

MODERN CURRICULUM

FOR GIFTED AND ADVANCED
ACADEMIC STUDENTS

EDITED BY
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INTRODUCTION

BOLD VISION FOR DEVELOPING TALENT IN AN AGE OF STANDARDS

INTRODUCTION TO *MODERN CURRICULUM FOR GIFTED AND ADVANCED ACADEMIC STUDENTS*

TODD KETTLER

Gifted education hovers anxiously on the periphery of educational policy, practice, and priority. There are no federal mandates for gifted education programs and services. Only about half of the states at any given time have policies requiring gifted education, and in many of those, there are no evaluation and accountability mechanisms to incent quality. I have been a participant observer to this phenomenon as I spent 12 years as a director of gifted and advanced academic programs. At an administrative retreat, I once told my good friends and colleagues who were directors of language arts and mathematics that our jobs were very different. I pointed out that each day they come to work with the assumption that everyone supports curriculum and instruction efforts in language arts and mathematics. Sure, they had disagreements in the ranks, but no one questioned why students learn math, reading, and writing. I, on the other hand, dedicated half of my work to advocating to sustain existing efforts in gifted education with little time left for developing better and broader visions. Each staffing and budget meeting held the possibility of reductions to gifted education, even in a state that mandated we provide services.

Surely, the reasons for gifted education's peripheral role are complex. As a field, we do not systematically build a research base of curriculum and instruc-

tional interventions that demonstrate effectiveness as we ought to. But even that likely agreed-upon statement leads to further complexities. We debate the definitions of giftedness and suffer the consequences of inequities. We struggle to measure meaningful outcomes, and in many cases our program evaluations, if they exist at all, focus on what the adults are doing rather than how the students are achieving. Once I asked a superintendent of a very successful school district how he measured the quality of the gifted program, and in a joking manner, he replied, “The number of parent complaints.” While we both laughed a little, we also knew there was a sad truth to the statement.

What is a modern curriculum for gifted and advanced academic students, and why do we need it? It seems that gifted education is searching for a curriculum identity. I make this suggestion based on the following observations and experiences. First, I believe we have taken on a parasitic role in curriculum, and this may be linked to the emergence of differentiation movements in the 1980s. Policies and practices at that time led to increasingly diverse classrooms and a reduction in ability grouping in the wake of de-tracking. Gifted education seemed to carry the torch of differentiated instruction. Many of the field’s best thinkers proposed strategies and techniques on how educators of gifted students could differentiate the standard school curriculum to meet the needs of gifted learners. In spite of some evidence that differentiation was far more discussed than actually implemented, this became the primary approach of many school districts to provide gifted education services. The evolution of differentiated instruction went beyond ability-based modifications to include increasingly suspect learning-style modifications and student choices in activities. By the end of the 20th century, it seemed differentiated instruction had become the instructional approach for all students and its biggest organizational advocate was the Association for Supervision and Curriculum Development (ASCD), rather than the National Association for Gifted Children (NAGC). Perhaps the present culmination of this parasitic status is the emergence of the Common Core State Standards (CCSS). Again, gifted education’s role has been to articulate how to differentiate the standards for gifted learners. While we may not be satisfied with that role, it was better than the alternative, which was to succumb to those who said the CCSS standards may have eliminated the need for gifted education at all.

Second, we seem indecisive and apprehensive about the most popular advanced academic programs to have emerged in the last two decades. I have attended multiple College Board conferences and heard the statement that the Advanced Placement (AP) program is not gifted education. I have attended multiple International Baccalaureate (IB) conferences and heard the same

statement about IB. Furthermore, I have been at gifted and talented conferences and heard advocates for gifted education say the same thing—AP and IB are not gifted education. At the same time, I consult in and work with many school districts, some of which are among the most successful in their states. When I gather data on what the gifted students are doing in those middle and high schools, I find that they are for the most part participating in AP and IB programs. In a similar way, the third program that has grown tremendously is dual/concurrent enrollment in college courses. Again, many gifted education administrators claim it is not a gifted education program, but many gifted students seem to participate in early college enrollment in high schools of all sizes and locales. All three of these programs have grown tremendously in the last 20 years, and some researchers in gifted education have advocated for their merits with gifted students. However, these initiatives largely remain the purview of general education, not gifted education.

Third, reform efforts under the headings of 21st-century education have gathered significant attention in educational practice and reform movements. These include inquiry models such as Project- and Problem-Based Learning (PBL); online and blended learning models; flipped classrooms; science, technology, engineering, and mathematics (STEM) initiatives; career and technology academies; and service learning initiatives merged with the core curriculum. Again, curriculum innovation seems more likely to emerge from general education rather than gifted education in each of these areas. I recently visited a high school mathematics and science academy that required students to score above the 90th percentile on SAT for admission, and approximately 50% of the graduates were National Merit Finalists or Scholars. They described themselves as an advanced math and science program, but intentionally minimized their use of the term *gifted* when describing either their students or their curriculum. I visited another high school academy devoted to a collection of career academies including medicine, robotics, law and policy, culinary arts, and digital arts. Although I observed amazing career-focused achievement and advanced curriculum, gifted education or gifted students were never mentioned. These issues were not limited to high schools. In the last 3 years, I have made multiple visits to three highly successful STEM elementary schools. One of them offered the STEM program bilingually in a balance of Spanish and English. When I asked about the gifted and talented students, they described how their needs were met through the open-ended project nature of the curriculum. In fact, the GT specialist at one school said the entire program was GT curriculum and parents of GT students were eager to get their kids into the program.

Those three trends may indicate that we need to rethink gifted curriculum. How can we move beyond the limitations of differentiating core curriculum to engaging ways of developing exceptional talent in a broad spectrum of fields and disciplines? I propose that a modern approach to gifted curriculum should focus on advanced conceptual understandings. Advanced conceptual understandings form the foundation for creative thinking, critical thinking, and problem solving within and across disciplines. To a large degree, modern gifted curriculum should include an inquiry focus within a constructivist learning paradigm. The goal of gifted curriculum includes the following: (1) developing increasing independence as a learner, (2) fostering active intellectual engagement with classical and contemporary ideas and issues, and (3) developing advanced products and performances reflecting conceptual insight and complex thinking.

Additionally, we need to think about both the microcurriculum as a set of learning and assessment tasks, as well as the macrocurriculum as an advanced course of study for gifted and advanced students. This approach to macrocurriculum may yield more fruitful avenues for accommodating the purposes and values of AP, IB, and dual/concurrent enrollment options. The macro approach to gifted curriculum should explore how the goals of gifted education can effectively merge with some 21st-century models, especially STEM programs, advanced career academies, and online/blending learning opportunities. In many ways, technological innovations have opened a brave new world of opportunities for gifted education. Modern curriculum for gifted and advanced learners is not intended to offer a panacea or an ultimate solution. It is designed to further the conversation about how we make sense of giftedness, talent development, and educational innovation.

Modern Curriculum for Gifted and Advanced Academic Students is arranged in three sections moving from big ideas to the application of those ideas. The first section includes chapters to generate future-focused thinking. How do we make sense of ubiquitous technology and the capacity to access seemingly limitless information? What can we learn from the history of the idea of differentiation to help us forge a bold future for gifted education? This first section also address the foundations of two emergent paradigms that have offered alternatives to traditional ways of thinking about gifted education. Specifically, in what ways do the talent development paradigm and the differentiation paradigm inform our thinking about learning design for gifted and advanced academic students? To close the first section, we consider the nature of curriculum design in the age of standards. Most importantly, how might or should the Common Core State Standards (CCSS) and Next Generation Science

Standards (NGSS) impact innovative work in gifted education curriculum and instruction?

The second section of *Modern Curriculum for Gifted and Advanced Academic Students* explores curriculum elements necessary to focus on advanced conceptual understandings, develop independent learners, foster intellectual engagement, and create advanced products and performances reflecting conceptual insight and complexing thinking. This section includes chapters on developing critical thinking and creative thinking across all subject areas and all grade-levels. How can we design inquiry-based curriculum for gifted and advanced learners, including detailed recommendations for implementing Project-Based Learning models? What role do independent research and personalization of learning play in learning designs for gifted and advanced students? How do we define appropriate learning outcomes for advanced products and performances? Perhaps more importantly, what tools might we use to measure those outcomes systematically? Finally, what possibilities remain untapped in gifted education curriculum innovation through the use of blended learning approaches to emphasize advanced talent development and personalization?

The final section of *Modern Curriculum for Gifted and Advanced Academic Students* includes examples of how to innovate learning design in the four core curriculum areas of language arts, mathematics, science, and social studies. There are two chapters for each discipline. One chapter focuses on learning design from a talent development perspective, and one chapter focuses on learning design from a differentiation perspective. Much debate in our field has centered on these theoretical models, but in many ways, the day-to-day operations of gifted curriculum and instruction from either the talent development or differentiation approach are vaguely understood at best. These models are intended to both bring some specificity to the approaches within the modern curriculum framework and to expand our understanding of a new era of curriculum possibilities.

Each chapter includes discussion questions and implications for research. The discussion questions could be used as part of a course in gifted education curriculum and instruction or in professional learning designs in school systems. The implications for research are intended to generate ideas and possibilities for those actively engaged in gifted education research.

Ideally, *Modern Curriculum for Gifted and Advanced Academic Students* helps us think in ways that are both careful and innovative about the role of gifted education, and specifically, learning designs in gifted education. May the discourse that emerges imagine the role of leadership and advocacy, the need for specific and quality school-based intervention research, and the hope for

bold visions projecting gifted education and advanced academics into a relevant and viable future. I do not believe that our communities and boards of education oppose exceptional achievement and the development of gifted students. I do believe they await a clear and consistent vision of how that could be accomplished. In what ways might our field reach in and reach out to lead a new wave of excellence that does not forsake equity? What role might gifted education play in educational reforms including, but not restricted to, school choice, magnet schools, academies, and STEM and STEAM innovations? Gifted and advanced students crave more than underground programs with periphery importance. Perhaps *Modern Curriculum for Gifted and Advanced Academic Students* helps to start that conversation.

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