Developing Competent Highly Capable Learner: Designing Quality Programs for Gifted Students

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Designing quality program services for our highly capable/gifted students may challenge our conventional notions about what constitutes a "gifted program." Fundamentally, three questions need to be addressed: What are to be the student outcomes? How do we use research based models to produce those outcomes? How do we know what we are doing is getting us what we want and, more importantly, what students need? Conceptually, how do the various pieces fit together? The following discussion describes an approach to designing a program which is based upon student goals, learning needs and outcomes.

When considering the needs of highly capable/gifted and talented students, it becomes most evident that each student is very different and that such differences engenders complexity. Thus, when developing educational services for highly capable/gifted students, educators are challenged to consider all aspects of development: intellectual, social, emotional and physical. Concurrently, valuing the asynchronous nature of such development is critical to each student being a successful learner. Thus, early in my career as I became involved in developing programs for gifted students, both preschool and school age, I asked myself the question: What is the most crucial thing we as educators can do for such students in order that they may each become competent capable independent learners? What are the skills and areas of expertise a student needs to master in order to be free to pursue, to study, to investigate, to research and to create in those areas of greatest interest? How can we as educators most efficaciously remove the "walls of the school" so that each gifted student can explore and learn in greater depths? Those questions lead to the defining of nine Independent Learner Skill areas which when mastered by each student did result in him/her becoming a competent capable independent learner by the end of elementary school. As a result, the nature of specific program services at the middle and high school years allowed for a greater range of flexibility in the options that could be accessed. Plus, some of those learning opportunities were not always "school based," but were initiated by the student as he/she sought community resources and "real life experiences".

Defining each Independent Learner Skill is the easy part as each can be taught using a variety of instructional strategies and resources. The key to the student mastering each skill rests in being provided opportunities to practice using the skill and for there to be accountability that both teaching and practice did occur. The introduction to such skills begins when a student is identified as being gifted and should be completed by 4th or 5th grade. I have attached a copy of a tracking sheet we used to collect such performance

data. By annually reviewing the data collected and by documenting what and how the selected students performed during their middle and high school years and beyond, validated that the nature of the planning done and implemented during those elementary school years did positively impact the quality of the future for each of the students served by the GT program.

The nine Independent Learner Skills are: Questioning Skills, Observation Skills, Resource Usage, Convergent Thinking Skills, Divergent Thinking Skills, Manipulative Skills, Recording Techniques, Reflective Thinking and Independent Study.

INDEPENDENT LEARNER SKILL	LEARNER OUTCOUME	INSTRUCTIONAL PROCESS
Questioning Skills	Involves the student in structuring questions so that he/she obtains the quality and type of information desired or needed.	Using such questioning models such as Bloom's Taxonomy, Socratic Method, or Taba Strategies, students learn that there is power in asking quality questions which are open-ended and generate discussion and thinking about ideas in different ways.
Observation Skills	The student knows how to be a critical observer and learns how to understand different perspectives.	Have the student experience using such observational senses as seeing, hearing, feeling, smelling and tasting to acquire information and date that can be evaluated. Then focus on developing one's intuitive abilities. Finally, teach the student learner how to use another point of view to perceive a situation or condition differently.
Resource Usage	The student knows how to use technology, reference materials and people to obtain the desired information.	Introduce the student to a variety of primary and secondary sources of information and teach them strategies in ways to best access and use such resources.
Convergent Thinking Skills	The student knows how to make a definitive response based upon a general body of knowledge.	Introduce the student to strategies for reaching a specific answer by using such processes as deductive reasoning and logical thinking.
Divergent Thinking	The student learns how to	Teach the student how to use

Skills	expand upon a specific idea in a variety of different and unique ways.	such strategies as SCAMPER, and other types of creative thinking strategies to include their fluency, flexibility, elaboration, and originality as they produce new ideas and products.
Manipulative Skills	The student knows how to use a variety of pieces of equipment effectively and care for each item in a responsible way.	Teach the student the value of using and caring for a variety of types of equipment, resources and material, e.g. technology, books, historical documents, etc.
Recording Techniques	The student knows how to document, organize and use observations, presentations, lectures and experiences, etc.	Teach the student that there are many different ways to record data and to use it to communicate ideas.
Reflective Thinking	The student knows how to reflect upon an outcome, e.g. performance, product, action, decision, etc., and to critically evaluate its strengths and areas needing revision or improvement.	Teach the student how to evaluate his/her work and how to use such feedback to improve.
Independent Study	The student knows how to pursue, investigate, organize and present the outcome based upon an area of interest which he/she selected to study in-depth.	Teach the student to use the other eight skills to pursue, investigate, organize and present the results of an individual or group investigation.

The mastering of the Independent Learner Skills can serve as one of the learning goals for a student. I have attached a sample of a planning sheet which also illustrates how we defined such learning goals as those related to leadership, creativity and careers. So, as a highly capable or gifted students' program is defined, student learning goals can be developed for each student in a way that there is a clear linkage between the "big idea" presented in the program goal for students and how it translates into a specific program goal for each selected student.

In addition, there is the accountability component. Thus, I have attached a sample of a form we used as it allowed us to record a great deal of data on one sheet. Regular classroom teachers completed this form for students in grades K-2 and starting in grade 3, the students were given time each week to complete the form. Please note this did mean that for this specific program, students were taught about Bloom's Taxonomy, Renzulli's Enrichment Triad and the Independent Learner Skills. Certainly with the use

of computers, the tabulating of the frequency of the use of each program model (Bloom's, Renzulli, and Independent Learner Skills) would be very realistic as would be the data associated with each activity. The operative question is: Did what the student do make a difference and how do we know? Generally we have depended primarily upon achievement test to determine whether our highly capable/gifted programs are effective; however, that is only one measure which for a variety of reasons may not be the best measure. First of all, is one of the primary goals of the highly capable/gifted program to improve the student's achievement level, then the use of achievement data may measure this? But if the student program goals also include these Independent Learner Skills then a typical achievement test score does not measure the students. Specifically, what are the student program goals and what data is collected to measure growth? Regardless of the models used to define the framework for delivering services to each student, the most important principle is that the evaluation of program effectiveness should be grounded in the student goals.

In summary, the approach program design described in this article best provides is an example of how different "models" can interact to produce the desired student learning outcomes expected from a highly capable/gifted program. The core does center around assuring that students master specific independent learning skills so he/she becomes a competent capable independent learner; thereby being able to pursue his/her explorations, investigations and creations well beyond the walls of any school and well onto the highways of life. As teachers, we play a crucial role in teaching our students how to achieve such independence, but we are not with them forever and, giving them the tools they need in a systematic way enhances the chances for lifelong success. Perhaps in a way, what we are capable of doing is systematically supporting our highly capable/gifted students to have the freedom to learn in a productive and meaningful way.

References

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SAMPLE SCHOOL DISTRICT HIGHLY CAPABLE PROGRAM
STUDENT LEARNING PLAN

STUDENT: *Samuel Brown*　　**DATE:** __9/20/2012__

TEACHER: *Mrs. Laddie*　　**GRADE:** __4th__

Learning Goals:

1. **To develop Independent Learner Skills by involving** *Samuel Brown*'s **interest in** __math__ , __Science__ , __reading__ , **and** __creative writing__ .

2. **To develop and challenge** *Samuel Brown*'s **higher level thinking abilities by engaging him/~~her~~ in such interests as** __science__ , __mathematics__ , **and** __creative writing__ .

3. **To develop** *Samuel Brown*'s **creative ability by involving his/~~her~~ interest in** __creative writing__ , **and** _____.

4. **To augment** *Samuel Brown*'s **leadership ability.**

5. **To explore** *Samuel Brown*'s **career interest in** *becoming an environmental journalist* .

6. _____.

SIGNATURES:

Samuel Brown 　　　　　　*Sally Brown*
STUDENT　　　　　　　　　**PARENT**

Ms. Sharon Price　　　　　　*Mrs. Jane Laddie*
Highly Capable Program Teacher　　**Regular Classroom Teacher**

SAMPLE SCHOOL DISTRICT HIGHLY CAPABLE PROGRAM
STUDENT LOG AND LEARNING PLAN (Sample)

Number of Learning Goal(s) 1 & 2   **Student's Name:** _Samuel Brown_

Area of Interest:

Select an interest from the pull-down menu, or enter your interest in the cells provided.	Creative Writing	If not listed, enter interest area, e.g. robotics	photography	History of the NW		

START DATE (Goal #)	COMPLE-TED DATE	TALLY OF ACTIV-ITIES	SPECIFIC ACTIVITIY (State specifically what was done including concept, verb from Bloom's and resource person who worked with you.)	BLOOM'S TAXONOMY						RENZULLI TRIAD			INDEPENDENT LEARNER SKILLS								
				KNOWLEDGE	COMPREHENSION	APPLICATION	ANALYSIS	SYNTHESIS	EVALUATION	TYPE I	TYPE 2	TYPE 3	QUESTIONING SKILLS	OBSERVATION SKILLS	RESOURCE USAGE	CONVERGENT THINKING	DIVERGENT THINKING	MANIPULATIVE SKILLS	RECORDING TECHNIQUES	REFLECTIVE THINKING	INDEPENDENT STUDY
11/10/12 (#1)	11/12/12	III	Created and wrote my own short story in reading with Mrs. Wilson					X				X			X	X	X			X	X
2/21/13 (#2)	2/21/13	I	Discussed starting a JGB group with Mrs. Willson				X			X			X	X							
2/24/13 (1)	2/29/13	II	Created, wrote and revised a poem to be printed in the school newsletter with help from Mr. Becker.						X			X			X	X	X			X	X