PROGRAMMING FOR TALENT DEVELOPMENT:

EXPANDING HORIZONS FOR GIFTED EDUCATION

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The only man I know who
Behaves sensibly is my tailor; he takes
My measurements anew each time he sees me.
The rest go on with their old measurements
And expect me to fit them.

George Bernard Shaw (1856-1950), Irish playwright and critic.

Those of us in the field of Gifted Education need to be more like George Bernard Shaw’s tailor. We must develop forward-looking programming options for all students, and especially for those with high potential whose needs must be met in appropriate and flexible ways. The 21st Century presents unique challenges and will require answers to questions that have not yet been formulated. We know that political, business, and religious leaders worldwide are clamouring for individuals who can work collaboratively with others, think critically and creatively, and solve complex problems. If our challenge is, as often expressed, to ‘prepare the leaders of tomorrow,’ the task has never been more formidable.

Students - their characteristics, their strengths and talents, and their needs for instructional services that are stimulating and satisfying - must be the central focus of the next generation of programming that will carry us, in the words of this book’s editors, ‘beyond gifted education’.

After nearly four decades of involvement in the field, the heart of our vision for the future rests in recognising and nurturing students' unique strengths, talents, sustained interests, and needs rather than in labels and categories which anoint a few students as ‘gifted’ and exclude all others. 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?’ (Treffinger & Selby 2007).

There are many ways to expand, extend, or enhance learning opportunities for students. We use six broad themes or areas of educational programming as starting points for planning programming for talent development. In each of these six areas, many provisions can be made quite effectively in the mainstream classroom (e.g., Treffinger et al. 2004; Treffinger et al. in press), although effective programming can also extend beyond the regular classroom and outside the walls of the school. The six themes follow:

**Differentiating basics.** Concern for differentiating basic instruction recognising 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.

**Effective acceleration.** Students who display strengths in any area need access to teachers, mentors, and materials for advanced learning opportunities. Through advanced curricula and deliberately planned accelerative strategies, content instruction can become more stimulating and challenging for learners.

**Appropriate enrichment.** Enrichment is another essential attribute of programming for talent development. Rather than ‘more of the same’, enrichment involves the need to explore new and
varied topics, to develop thinking and research skills, and as Renzulli (1977) proposed, to pursue individual or small group investigations of real problems.

**Independent, self-directed learning.** Fostering of effective, independent, self-directed learning, is another important component of talent development programming (e.g., Treffinger & Barton 1979; Treffinger 2003). Students need to learn how to define goals, locate and use appropriate resources, plan appropriate learning activities, create and evaluate products and present or share their work.

**Personal growth and social development.** The affective and social-emotional needs of students should also 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, a positive regard for the processes of learning and inquiry, and a commitment to a guiding set of moral and ethical values.

**Career exploration with a futuristic perspective.** As learners discover and develop their talents, they will also need support in exploring career opportunities and information, and in learning how to deal effectively with rapid change and the uncertainty of the future.

**Three foundations of programming for talent development**

Our work on meeting the challenge of expanding, extending, or enhancing learning opportunities for students, spanning more than four decades of theory, research, and practice, draws upon three important foundations. These are: a contemporary, inclusive programming model; attention to differentiation of instruction that is responsive to personal creativity characteristics, learning style, and problem solving style; and deliberate instruction in productive thinking and change management. Taken together, these foundations will guide us in our efforts to enhance, enrich, and strengthen the fabric of 21st Century practice in both gifted and general education. In this
chapter, we offer a brief overview of each of these foundations and a discussion of their importance in understanding gifted education as a complex, evolving, and dynamic educational concept.

A contemporary, inclusive programming model

The Levels of Service (LoS) approach (Treffinger 1981, 1998; Treffinger & Selby 2007; Treffinger et al. 2004; Treffinger et al. in press) is a contemporary, flexible, and inclusive model for nurturing the strengths and talents of students through the collaborative efforts of the school, the home, and the community. Based on more than two decades of research, development, and practical application, the LoS approach serves as a framework for ensuring appropriate, challenging, and developmental learning experiences for high-ability students and for differentiating instruction, recognising strengths, talents, and interests, and nurturing the potential among all students. From its origins as the IPPM approach (Individualised Programming Planning Model) (Treffinger 1981) to its contemporary expression today, our approach calls upon educators to consider the most appropriate decisions for the student (Colon & Treffinger 1980; Treffinger 1998; Treffinger et al. 2004) and seeks to guide them in designing, organising, and carrying out effective educational responses.

The LoS approach involves four levels of educational programming or services that serve varying numbers of students, based on the individual student’s strengths, talents, and sustained interests (rather than on inclusion or exclusion of students from a single ‘gifted program’ based on a fixed test score or criterion). LoS involves a variety of programming activities or services, building on student interests, problem solving, and learning style preferences to differentiate instruction and curriculum. Let us consider each of the four levels of service; the model is depicted graphically in Figure 1.
Level I services reach all students, providing many and varied ways to engage the interest and attention of learners. Level I involves the exposure of all students to appropriate and challenging experiences that create a foundation for talent development, such as higher-level thinking, problem solving, decision making, research and inquiry, and high-interest content. Level I also involves assessing and clarifying students’ personal characteristics, interests, problem solving and learning style preferences…helping parents, teachers, and the students themselves to understand their strengths and to clarify the ways in which they can be at their best. Level I activities, which are generally brief in duration, can readily be accomplished in the classroom or through specific events (such as assemblies with guest speakers or field trips). They expose students to many different topics and experiences in order to clarify strengths, talents, and interests for subsequent development.

Level II services invite students to participate in activities through which they can verify and extend their strengths, talents, and interest areas. We might say that ‘…anyone might, but not everyone will’ participate in any given Level II activity. They involve opportunities for students to explore themes, topics, or talent areas about which they have an initial curiosity, or for which they demonstrate interest or aptitude as observed by parents, teachers, or others. Level II activities provide students with experiences that may be deeper, more challenging, or sustained over a longer period of time than Level I. Students can now put their skills and interests to the test, confirm or disconfirm their interest in future work in a specific area, or identify other new (or spin-off) directions to pursue. At the same time, Level II activities can be sufficiently finite in duration that a student is not required to make a long-term commitment to an area that might not sustain their interest or enthusiasm.
Both Levels I and II serve as a ‘staging platform’ for the emergence and development of specific talent areas for any student. They are essential to the overall talent recognition and development process, because they can help, create or clarify promising opportunities and directions for students to pursue.

In Levels III and IV the focus shifts to linking an increasingly smaller number of students with programming opportunities that provide highly personalised responses to their unique strengths, accomplishments, and growing expertise. The services students need at Level III or IV often build directly on, and extend significantly, previous Level I and Level II experiences. The focus also shifts from foundational group opportunities to small group and individual opportunities that respond to the unmet needs of specific students.

Educators considering Level III or Level IV services for students, examine specific criteria that relate directly to (or identify) the students’ unmet, high-level needs in any talent area or domain, seeking demonstrated student interest, motivation, preparation, and readiness to engage in the activity. Evaluation may be based evidence of the student’s ability and/or achievement in the specific content or talent area of the proposed programming, rather than on generic ability measures and labels or arbitrary ‘cutoff” scores. Level III offers services within the school or through other agencies to help students reach a higher level of accomplishment and build a commitment in a particular talent area or domain, and may involve collaborative efforts among schools to make advanced offerings practical from a scheduling or cost perspective.

Finally, Level IV recognises and responds to an individual’s ‘blossoming expertise,’ providing individually tailored services that help the student rise to an outstanding level of talent development, expression, and productivity. The challenges of responding to the programmatic needs of a student who demonstrates the need for Level IV services are unique, and require the
collaboration of student, parent, school, and community resources. Often it involves the development of a deliberate Talent Development Action Plan. In some cases this includes making exceptions to standard rules and procedures, crossing traditional age or grade-level (or school) boundaries and doing whatever may be necessary to ensure that the student’s needs are being met.

The benefits of providing an appropriate, challenging, and developmental educational opportunities across the four levels of service far outweigh any inconveniences that educators incur. We believe that implementation of the LoS approach does not imply more work for educators, but enables them to discover (or, re-discover) the motivation, commitment, and rewards that initially led them into teaching.

**Differentiation responsive to creativity characteristics and styles**

When we look at talent development from the perspective of the LoS approach, it is essential to recognise that, over several decades of educational and psychological theory and research, our conception of talent, intelligence, and giftedness has expanded significantly (e.g., Reis & Renzulli 1982; Treffinger, Young, & Nassab 2005), so that it is essential today to hold a multi-dimensional perspective of those constructs.

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 (1959, 1967) and C. W. Taylor (1968, 1985) 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 emphasised 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 cut-off point. The LoS approach builds on the need to recognise that talents are complex and multifaceted. Our emphasis on bringing out the best in all students also takes into account our understanding that, within any student, personal creativity characteristics and style add uniqueness, breadth, and power to the construct of gifts and talents (Selby, Shaw, & Houtz 2005). We ask: ‘How do we help individuals to grow in the knowledge of themselves as learners?’ ‘How might we help individuals and groups to work together more efficiently and harmoniously?’ ‘How might educators tailor their instruction
to accommodate the emerging needs of a greater number of students?’ Thus, our work also involves studies of personal creativity characteristics, learning styles, and problem solving styles. Treffinger et al. (2002) reviewed research on personal creativity characteristics as part of a larger research project on creativity assessment. In so doing our efforts shifted from asking how creative one is, towards asking how an individual might be as creative as possible. We identified four categories into which we clustered creativity characteristics: Generating Ideas, Digging Deeper into Ideas, Openness and Courage to Explore Ideas, and Listening to One’s ‘Inner Voice.’ We affirmed the importance of assessing such characteristics in many ways (e.g., through formal and informal assessment, self-report and rating tools, and authentic performance data). This was carried out less for the purposes of labelling and selection, and more for the important tasks of designing effective, appropriate instruction and building meta-cognition and self-understanding of the students’ strengths and talents.

Theory and research on learning style (e.g., Dunn 1993, 1998), while not universally embraced, yields valuable and useful insights into the varied ways in which learners prefer to function when learning new and challenging material. Research on the Dunns’ model indicates, for example, that a number of style factors (such as low structure, learning alone (unless with others who are high achievers), and learning in a variety of ways) often differentiate high-ability students from other age peers (Dunn, Dunn, & Treffinger 1992; Dunn 1998; Selby & Treffinger 2003). Although there was considerable variation within and across talent domains, cultures, and tasks, Dunn (1998) reported that students with strengths in a specific talent domain demonstrated similar learning preferences across cultures. Awareness of learning style offers individuals a deeper understanding of themselves as learners, and provides educators with opportunities to
develop their students’ creative productivity in personal and effective ways (see www.learningstyles.net).

Problem solving styles are consistent individual differences in the ways people prefer to generate ideas and focus them in order to gain clarity, produce ideas, and prepare for action when managing change or solving problems (Selby et al. 2004). Problem-solving style involves three dimensions and six specific styles (Treffinger et al. 2007). ‘Orientation to Change’ deals with an individual’s preferences for responding to and managing structure, authority, and novelty when solving complex problems or managing change. It includes the ‘Explorer’ and ‘Developer’ styles. Explorers tend to prefer highly original approaches and solutions, often find external structure limiting, and seek distance from authority. Developers tend to prefer new solutions that are clearly workable and add value to the current reality, and are comfortable working with the guidance of structure and authority.

The second dimension, ‘Manner of Processing’, addresses preferences for turning first to one’s own inner resources (an ‘Internal’ style) or to draw early and often on interaction and the resources of others (an ‘External’ style) in solving problems and dealing with change. The ‘Ways of Deciding’ dimension deals with preferences for a ‘Person’-oriented style (emphasising relationships or harmony) or a ‘Task’ style (emphasising the quality and demands of the task) in problem solving and change management. By understanding and using knowledge about problem-solving style, individuals choose issues and challenges and apply strategies and tools in ways that draw upon and nurture their strengths and talents. Team members find ways to collaborate successfully across differing styles and to appreciate the strengths each person brings to the process. Educators can use problem-solving style data to differentiate instruction and to enable learners to discover and apply their problem-solving skills in powerful ways.
Earlier in this section we posed three questions, each of which assumes that our goal is to bring out the best in all students. Because talents evolve over a period of time, in different circumstances, and within a variety of talent domains, our responses as educators must take into account personal creativity characteristics, learning styles, and problem-solving styles.

**Deliberate instruction in productive thinking and change management**

The third component of the foundation for our work on responsive, contemporary programming involves deliberate instruction in productive thinking (including both creative thinking, critical thinking, and Creative Problem Solving (CPS)) and the application of those skills to complex, open-ended tasks and challenges, and to change management. 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, using the Internet effectively and wisely, learning basic procedures of data collection and 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 processes is also important. 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. There is also a second set of tools - focusing tools – to help individuals or groups to produce many, varied, or unusual possibilities, to develop new and interesting combinations of possibilities, or to add richness and detail to new possibilities. Brainstorming is an example of a generating tool, although there are also several other generating tools (see, for example, Treffinger & Nassab 2000, 2005). It also includes a second set of tools to help individuals or groups analyse, organise, refine, develop, prioritise, evaluate, or select options from the set of possibilities they have at hand, or ‘focusing’ tools. Students can apply these basic tools for generating and focusing options independently, or teachers can easily incorporate them into a variety of content or curriculum areas. For other tasks - opportunities and challenges that are complex, ambiguous, important, and open-ended - individuals and groups often need to employ a systematic approach to attain clarity about the problem, to generate possible solutions, or to prepare for action and successful implementation. These challenges call for applications of the Creative Problem Solving (CPS Version 6.1™) framework (Treffinger, Isaksen, & Stead-Dorval 2006; Treffinger et al. 2006). The CPS framework emphasises the importance of a natural, descriptive, and flexible approach to problem solving (in contrast with the prescriptive, sequential approach of traditional ‘step/stage’ models). CPS includes three process components: ‘Understanding the Challenge’ (examining opportunities in constructive ways, exploring data to clarify the central themes and issues, and framing a specific problem statement), ‘Generating Ideas’ (producing many, varied, unusual, and detailed options for responding to one’s challenge), and ‘Preparing for Action’ (developing or strengthening promising solutions and building acceptance by others with specific action
commitments). The CPS framework also includes a metacognitive or management component, ‘Planning Your Approach’, to guide individuals and groups in determining the appropriateness of CPS for a specific task or challenge and to enable them to analyse and select relevant and appropriate process components to apply.

Productive thinking and CPS can be helpful to educators who work with students of all ages and across many content areas with students in regular education, special education, and gifted education (Isaksen & Treffinger 2004; Treffinger & Isaksen 2005). Helping students to learn and apply practical tools for generating ideas and for focusing their thinking, in addition to applying the components and stages of CPS, will enhance student learning in powerful ways that extend beyond memorisation and recall. Even in times in which there is great emphasis on basic learning and doing well on standardised tests - indeed, particularly in such times - it remains important to balance the emphasis between process and content in teaching and learning.

Students who are competent in the basics of productive thinking and CPS, as well as the basics of content areas, will be lifelong learners, creators, and problem solvers who can live and work effectively in a world of constant change. (You can download a PDF summary of our contemporary CPS model and find additional resources at the CPS area of our website www.creativelearning.com)

**Summary**

Shaw benefited each time his tailor took his measurements anew. For us to meet the challenges and opportunities of the decades ahead, we, too, must learn from that metaphor. Gifted education is - and always has been - a dynamic, constantly evolving discipline, in which both new knowledge and new questions continue to proliferate. By adopting natural, flexible, inclusive programming models, understanding our own styles and creativity characteristics (as well as
those of our students), and arming ourselves with powerful, but practical tools for solving problems and managing change, we will be confident and competent to meet the future and give it shape and direction. A recent quote, of un-cited origin, posed both the opportunity and the challenge quite well:

"Innovation is not found in the middle of the status quo

...Innovation always starts at the edge...... On the edge, the

landscape is uncertain and unstable...... But the edge is also home
to the beginning of the future"

References


Figure 1: The Four Levels of Service

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