Newsletter
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Twenty-One Years of Excellence

Translating the Integrated Curriculum Model Into Units of Study

by Dr. Joyce VanTassel-Baska

When we consider the importance of differentiated curriculum for the gifted, it becomes apparent that multiple and simultaneous approaches to differentiation need to be applied. Gifted students require advanced content, higher level skills and processes, product development opportunities, and the intellectual challenge of dealing with real world issues, themes, and concepts that are interdisciplinary in nature. The Integrated Curriculum Model design provides all of these emphases in an integrated way, using content standards as a base but going beyond the standards in important ways.

To date, the Integrated Curriculum Model (ICM) has been translated into a curricular framework and set of teaching units in the core content areas of science, language arts, mathematics, and social studies. The translation of the ICM was accomplished by developing a curricular framework with goals and outcomes, addressing each of its dimensions in an integrated way.

Language arts

In order to satisfy the need for advanced content, the language arts curriculum (Center for Gifted Education, 1999), developed for grades K–12, used advanced literature selections that were two years beyond grade reading level, used advanced language, and challenged students to develop multiple levels of meaning. The writing emphasis was on persuasive essays that developed argument, which is a needed form of writing for much work in high school and all college level work. Use of advanced vocabulary and the mastery of English syntax at the elementary level was also stressed.

The process/product dimension of the curriculum was addressed by embedding the Elements of Reasoning developed by Paul (1992) and by using a research model developed to aid students in generating original work (Boyce, 1997). Products were encouraged through both written and oral work.

The issue/theme dimension of the curriculum was explicated by focusing on the theme of change as it applied to works of literature selected for the unit, the writing process, language study, and learners reflecting on their own changes in thinking and writing throughout the unit. Additionally, studying an issue of significance was emphasized as a part of the research strand for each unit. Six units have been developed, validated, piloted, and revised using this framework (Center for Gifted Education, 1999; VanTassel-Baska, Zuo, Avery, & Little, 2002).

Science

The translation of the ICM to science curriculum was driven by the overarching theme of systems, which became the conceptual organizing influence in each of the seven units of study (Center for Gifted Education, 1997). Students learned the elements, boundaries, inputs, and outputs, as well as the interactions of selected systems. Through a problem-based learning approach, they also learned about how science systems interact with real-world social, political, and economic systems. In the newer primary level units, the concepts of

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both systems and change are used to enhance schematic understanding of the content used. The six Project Clarion units represent an effort to use concepts as the core learning approach in the unit, with PBL embedded as opposed to being central to implementation.

The process/product dimension of the curricular model was addressed through engaging students in a scientific research process that led them to create their own experiments and design their own solutions to each unit's central problem. Adaptations to the research process were made for primary students although the same performance-based tool has been employed to assess learning in this area.

The advanced content dimension was addressed by selecting advanced science content for inclusion in each unit and encouraging in-depth study of selected content relevant to understanding the central problem of the unit. These units are being used in classrooms across the country to incorporate the new science emphasis and have been found successful in heterogeneous settings, as well as with more restricted groups (VanTassel-Baska, Bass, Reis, Poland, & Avery, 1998). The primary level Project Clarion units have also been found to be effective in heterogeneous Title I classrooms (Bland, VanTassel-Baska, Bracken, Feng, Stambaugh & Kim, under review).

Social Studies

The translation of the ICM to social studies was also driven by the theme or concept of *systems* for several units, with the concepts of *change* and *cause and effec*t explored in additional units. The concept of *systems* was applied to understanding structures in society, such as economic and political systems; other units emphasized connected chains of causes and effects to help students understand multiple causation in history and to recognize that historical events were not inevitable.

As in the language arts units, the process/product dimension of the model was addressed through the embedded use of Paul's (1992) Elements of Reasoning, as well as through a heavy emphasis on historical analysis. Products included written and oral presentations of research efforts and other activities.

The advanced content dimension was addressed through the selection of advanced reading materials, including many primary source documents, as well as secondary sources and historical fiction, and through early introduction of advanced content skills like historical analysis. Research findings suggest that students grew in content, process skills, and concept attainment as a result of exposure to a unit of study (Little, Feng, VanTassel-Baska, Rogers, & Avery, 2007).

Mathematics

The concept used in several math units is that of *models*, allowing students to understand the physical properties of mathematical models but also their conceptual components as well. Students learn to apply their understanding of models to the natural world around them, seeing how the models represent the real world in important ways.

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From the Editor

This issue of the Center's *Systems Newsletter* will be the last one published under the aegis of Dr. JoyceVanTassel-Baska, the Center's founder and current Executive Director. As of this August Dr. VanTassel-Baska will officially retire from the College of William and Mary and the Center. We know that she will still be an integral part of the Center through what she has created here as well as through her continuing consulting, writing and research. It is only fitting, then, that this issue feature an interview with Dr. VanTassel-Baska about her thoughts on curriculum development, an article by her about curriculum and the Integrated Curriculum Model, as well as a brief piece on the Festschrift held in her honor at the College on March 13, 2009.

Also included in this issue are dissertation abstracts from this year's graduating doctoral students and a few announcements about Center events.

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For example, students can understand animal overpopulation by graphing population increases across years and examine the geographical areas where it has occurred. In this way, they can predict future population trends.

The process emphasis in the mathematics units is on the higher level skill of problem-solving coupled with its application to research skills and strategies as students grapple with real world problems and then attempt to set up investigations to answer questions raised in the process of designing a study. The math units focus on data collection, analysis, interpretation and representation in appropriate ways for relevant audiences. Products emanating from these units emphasize the use of graphs, charts, and models to communicate findings effectively.

The advanced content aspect of the mathematics units focuses on higher level mathematical thought in areas like place value and spatial reasoning. The interdisciplinary Models unit (linked to science) emphasizes the use of logic, statistics and probability skills at advanced levels for middle school students. Although the units have been piloted and field-tested, to date, no studies of effectiveness have been done.

Research-based Design Elements

While these national curricular projects for high-ability learners were developed with an understanding of appropriate curricular differentiation for gifted students, they also demonstrate the use of key design features of curricular reform strongly advocated by the national standards projects (O'Day & Smith, 1993) and the research-based learning strategies emphasized by the National Research Council (Bransford & Donovan, 2005). Thus, the curricular projects employ the following emphases:

Meaning-based, in that the curriculum emphasizes depth over breadth, concepts over facts, and is grounded in real-world issues and problems that students care about or need to know. In science, students study the implications of acid spills on interstate highway systems. In language arts, they relate to how the impact of the treatment of minorities in this country has changed over a 60-year period. In social studies, students examine documents within context and explore the influence of various individuals and groups to understand the complexity of historical events and decisions. Moreover, the pedagogy of the curriculum is constructivist in orientation, helping students to construct their own meaning from the events, artifacts, and problems studied.

Intradisciplinary and interdisciplinary connections through using overarching concepts, issues, and themes as major organizers. Thus, students study systems of cities, government, economies, and language, as well as chemistry and biology. The concept of *change* in language arts is relevant to literature, writing, and language, as well as to mathematics, art, and music and is taught through the use of archetypal concept maps that allow students to internalize their understanding of important ideas.

Metacognition, which requires student reflection on learning processes. Students are involved in consciously planning, monitoring, and assessing their own learning for efficient and effective use of time and resources. In social studies, for example, students pursue alternative paths to a real-world problem resolution in their particular area of study through a deliberative group process that engages them in metacognitive skills.

Habits of mind, through cultivating modes of thinking that resemble those of professionals in various fields with respect to skills, predispositions, and attitudes. In science, curiosity, objectivity, and skepticism are openly nurtured. In language arts, the mode of reflection and revision is consistently encouraged. In social studies, experiences develop awareness of the complexity of causality, the importance of exploring bias, and the need to avoid present-mindedness and ethnocentrism.

Inquiry-based learning and problem solving by having students take charge of their own learning. In the problem-based science units, students find out what they know, what they need to know, and how to pursue important knowledge in working on a real-world problem in small investigatory teams. In language arts, students team to discover how language functions and is structured. In social studies, students work together to explore different aspects of a culture or historical period and then share their findings.

T*echnologies as integrative tools* for the learning process, from doing research via the Internet, to creating powerpoint presentations and videos, to communicating with students and mentors around the world by e-mail. The units of study in each area incorporate activities that require these applications.

*Authentic assessment*s which tap into what students know as a result of meaningful instruction. Using approaches like portfolios and performance-based activities, the units engage learners in assessment as an active part of the learning process.

The relationship of curriculum to gifted learner characteristics

The implementation of any curricular model is based on several considerations in the school setting. Most important among them is the nature of the learner. For gifted and high ability students, regardless of the richness of the core curricular base, there will be a need to address certain powerful characteristics

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From the Executive Director
Dr. Joyce VanTassel-Baska

This column marks my last as the Executive Director of the Center for Gifted Education at the College of William and Mary. It is difficult to believe that 22 years have passed since my arrival on campus as an endowed chair, charged with creating a center and a graduate program. The role was one where I was free to create what was possible in a historic place, both the College and its environs, that captured the interest and desire of many educators worldwide and university personnel to be associated with our efforts. Those efforts have always seen the importance of the talent development process on the individual across the lifespan, whether she was a precollegiate learner, graduate student, or educator. As I leave the Center in the very capable hands of Dr. Tracy Cross, I want to share the advice I gave to our graduates at the luncheon in May at the Wren Building. The ideas reflect well my understanding of why I have been successful during my tenure here.

What are the qualities one associates with being a successful professor? Brilliance? Absentmindedness? Wisdom in thought and action? While these may apply to many professors, they clearly do not apply to me. From the beginning, I entered higher education on a mission to institutionalize gifted education as a legitimate field of study, to create opportunities for precollegiate learners, and to conduct research and development projects that were meaningful and lasting. I also thought I had something to say about many topics, but especially what was appropriate curriculum, instruction, and assessment for gifted learners. Thus being a professor was a platform for my ideas, wishes, and dreams.

For all of you graduates of our program who aspire to a similar path, success in higher education does not come easily or without cost. Perhaps the following key ideas may be of use to you as you move beyond this place into your own careers.

1. *Be a coach*. My most important preparation for being a mentor to my students were the years I coached girls' basketball, track and tennis at the high school where I taught. It was in this milieu that I learned how to motivate people, how to understand and address individual differences, and how to have fun with students. It was here that I honed my teaching skills to be used in one-to-one situations where the goal was clear, time was of the essence, and growth was a tangible entity to be sought daily.
2. *Use time wisely*. People often remark they don't have time to write as it requires large periods of time when one is not doing anything else. Ironically, I have found just the opposite to be true. I encourage you to use downtime like airline travel to write a talk, a grant proposal, or start or finish an article for publication. Try to use time for simultaneous purposes, such as giving a talk, converting it for publication, and meeting with colleagues on a project. Through this approach, it is easier to justify taking the time to travel for a conference or other educational event. Finally, analyze the time periods when you are most productive intellectually and set aside 2-3 hours each day to pursue those types of tasks. For me, over the course of 27 years, it has been early morning from 5-8 am. Most of my books and articles have been written during that timeframe.
3. *Write every day*. If you want to be successful as a productive scholar, then be sure you are writing at least a page every day. The act of doing it will enhance your fluency, clarify your thinking, and force you to elaborate your ideas. Moreover, consider all writing as argument, a way of taking a position and then supporting it with evidence and data. Using this model will help you become more effective in oral discourse as well since higher education demands defense of ideas in all venues, including meetings with colleagues.
4. *Teach as if your hair is on fire*. Teaching is an act that requires a sense of urgency on the part of both teacher and learner. Only so much time is available to teach/learn important knowledge, skills, and attitudes. Yet the urgency must be modulated with constructivist approaches that enable the learner to discover meaning on his own. Use problem-based learning, simulations, and case studies to enhance your students' learning. Another facet of effective teaching is using your research agenda and your academic passions as a basis for promoting student learning. My most successful teaching has emerged from involving my students in research on curriculum effectiveness, teacher use of differentiated strategies, and studies of low income learners-all passions of mine for 30 years.
5. *Expect to work 70 hours per week if you want to excel*; if you want to be competent in your field, work 55 hours per week. One of my mentors made clear to me that putting in three extra hours per day, including weekends could make me an "academic star". While the time may not have produced stardom per se, it has made me creatively productive. Using three hours per day to do research and write has been a highly important way to think about using work time and doing the same on weekends.

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It is also a way to think about keeping up your reading of important books and articles in your field.

6. *Have a planful research agenda*. Developing your personal research plan can have long lasting effects on your ability to keep doing research in the face of everyday tasks that can take over or easier tasks that can drive out those that are more challenging. Project your research out across the years to tenure and beyond. What do I want to accomplish in five years? What are my topics of interest? What are my methodological skills? What do I want to do alone and what do I want to collaborate on? These questions are central to planning any substantive research agenda.
7. *Make your service work count toward academic presentations and publications*. As an educator in gifted education, it is mandatory that you do work with schools and even students themselves in campus-based programs that you or others initiate. However, it is important that the work you do be recorded in a way that would render it useful as a model to others, useful to you as a context for conducting research, and important to understanding a facet of the field. My greatest regret was not taking my own advice early in my career in Toledo when I had a Title 3 three year research and development project in low income high schools that was groundbreaking at the time yet I was not savvy enough to see the need to write it up, report the research results, and do presentations on the project. Be sure you chronicle your work carefully.
8. *Find and create role models for yourself*. Much is made of the need to have mentors in order to be successful, and certainly the research suggests their importance in the sciences. However, there is evidence in the arts that emulators will do just as well. In education, we have many opportunities to meet people who can help us in some way, if only by their example, their message, or by dint of their personality. Take advantage of these opportunities and convert them to positive use. I learned a great deal from people whom I observed carefully for work habits, academic skills, and humane attitudes.
9. *Don't be afraid to try things you don't know how to do*. Paul Torrance would call this trait "pushing the envelope", an essential aspect of creativity and of testing your own limits. Too many people must feel centered in a situation before they will take on a challenge. Dare to go beyond your competencies at a given time and test out unknown areas of learning. Such risk-taking enhances problem-solving, how to access and use resources effectively, and causes you to break patterns and see/create new ones. Much of what I have accomplished would never have been done if I felt I needed to have mastery in relevant areas before I began to work in them. For example, I taught my first course in gifted before taking one formally myself. No one was harmed by the experience, and I grew tremendously in my ability to organize material in this area of learning.
10. *Love what you do*. Freud has opined on the twin influences of love and work as the basis for human happiness. I believe that the two also need to be seen as one-love the work that you do with all your heart, recognizing that it will never be done, that you are a Sisyphus, rolling the rock back up the hill after a setback. Work in gifted education is not glamorous nor is it for the faint of heart. The challenges to the cause of gifted children are often daily, the arguments against the effort often relentless, regardless of context, and the damaging stereotypes all around you-the truly gifted need no help, the same education will work for everybody, regardless of differences in capacity to learn, and bringing up the bottom is important, even if it means choking off the top. In order to persevere in a field that presents these challenges, you must be committed to the needs of these students and be willing to speak out on behalf of them at every turn.

Current Graduates of William and Mary's Gifted Education Program

Bronwyn came to us from St. Louis, MO where she was a high school French teacher. Dr. MacFarlane worked at the Center for Gifted Education at The College of William and Mary in Virginia as a research assistant to Dr. Joyce VanTassel-Baska for 3 years while earning her doctorate in educational policy, planning, and leadership with dual specializations in both gifted education program administration and K-12 school administration. She received the 2008 National Association for Gifted Children Outstanding Doctoral Student Award; the 2008 College of William and Mary School of Education Dean's Award for Excellence; the 2007 College of William and Mary Excellence in Gifted Education Doctoral Award; and the 2007 International P.E.O. Scholarship Award. She has published and presented at national and state conferences on research projects. Her dissertation was on examining the use of differentiation in World Language AP teachers' classrooms. She along with Tamra Stambaugh edited the Festschrift volume of Dr. VanTassel-Baska's work.

Valija came to us from Norfolk, VA where she served as a high school math teacher and gifted resources teacher after teaching 5 years in New Jersey and established the AP Statistics course. As a research assistant at the Center, Valija has served as a good asset in curriculum development and is completing a math unit of study for piloting. She has published and presented on her work in both state and national venues. She has received the Galfo Research Award and the Kappa Delta Pi Achievement Award for the past 2 years here at the college. Using the NELS/88 database, her dissertation was on predicting success among Black and White promising academic learners on talent development factors. To prepare for her study she attended special invitational workshops sponsored by AERA and attended a summer course offered at the University of Michigan.

Katie Dolph is a cluster teacher in Norfolk Public Schools where she also conducted her evaluation study of curriculum and instructional practices used with gifted learners. Katie has attended the program while working full time. She also has coached

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rowing and worked in the regular classroom. She wrote an article for the Festschrift volume II based on her study of appropriate instructional practices for the gifted.

Lisa Kaenzig was formerly a fulltime graduate assistant at The Center for Gifted Education, specializing in the development of one of our top social studies units- The Road to the White House. She has exercised her considerable political knowledge in the effort. She has done several presentations for parents in our SEP program on the importance of career counseling and has maintained a strong interest in female talent development, leading to her dissertation study on the talent development process among elite women scientists at top New York State institutions. Lisa has been working as an Assistant Dean at William Smith College in Geneva, New York for the past 3 years.

Kianga Thomas has been a part time student in our program while a full time teacher of the gifted in both Newport News and Hampton before taking his current position as Assistant Professor at the College of Education at Hampton University. He is a family man with sons Harrison and Hayden. Kianga has received several awards (Virginia Association of Chapter of Alpha Phi Alpha fraternities) for his work with minority youth, a passion that he used to propel his dissertation study on the role of self efficacy, resilience, and leadership on the success of African American males transitioning to the university level. He has presented his research at both state and national conferences this year. 🕮 🕮

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through flexible implementation of a model.

There are many characteristics of gifted learners on which one might focus for a discussion of creating an optimal match between learner and curriculum. Several lists have been discussed as a basis for curricular work (e.g., Maker, 1982; VanTassel-Baska, 1994a). However, in studies of curricula, it has become apparent that three characteristics remain pivotal for purposes of curricular planning and development: precocity, intensity, and complexity.

Precocity. The precocity of the learner is a key characteristic to consider in curriculum development. Gifted learners, almost by definition, evidence advanced development in some school-related curricular area. The most commonly tested areas for such development are in the verbal and mathematical subject domains. Most students identified for gifted programs are at least 2 years advanced in one or both areas. Such evidence of advanced development provides a basis for curricular planning at a more advanced level and the expectation that such students can master new materials in one-third to one-half the time of typical learners. For highly gifted learners, there is a powerful motivation to learn fast and move ahead.

Intensity. In addition to precocity, another key characteristic that deserves attention for curriculum development is the intensity of gifted learners. This intensity may be manifested affectively in the realm of emotional responsiveness when students react strongly to the death of a pet or the classroom injustice committed by a teacher. But, this characteristic also has saliency in the cognitive realm. Students exhibit intensity through the capacity to focus and concentrate for long periods of time on a subject that fascinates them or an idea they find intriguing. Such a characteristic can just as quickly become dissipated in uninteresting busywork or lack of depth in the exploration even of a subject of interest. This characteristic, like precocity, needs curricular attention.

Complexity. The third learner characteristic of curricular interest is complexity, the capacity of gifted learners to engage in higher level and abstract thinking even at young ages. It also refers to their preference for hard and challenging work, often at levels beyond current functioning. They also enjoy working on multiple levels simultaneously, such as when solving complex real-world problems that have many parts and perspectives to study. Just as with precocity and intensity, the characteristic of complexity in the gifted demands curricular responsiveness because it is openly desired by the learner and often indicated by his or her behavior in the classroom.

These three characteristics each dictate an approach to the curriculum that honors the various facets of the gifted mind and personality. While other curricular models have addressed a particular facet of the gifted learner, the Integrated Curriculum Model represents a fusion of several approaches such that the most powerful characteristics of the gifted are directly reflected in the curricular intervention.

Teacher knowledge, skills, and attitudes needed to address gifted student needs

Based on recent data confirming the significant role of teacher training in providing differentiated instruction for the gifted (Hansen & Feldhusen, 1994; Tomlinson et al., 1994) and the new teacher education standards (Johnsen, VanTassel-Baska, & Robinson, 2008),

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there is good reason to place gifted students with teachers who have received at least 12 hours of professional training. The benefits to gifted learners become greater when a differentiated curriculum is handled by those sensitive to the nature and needs of such students. Some training in the direct implementation of curricular materials to be used is also desirable. For example, in our experience with the Center for Gifted Education materials, 3-5 days of training in the various approaches employed in the materials have generally supported initial implementation, depending on the experience of the teachers involved.

What teacher characteristics are essential for implementing content-based curricula with gifted learners? Obviously, knowing the content area being taught is a primary consideration, coupled with a deep understanding of how gifted students learn differently from other students and even each other. Such a combination requires important human characteristics in a teacher of the gifted, such as openness to experience, a personal passion for learning, and a curiosity about how the minds of these students work. Such characteristics must also be matched, however, by a strong grasp of the structure of the discipline in which one is teaching and the security to employ different methods as they are required. Facilitating learning for these students must involve careful questioning and probing, coupled with the regular presentation of challenging stimuli.

Access to high-quality, well-trained teachers in specific subject areas who can provide challenge and nurturance for our best learners is clearly a critical issue in appropriate education of the gifted. Without thoughtful teachers, the best curricula will lie dormant in classrooms, unable to be energized and vivified by expert instruction. Teachers with only strong management skills also will fail to excite the gifted if lack of knowledge is apparent.

Conclusion

In order for gifted learners to perform at optimal levels, the educational context must offer challenging opportunities that tap deeply into students' psychological states (Csikszentmihalyi, Rathunde, & Whalen, 1993), provide generative learning situations (VanTassel-Baska, 1998), and also demand high standards of excellence that correspond to expectations for high-level creative productivity in any field (Ochse, 1990). More than ever, the climate of a school for excellence matters if curricular standards are to be raised successfully for any student. For gifted students in particular, such a climate must be in place to ensure optimal development, positive attitudes toward learning, and engagement.

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An Interview with Dr. Joyce VanTassel-Baska

by Dr. Kimberley Chandler

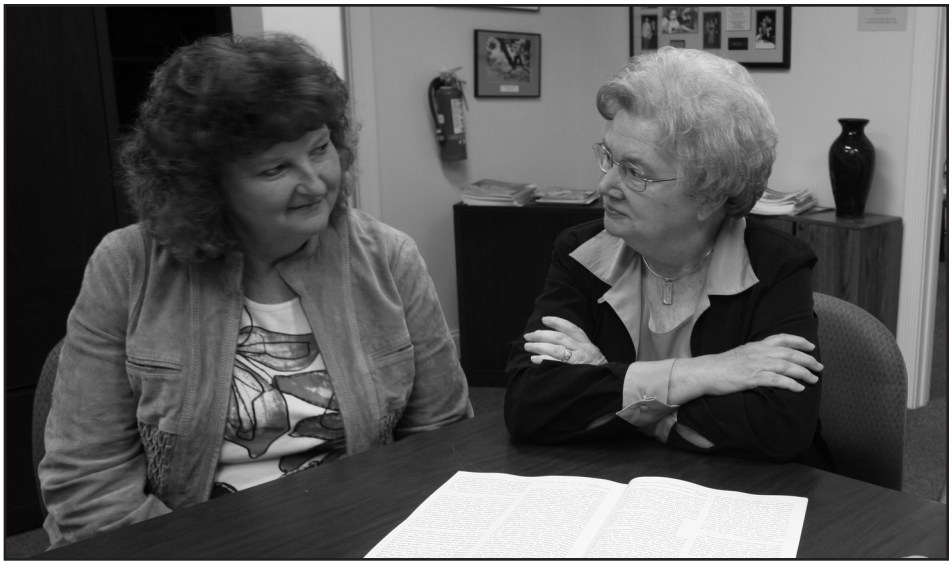
(**K**) Many people consider you to be the "guru" of curriculum in gifted education. Why did you choose curriculum as your emphasis?

(**J**) My background led me naturally to focus on curriculum. I'm a former secondary teacher of English and Latin who was very engaged in curriculum development when I was a teacher. I taught every high school grade level in both subjects. Therefore, I taught a total of eight different courses during my high school teaching career of seven and a half years. In addition, I also created electives and new courses of study, including a course called World Literature and the Bible for senior level students. I also taught Advanced Placement Literature.

When I became an administrator of gifted programs in Toledo, I also was very involved with curriculum development for gifted learners. I published two guides in my first three years; one on the world of the gifted K-6 for elementary teachers and the Phoenix Project curriculum guide for high school teachers which was an integrated interdisciplinary curriculum with a guidance component that was used in all three inner city high schools in Toledo at that time. So, in my first ten years of work in education, I was very involved with curriculum development. It continued to be a major part of my work in Illinois where I was involved in a federal curriculum project using Adler's Syntopicon for organizing curriculum and designed and developed four major units of study for that project. Then at Northwestern I had a grant from the Joyce Foundation to develop curriculum in math, science, and technology for high ability learners. So by the time I came to William and Mary, I had a deeper level of experience with curriculum for the gifted than most people. Even though most people are not aware of that history, it served me well for engaging in my Javits curriculum work here at William and Mary.

(**K**) Why do you think it became such an important area of endeavor for you?

(**J**) Partially it was my own sense that it was a good fit for my skills and interests based on the experiences that I've described. However, I also saw curriculum as a weakness in terms of what was not happening in gifted programs. People were using units on chocolate, for example, with gifted students and justifying it because content doesn't matter or so it was suggested. In addition to that, I think it's fair to say that the Javits projects encouraged curriculum development, leading to our contracts to design curriculum in science and language arts. So it was a happy union of my background experiences and skills, coupled with a need in the field, and the accessibility of resources that really led The Center for Gifted Education in this direction.



Dr. Kimberley Chandler (l) and Dr. Joyce VanTassel-Baska

(**K**) How did you develop the Integrated Curriculum Model?

(**J**) I started with a review of the literature in 1986 as to what curriculum approaches were effective with gifted learners. The ICM grew out of my examination of research that suggested that advanced content was the most powerful approach that we had, followed by enrichment approaches that were predominately focused on higher level thinking and product development. There was also a scattered literature base on interdisciplinary approaches, such as concepts, issues or actual themes. Even though the literature base was uneven in supporting the efficacy of those three components, they represented three very distinct approaches to organizing curriculum that could be justified by the evidence available. My underlying thesis was always that we could get a richer curriculum if we utilized all three as opposed to utilizing only one approach. This model has worked quite well over the past twenty years to design differentiated curriculum and to link the work to the content standards. So even though the ICM model preceded the content standards, it in fact dovetailed with the design and alignment approach.

(**K**) Have you ever considered a revision to it? If so, what would it be?

(**J**) Well, I would revise it if I felt that in fact there was research suggesting that there was another approach to curriculum that isn't covered by the model that would be effective. I do believe that the model could be augmented by a major emphasis on social and emotional development and career development. I think both of those areas would be possible enhancements to the ICM in its current form. However, I do not see the need to make the model more complex. If anything it is already too complex.

(**K**) How does knowing that materials you have developed are used so widely and

Note: Kim Chandler (K); Joyce VanTassel-Baska (J)

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An Interview

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impacted so many make you feel?

(**J**) I don't spend a lot of time thinking about it. I certainly am pleased to know that children benefit from being provided high-powered and challenging curriculum. That makes me very happy. Beyond that, my only wish would be that more students could have that opportunity. I wish that schools were more open to trying innovative curriculum and instructional approaches that would allow that to happen, not just for the gifted, but to promote high end learning across the board.

(**K**) What is the greatest barrier to providing excellent curriculum for gifted students?

(**J**) Educational institutions are set up to maintain the status quo and in the process of maintaining it they frequently overlook individual differences. So at one level, I would say that there is an institutional barrier just based on how educational institutions are organized. Beyond that, I would also say that teachers, as a part of those educational institutions, are charged to teach what has been approved by their communities and that's a set scope and sequence of curriculum at every grade level. So if I were to say what is the greatest barrier, it is this age-grade lock step model of teaching and learning. This is not the fault of teachers, but they become part of the problem when they feel that they do not have enough power or control to make changes in a curriculum diet that would benefit a core group of learners or even just one. Moreover, we have not charged schools with optimizing learning for anybody. We have only charged them with providing a minimum threshold of opportunities, and consequently it is the barrier of raising expectations to levels that schools were never intended to have to reach. When you think about the implications of raising the expectations of schools, that also becomes quite personalized in terms of raising the competence level of teachers in terms of stretching their cognitive capacities and their capacity to organize classrooms in flexible ways. So you have another barrier related to teacher readiness and teacher capacity to deliver more high- powered curriculum opportunities.

(**K**) Recognizing that teachers are always going to write curriculum, what three things would you like for all teachers to understand/know/take into consideration when writing curriculum for gifted learners?

(**J**) Well I would hate to limit it to three things, because I think that curriculum development is a complex enterprise that requires work over time. Curriculum products get better because people spend more time on them and try them out and learn from those try outs how to improve curriculum products. So one of the basic issues that teachers need to understand is that curriculum has to be designed and tried out and revised, then tried out again beyond just their classrooms in order to make claims about the quality of the product. Also teachers need to understand that there is nothing magical in a curriculum that is going to produce learning in gifted students if we are not really targeting the nature of the learning that we want to accrue and ultimately collecting data on whether or not student learning has occurred as a result of what's gone on. Classroom-based action research on student learning thus is an important activity that teachers need to engage in. Probably the third most critical understanding is curriculum design. Teachers need to understand that a curriculum has to be coherent and understandable by anyone who reads it, showing the relationship of the elements of goals down to the level of activities and materials. Lastly, principles of differentiation for gifted learners have to be well internalized in order for teachers to do a good job in designing curriculum for these learners.

(**K**) What do you believe is required for the appropriate implementation of exemplary curriculum for advanced learners?

(**J**) I believe that what we do for advanced learners ultimately ends up being treated as an innovation, since it's not routinely happening in schools. What we know from the innovation literature suggests that teachers need to be well-prepared to teach a curriculum which means they need to be trained on it and the underlying principles related to implementing that curriculum. That's why our William and Mary training model is one that is based on teaching-learning models that are imbedded in existing lesson plans. So teacher preparation with materials is critical.

The second feature that is critical is the support of administrators. Teachers need to feel support whenever they are doing anything that involves innovation, and administrators should be curriculum leaders in the building in terms of providing that support which can take many forms, including verbal, monetary, resources, or moral support if the teacher is challenged by parents or peers. Support may also come in the form of showcasing the work of teachers who are willing to step out and do something that is innovative. So the administrator is crucial as a support structure.

I also think collegial support is important in terms of curriculum implementation. A teacher is going to be more effective with curriculum innovation if not just she at third grade is doing it but if her colleagues at fourth and fifth grade are also doing it and the other teacher in third grade across the hall is also doing it. There is value to having a critical mass of teachers engaged in innovative curriculum implementation. Where it is done at multiple grade levels by multiple teachers you are likely to have greater support in terms of innovation, and teachers in turn can support each other relative to the implementation.

I also think that there is a real need with implementing new curriculum to have additional resources available to put toward

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THE CENTER'S UPCOMING EVENTS

Summer Enrichment Program
Session I - July 6-10, 2009
Session II - July 13-17, 2009

Advanced Placement (AP) Institute
August 3-7, 2009

An Interview

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the effort. By that I mean additional materials that may need to be purchased in the form of books, guides, or computer software programs that just make the implementation easier for teachers.

Then the last area that I want to highlight would be the absolute necessity of curriculum monitoring and follow-up beyond professional development into classrooms to see that the innovative strategies and curriculum are being implemented effectively and as they were intended. Fidelity of implementation is one of our biggest problems in trying to institutionalize curriculum innovation. Unless the new curriculum becomes a part of teacher routine, it may have a "short shelf life" in the classroom.

(**K**) How has the standards movement impacted curriculum for the gifted in both positive and negative ways?

(**J**) On the positive side, the new standards would actually raise the level of expectation and challenge for gifted learners if teachers were teaching to the standards as they were intended. Because they were designed down from a conceptualization of a practicing professional, the activities, the habits of mind, and the skills were high level. The downside of the standards only came about when the translation of them was hindered in two ways. First, it was hindered by insisting that we have fifty translations of a single set of high quality national standards. And in those fifty translations, the level of challenge went down, and the interpretation of the standards became much more leveled than it should have been. The second deterrent to effective implementation of standards came about when high stakes testing in fifty states was instituted to try to assess learning. In the process, these assessments became narrower than the standards and lower level. Thus the instruction of teachers began to match up with the assessments and not with the standards.

Another asset of the standards was that they defined what high school graduates should know and be able to do in the new century. This marked the beginning of our focus on outcomes rather than objectives, a focus on high level performance as opposed to a developmental progression of skills, and an emphasis on the multiple dimensions that are associated with learning rather than only a skill-based orientation. Knowledge, skills, and attitudes took front and center in terms of the new standards in a way that they had not in the past. However, in some instances the translations of these high level outcomes became faulty. Individual states did not carefully think through what the implications were for what students were able to do at given stages of development. An example would be here in Virginia where we had students learning about China before they learned about their own country or before they learned about their neighborhood because there was little attention to developmental progression.

(**K**) Today's students are exposed to "bits and bytes" of information in their everyday lives. What implications for curriculum do you foresee as a result of multi-media influence?

(**J**) This is not just a curriculum question; it's a question of "How will technology ultimately impact educational delivery systems at all stages of development, everywhere?" And I don't really feel that I know the answer to that. I think that the role of technology has expanded already in ways that are well beyond our thinking, certainly, just a decade ago even. The attractiveness of online courses for students K-12 has grown exponentially from early efforts like the Stanford EPGY program to the Online Learning Links at Northwestern now to multimedia opportunities like *CTYOnline* through Johns Hopkins and other kinds of telecommunication models. I think the future of the education of the gifted will lie in these kinds of options that will be available to families of means. My concern is that it will be available to those who can afford it, not to those necessarily who need it the most. There is also in the new technology an underlying assumption that people are self-directed and independent learners. And in my years of working with the gifted, I do not fundamentally believe nor do we have the data to show that that is the case in the majority of gifted students. Many gifted students are satellite learners who require a high-powered instructor who can motivate them and ready them to take on challenging learning tasks. They also require the interaction of peers who are equally able and interested in the learning process. The lack of accessibility to both of those features in online learning environments, I believe, will continue to hinder the role of technology as the total answer to the educational needs of the gifted.

(**K**) What was the most interesting curriculum project with which you have been involved? What made it interesting?

(**J**) I must confess that all curriculum projects that I have ever been engaged in have been interesting, because they have all been totally absorbing and challenging in their own right. But I would be less than candid if I did not say that the project that I have enjoyed the most over the years has been the development of language arts curriculum because it is closest to my own background and content expertise. Both the original language arts units and the Athena Project which involved further development of new language arts materials including Jacob's Ladder and additional Navigators were special.

(**K**) What one curriculum project have you most wanted to do but have been unable to do so far?

(**J**) There are several actually. One is developing concept-based curriculum in shorter units of study and hooking those concepts to multiple subject areas. That to me would be an interesting project. Another would be an interrelated arts project, whereby you take the visual arts, music, and the performing arts, and you weave them together in terms of helping students arrive at deeper levels of thinking and feeling as well as just doing the arts.

(**K**) Are there any areas that you believe should be a focus for the field of gifted education in the future?

(**J**) The field has to "grow up" in my view in

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Leading Change: The Festschrift of Dr. Joyce VanTassel-Baska

by Dr. Janice Robbins

***fest·schrift** (f?st'shr?ft')*
n A volume of learned articles or essays by colleagues and admirers, serving as a tribute to a scholar.

Colleagues and admirers of Dr. Joyce VanTassel-Baska joined together on March 13, 2009 in celebration of the publication of *Leading Change: The Festschrift of Dr. Joyce VanTassel-Baska.* The volume, dedicated to Joyce's leadership in gifted education, includes 45 chapters as well as Joyce's personal reflections on her life and works. A testimony to her influence in the field, the Festschrift includes the works of scholars, researchers, students, and practitioners in the field of gifted education, each of whom has been influenced by Joyce in some way. The combined voices of these outstanding educators echo Dr. VanTassel-Baska's firm beliefs about the nature and needs of gifted learners and her endless research on their behalf.

The celebration was a day-long event that featured several panel discussions on various areas of research in the field of gifted education, including constructs that define giftedness, inhibitors to giftedness and the infrastructure of gifted education. The Festschrift celebration was organized by two of her former doctoral students, Tamra Stambaugh, now director of Programs for Talented Youth at Vanderbilt University in Tennessee and Bronwyn MacFarlane, now an assistant professor at the University of Arkansas at Little Rock. Attendees at the day-long event travelled from across the country to share in the latest research and thinking about the field of gifted education and its future.

Among the chapter authors and participating panel members were James Gallagher, a senior scientist emeritus and former director of FPG Child Development Institute at the University of North Carolina, Charlotte; Camilla Benbow, dean of Vanderbilt University's Peabody College of education and human development; and Linda Brody, director of the Study of Exceptional Talent and co-director of the Diagnostic and Counseling Center at the Johns Hopkins Center for Talented Youth. The number of Joyce's former students on the panel served as a testament to her on-going impact on the field through her mentorship and development of their individual talents. The day was also interspersed with personal reminiscences from colleagues and former students about Joyce's impact on their lives and careers in gifted education.

Drs. Tamara Stambaugh, Joyce VanTassel-Baska, and Bronwyn MacFarlane

"The turn-out for the Festschrift was tremendous—scholars from universities across the country, partners from state and local education agencies, and alumni in gifted education," said Virginia McLaughlin, dean of William & Mary's School of Education. "Throughout their presentations and remarks, they acknowledged Joyce's impact on the profession and on their personal lives as well. In particular, participants noted Joyce's leadership and advocacy in the areas of curriculum research and development, professional standards, and social justice."

The academic portion of the day was followed by a dinner that was attended by over 80 participants, many who stayed on from the day. Diners were entertained by a display of pictures spanning Joyce's life from age 3 to the present. The pictures highlighted many important events and people in Joyce's life. Some attendees were surprised to see themselves in those pictures and were touched to see photos of Joyce and some of her mentors such as Dr. Julian Stanley and Dr. John Feldhusen. The evening concluded with a number of toasts to Joyce that highlighted the impact she has had on many. Two life-long friends as well as her daughter shared extended reminiscences about Joyce. The final touch was a synthesis of her own life by Joyce and her thoughts on how she might have impacted individuals and the field of gifted education.

The festschrift volume speaks clearly to the passion and dedication Joyce has brought to the field of gifted education for over years. She has instructed, guided, cajoled, directed, convinced, enlightened, and otherwise influenced students, deans, principals, superintendents, association leaders, political figures, and countless individuals who have wrestled with the ever-present question, "What do gifted learners need?" Chapters in the Festschrift speak to topics close to Joyce's heart including creativity, talent development, students of poverty and underrepresented minority youth, twice-exceptional children, equitable assessment, the study of eminent people, and, of course, curriculum. Joyce's work in articulating and demonstrating the value of the Integrated Curriculum Model is reviewed and detailed in several of the Festschrift chapters.

2009 marks the twenty-first year of the Center for Gifted Education. In a sense, the Center has come of age. The Center's work in multiple areas of gifted education, led by Joyce, has resulted in a national and international reputation for excellence. Researchers build upon the work she has completed. Leaders in the field cite her findings in support of their own work.

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Leading Change

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Teachers all over the world use the Integrated Curriculum Model as incorporated into aware-winning units of study. Hundreds of educators come to Williamsburg every year to gain confidence and competence in the use of these units. As Joyce prepares to retire from the Executive Directorship of the Center and 44 years in education, she knows that the years of research and development she has led will continue to inspire teachers and their students for generations to come. Leading Change: The Festschrift of Dr. Joyce VanTassel-Baska, will remain a clear testament and a constant source of the ripple effects of her work. Well done, dear friend and colleague!

An Interview

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terms of the issue of curriculum and instruction. It has to come to grips with the fact that we should not be using curriculum with the gifted, our very best learners, where there is no evidence base for the effectiveness of its use. When I first came into the field in the early 1970s, curriculum was a series of activities made up by the teacher that were differentiated for the gifted. And we are right back to that same notion in serving the gifted in regular classrooms. It's a regressive state that is troublesome in terms of what we could be doing, so I would hope that the field would wake up to the fact that we have strong materials that could be built on for future projects and for future work.

We also need to realize that the world of curriculum for the gifted is wide open as opposed to narrow because of the standards or because of the school- based interpretation of the standards. I would love to see a return to the teaching of philosophy at grades four, five, and six to gifted learners. I would love to see more of an emphasis on spatially-oriented subject matter, like robotics. I would love to see much more of an emphasis on the serious teaching of foreign language in elementary and middle schools. These are all appropriate subject matter for gifted learners at the earlier stages of development that would be of interest and again growth-producing. Yet we have narrowed the vision of curriculum for the gifted to being what individual teachers are capable of delivering or what is tested on high stakes state assessments.

(**K**) Is there anything else you want to add in terms of the focus of the field?

(**J**) I think that there is a huge need for more research and development work in curriculum in all subject areas and at all requisite stages of development. There is still a lot we don't know about what works at different levels for gifted learners.

(**K**) What are you going to do next?

(**J**) Well, that is a good question. I am not entirely sure. I think I will continue to consult. I will continue to write. I will continue to be active in the field from the vantage point of reading and attending conferences. But where I will put the bulk of my creative energies I haven't yet really decided. I think that it will still take me a few months to settle into a different schedule in order to determine that. But I will say that I know there will be a need to continue to write everyday and to give talks regularly, in order to continue to feel fluent in those two modes of communication.

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An Evaluation Study of the Curriculum and Instructional Approaches Employed in the Norfolk Public Schools Gifted Program

by Katie Dolph, Norfolk Public Schools

The purpose of this study was to determine the degree to which the Norfolk Public Schools, Virginia, district elementary gifted grouping model was aligned with the National Association for Gifted Children Standards and its Local Plan for the Education of Gifted Students in regards to curriculum and instruction, as well as to provide data on classroom instruction techniques and the curriculum currently being used to provide gifted education services in the district.

The evaluation questions were 1) To what degree has the eighth recommendation of the 2005-06 evaluation study been implemented in the Norfolk Public Schools (NPS) district in regards to curriculum and instructional practices? 2) Are there differences between gifted resource teachers and cluster teachers in the use of differentiated instructional practices? 3) To what extent does the Local Educational Plan for the Education of the Gifted (LEA) for Norfolk Public Schools align with the Curriculum and Instructional NAGC standards?

Data were collected from gifted resource teachers and gifted cluster teachers via surveys and focus group interviews as well as an interview with the Director of the Office of Gifted Education. It was concluded that differentiation is not being consistently used with gifted students and that the NPS LEA is not aligned with the NAGC Curriculum and Instruction standards. More research studies should focus on the effects of differentiated instruction and curriculum on gifted students' learning. Longitudinal studies which focus on the long term benefits of differentiated curriculum and instruction to gifted students are also needed. 🕮 🕮 🕮

The Talent Development Process of Successful Academic Women Scientists at Elite Research Universities in New York State

by Lisa Kaenzig, William Smith College

The importance of science in our society continues to increase, as the needs of the global culture and the problems of the world's growing populations affect resources internationally (DeLisi, 2008; Fischman, 2007; Park, 2008). The need for qualified and experienced scientists to solve complex problems is important to the future of the United States. Models of success for women in STEM disciplines are important to improve the recruitment and retention of women in academic science. This study serves as an examination of the facilitators and barriers -- including external factors and internal characteristics -- on the talent development process of successful women academic scientists.

Since there are few studies relating specifically to the career experiences of successful women in academic science careers (Ceci & Williams, 2007; Wasserman, 2000; Xie & Shauman, 2003), a literature review was conducted that examined the (1) the gifted literature on women, including the eminence literature; (2) the higher education literature on women faculty and academic science, and (3) the literature related to the internal characteristics and external factors that influence the talent development process. The final section of the literature review includes a literature map (Creswell, 2009) outlining the major studies cited in this chapter. The conclusion, based on a critical analysis of the literature review, outlines the need for this study.

The current study utilizes the framework of Gagné's differentiated talent development model for gifted individuals (Gagné, 1985, 1991), to examine the themes cited in multiple studies that influence the talent development process. Through a mixed-design methodology (Creswell, 2009) that incorporates quantitative and qualitative analysis using a survey and follow-up interviews with selected participants, this study seeks to determine the effects of internal characteristics, external influences, significant events, and experiences on the success of women scientists at elite research universities in New York.

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Talent Development

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A purposeful sample (n=94) was selected based on established criteria. Forty-one successful academic women scientists are the study participants, representing a response rate of 43.6%. Findings include the important roles of parents, teachers, mentors and collaborators on the talent development process of the participants. The perception of the study participants was that there were multiple facilitators to their talent development process, while few barriers were acknowledged. The most important barriers cited by participants were perceptions of institutional culture and sexism.

Implications for practice in both gifted and higher education are suggested, based on the findings of the study. For gifted education, these suggestions include the need to provide parental education programs emphasizing the importance of intellectual engagement at home, providing dedicated time for science in primary education, and fostering science and mathematics opportunities, particularly for girls and young women. Stressing the importance of hard work, persistence and intelligent risk-taking are also important for encouraging girls in science. For higher education, the study provides models of success of academic women scientists, outlines the importance of mentors and collaborators, and emphasizes the critical role that institutions and departments play in facilitating or impeding women's career development as academics.

The current study suggests several areas for further research to continue the exploration of the talent development influences on academic women scientists. Based on the findings of this study, future recommended studies include examining the differences of generational cohorts; probing the roles of collaborators/mentor colleagues; exploring differences for women from various ethnic and racial backgrounds; replicating the current study with larger populations of women scientists; investigating the role of facilitative school environments; examining the patterns of influence of first generation successful academic women, and evaluating matched pairs of male and female successful academics. 🕮 🕮 🕮

Advanced Placement World Language Teacher Perceptions of High Ability Students and Differentiated Instruction

by Bronwyn MacFarlane, University of Arkansas at Little Rock

While research in gifted education has been conducted in specific curriculum areas such as language arts, mathematics, science, social studies, and fine arts, there is a paucity of literature connecting gifted and world language education. While world languages historically were elective courses at the high school level, attracting college bound students, world language credit requirements for high school graduation or college admission have expanded, encouraging enrollment in Advanced Placement world language courses for a broader range of learners. Since Advanced Placement options are still the current face of gifted services at the secondary level, there is a need for differentiated pedagogy in AP classrooms for secondary gifted learners, a need often not addressed (Hertberg-Davis, Callahan, & Kyburg, 2006). In most states AP teachers are not required to be trained in gifted education instructional practices, and their perceptions toward gifted students are unknown.

This survey research study collected data from Advanced Placement world language teachers regarding their perceptions of high ability world language students and self-assessed use of differentiated instructional approaches. Instrumentation included the Gagné and Nadeau (1991) scale of teacher perceptions toward gifted students, the William and Mary Classroom Observation Scale - Revised (VanTassel-Baska, Avery, Struck, Feng, Bracken, Drummond, & Stambaugh, 2005) which assessed teacher behaviors with respect to differentiation practices, and a researcher-created questionnaire which collected participant demographic data.

In this descriptive study, findings indicated teachers held somewhat positive attitudes toward providing needs and support for gifted students and the social value of gifted persons in society. Teachers held ambivalent attitudes about the instructional practice of ability grouping, the rejection of gifted students by others, and the practice of actively advocating for gifted learners. Teachers reported somewhat negative attitudes toward the instructional practice of appropriate acceleration. Findings further revealed limited teacher use of differentiated strategies in the AP classroom, limited teacher training in gifted education pedagogy, yet a positive relationship between high and low student achievement and teachers' training background in gifted education.

Implications for practice from this study focus on the need for gifted education training for Advanced Placement world language teachers on the characteristics of high ability students and differentiated instructional practices that are found to be effective for increased student achievement. Specifically, professional development is needed for teachers that address (1) differentiated curriculum for the gifted with an emphasis on remodeling AP curriculum to meet high ability student needs, and (2) the use of advanced instructional practices with specific information regarding effective delivery and classroom management techniques. Implications for research include the need for more studies on AP teachers' attitudes and practices in relation to gifted learners and a set of studies focusing on effective instructional practices for teaching world languages. 🕮 🕮 🕮

A Comparative Study of the Course Taking and Performance Patterns of High Achieving Secondary Students

by Joy Selberg, Salt Lake City Public Schools

Part one of this study relied on archival data of an urban public high school to explain and compare the Advanced Placement (AP) and International Baccalaureate (IB) course taking patterns and program exam performance of high school students who had participated in the districts program for gifted learners, the Extended Learning Program (ELP), when in grades 4-8, with those that did not.

Adapting Gagne's (2003, 2004) Differentiated Model of Giftedness and Talent (DMTG) as a conceptual framework, part two of this study examined the intrapersonal and environmental catalysts affecting the talent development process as perceived by seniors, enrolled in an AP or IB course. Seniors taking AP or IB and who had participated in the Extended Learning Program, were asked for their perceptions of the program's role in enhancing high-level performance and creative interest.

From archival data, former ELP students enrolled in more AP and IB courses, had higher mean scores on AP and IB exams, earned over 85% of the AP and IB awards, and were more likely to graduate when compared to non-ELP students.

ELP and non-ELP seniors attributed themselves as most responsible for their talent development process noting hard work and persistence as necessary traits. Those who had participated in the ELP found it offered opportunities to be with like peers, to work on challenging and advanced curricula, and to better prepare for the academic challenges ahead. Based on findings, recommendations for policy and practice, and suggestions for future research were provided. 🕮 🕮 🕮

An Exploratory Study of Factors that Relate to Academic Success Among High-Achieving African American Males

by Kianga Thomas, Hampton University

This exploratory study explored three factors – self-efficacy, resiliency, and leadership – that relate to academic success in African American male freshman college students. The study explored how self-efficacy, resiliency, and leadership interrelate, how a pilot group and study group differ in respect to self-efficacy, resiliency, and leadership, and how African American freshman males differ on these factors in respect to key demographic variables.

The study utilized the Student Academic Success Scale *(SASS),* which was an instrument developed by the researcher in a graduate course. The instrument was administered to 104 participants. Descriptive statistics, correlation coefficients, and a one-way analysis of variance (ANOVA) were data analysis techniques used to interpret data.

Data revealed that participants perceive themselves rather highly on the *SASS* and that there were positive correlations among all three variables. Furthermore, a one-way analysis of variance (ANOVA) showed that freshmen male students perceive themselves higher on the *SASS* than students from a pilot group of upperclassmen. Lastly, an ANOVA revealed that African American male freshmen who participated in art programs rated themselves significantly higher on self-efficacy and leadership, while students who participated in mentorship or internship programs rated themselves significantly higher on self-efficacy and resiliency.

Implications of this study indicate that there is a need to develop mentorship and internship opportunities in the elementary, middle, and high school settings for African American males. Moreover, future research should look closely at studying this group longitudinally to evaluate perceptions over a period of time. Another implication for research suggests that comparing a group of African American college males at a Historically Black College or University to African American males at a traditionally White institution on similar dimensions. 🕮

An Interview

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(**K**) Is there anything else that you would like to add?

(**J**) None of the curriculum work that has gone on here at William and Mary would have been possible without the strong collaborators that I've enjoyed working with over the years. This would include teachers like yourself, Kim, and others who have been graduate students and have been placed in a position of engaging in the curriculum development projects. But also staff people at the center with whom I have worked and who have added so much to the level of curriculum that we have been able to put out. Beverly Sher, Dana Johnson, and Linda Boyce are the three who come to my mind as being extremely powerful in really influencing that early work in very positive ways. And then, I would say in the last eight years or so, the collaborative work with Bruce Bracken, Carol Tieso, and other staff members here at the Center like yourself, Tamra Stambaugh, Elissa Brown, and Catherine Little, have made our curriculum work stronger and more credible. (Photo by Stephen Salpukas at the College of William and Mary.) 🕮 🕮

What's Happening at the Center

Graduating this year from the from the Educational Policy, Planning, and Leadership doctoral program are Dr. Katie Dolph, Dr. Lisa Kaenzig, Dr. Bronwyn MacFarlane, Dr. Valija Rose, Dr. Joy Selberg, and Dr. Kianga Thomas. Graduates of the Curriculum and Instruction Program with a concentration in gifted education are Melissa Baldwin, Leslie Belvin, Marvin Lee, Christina Pace, and Kimberley Thoresen.

Mihyeon Kim, a doctoral candidate at the Center received the Excellence in Gifted Education doctoral level award. Mihyeon is currently analyzing data with the intent of defending her dissertation this summer.

Kimberley Thoresen received the Excellence in Gifted Education master's level award. Kimberley will complete her thesis this summer and will begin teaching this fall in Prince William County, Virginia.

In July the staff and students of the Center will welcome the new executive director, Dr. Tracy Cross. Dr. Cross will be joining the faculty of the School of Education from Ball State University in Indiana where he served as the George and Frances Ball Distinguished Professor of Gifted Studies, and the Associate Dean for Graduate Studies, Research, and Assessment for Teachers College. Previously Dr. Cross served as the Executive Director of the Indiana Academy for Science, Mathematics and Humanities, a public residential school for intellectually gifted adolescents. An interview with Dr. Cross was published in last fall's issue of Systems.