions
to promote review, reflection, and analysis

1. Gather a group of colleagues from various grade levels and/or subject areas at your school. Provide markers and Post-It® notes for each person. Set up eight sheets of chart paper, with two sheets for each of the four Levels of Service. For each level, mark one sheet, “Present Positives,” and the other, “Wish List.” Now, generate as many programming examples as possible for your school. “Present Positives” are activities or services you already offer for students. The “Wish List” identifies improvements or new activities or services that you might create and carry out.

2. Review each of the 13 implementation guidelines at the end of this Chapter. Assess the extent to which your school’s programming already meets those guidelines, and identify the steps that you might initiate to meet any of the others.

3. Construct a list of the key features of the LoS approach, and another list of the key features of any other model or approach in this book. Identify the points on which both approaches are similar or are in agreement. Next, identify the ways they differ, and consider why those differences might exist. Finally, list ways that elements from both approaches might be integrated to lead to improved or more innovative programming in your setting.

4. Think about your own personal strengths, talents, and interests, and reflect back on your own personal school experiences (with an emphasis on your K-12 education). Did you experience services in any of the four levels of services, whether those experiences were informal or intentional? What was their impact on your personal growth and talent development? If your school had been implementing the LoS approach, what alternative or additional learning opportunities might have been valuable for you?

5. Consider the challenge of implementing the LoS approach in your setting. What would your administration, staff, parents, students, and community be most enthusiastic about supporting and doing? Why? What aspects of LoS might be most difficult for them to support and implement? Why? How would you plan for the gradual implementation of LoS?