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Message from the Editor
Danae Deligeorges

At this time of the year, each year, we are happy to publish an honouring issue.

This time, I’m in the pleasant position to edit an issue in which we honour NAGC and its legacy of 65 years. We pay tribute to those who enhance the growth and development of all gifted and talented children by creating the standards of gifted education as we know it.

Giftedness vs Gifted Education, is the topic that we chose to challenge our experts in the field to write about, using a maximum of 1500 words.

An attempt to look deeper, for the Noema of Giftedness, the pure, objective content of this term that we commonly use in our field.

An attempt to look deeper, for the Noesis in Gifted Education, the subjective educational experience we are seeking to provide gifted children.

Enjoy!
Message from the Chair

Stephen Schroth

All, On behalf of the Conceptual Foundations Network, welcome to the 2018 National Association for Gifted Children conference! Our program chair, Dr. Todd Kettler of Baylor University has done a tremendous job of putting together a series of presentations and posters that are dynamic, compelling, and timely. In a year where the Conceptual Foundations Network received a record number of proposal submissions, Todd and the reviewers were faced with many difficult choices. Not only did this year see more submissions than ever before, but the proposals were uniformly of the highest quality. At a time where gifted education is getting more attention than it has in decades, the Conceptual Foundations strand provides presentations that will help shape statewide and national conversations related to gifted education. The Conceptual Foundations Network is comprised of scholars and practitioners who grapple with many of the issues facing the field, which makes these sessions of special relevance. Please try to attend as many of these sessions as you can, as your support for the Conceptual Foundations Network and your colleagues helps build the foundation needed for a successful and dynamic group.

During the past year, work also has proceeded with the Legacy Archive Project, which records video interviews with many of the leaders in the field of gifted education, and makes these available at no cost to NAGC members. This year interviews were completed of Del Siegle, Linda Silverman, and Sylvia Rimm, and several other interviews are scheduled to be conducted shortly. If you would like to nominate someone to be interviewed, or if there is someone you feel should be nominated to be interviewed, please contact me at sschroth@towson.edu and we will get you involved. Special thanks to those colleagues who joined me as members of the Conceptual Foundations Legacy Archive Project committee: Dr. Abbey Cash, Ken Dickson, Bridget DuRuz, Dr. Todd Kettler, and Dr. Debra Troxclair. Their tireless efforts permitted the project to continue and to thrive.

While many other NAGC networks have ceased to produce a newsletter, the membership of Conceptual Foundations has determined that this an important and valued contribution we make to the field. Special thanks to our newsletter editor, Danae Deligeorge, who has continued to provide sterling support to this endeavour. Danae has solicited articles, put together the issues, and worked with me and others to assure that pertinent information about NAGC, Conceptual Foundations, the conference, and other activities that have proven valuable to our membership. I am sure you all join me in thanking Danae for her excellent work, and hope she will continue to provide this valuable service into the future.

Finally, I invite each of you to attend the Legacy Archive Project session that occurs Friday, November 16, from 4:30 p.m. to 5:30 p.m. in 200 A or the Conceptual Foundations Network Business Meeting that will take place Saturday, November 17, from 8:00 a.m. to 9:00 a.m. in 205 A, or both. Many NAGC leaders began their participation in the organisation by working with one or more networks. We invite everyone come and meet future friends from all over the United States. Attending such sessions is also a terrific way to take your knowledge of gifted education to the next level, as you will be interacting with colleagues who face many of the same issues and challenges that you do on a daily basis. Hearing how these individuals have worked to provide the best gifted education programming possible to the children they serve will provide you with wonderful new approaches, just as your insights and journey will be of value to others. Thank you for being a member of the Conceptual Foundations Network, and please let me know if there is anything I can do to enhance your experience with the organisation.
A funny thing happened at the business meeting of the Research on Giftedness, Creativity and Talent Development Special Interest Group at AERA last April. James Borland had been chosen as the special speaker and asked the group a series of questions that he obviously thought would meet with disagreement. Except they didn’t. Finally, I said, “You’ve grown on us, Dr. Borland.”

James Borland is well known for his dislike of labeling. His chapter “Gifted Education without Gifted Children” in Sternberg and Davidson’s text, *Conceptions of Giftedness*, is often required reading for graduate students. I will admit that when I first read Borland’s work at the age of 24, I was offended. How dare he! He just doesn’t understand what it is like to be gifted! We are qualitatively different and should be appreciated as such!

I loved Kazimierz Dabrowski. I came from an educational background that had been heavily focused on clinical psychology and personality theory. My undergraduate honors project had been on ego development among individuals with high verbal intelligence. In my Social and Emotional Development of the Gifted class, I stood in front as the living example of OE’s. The Theory of Positive Disintegration was so very compelling. I still consider it to be incredibly interesting and with the potential to inspire research. But…

Science. Research Methods. Statistics. The balance of the research does not support overexcitabilities as a reliable and valid conceptualization of giftedness. It captures a subset of highly intelligent, creative (albeit a bit disgruntled) people. We’re a cool bunch. But it is not a universal.

Change is afoot. There is a generation of scholars who were labeled as gifted and/or have children who are labeled, and who now question the status quo. What was done didn’t work well. What we are doing now isn’t working. The field took a set of continuous variables (cognitive ability, creativity, motivation) and made them categorical. What if we didn’t? What if we didn’t categorize and label? What if we focused on programs? What if like sports, there was a program that all interested kids could try out for? Ability would matter, but so would hard work.
The book *Beyond Gifted Education: Designing and Implementing Advanced Academic Programs* arose from such discussions. Betsy McCoach, Matthew McBee, Michael Matthews, and Scott Peters love gifted kids and are devoted to gifted education. This book was the response to their desire that gifted kids actually get served in school. And if labeling and identification had to change to make that happen, then bring it on.

The programs developed by the people I helped honor for the Legacy Series (Roeper, Renzulli, Gallagher, Baldwin, Treffinger, Kaplan, Sisk, and VanTassel-Baska, along with those we honor through NAGC awards such as Passow, Torrance, Belin, and Callahan) have produced scholars who want to push the field further. Their goals are to advocate for inclusivity and integration into the fabric of public school. They aspire to the highest levels of fidelity to the principles of quality research. And they want the field to be on the forefront of the open science movement.

This desire for change has predictably met with resistance. Perhaps there are generational tensions at play. Generation X wishes to quietly do their thing and get the job done. It is not personal, it’s business. GenX is perplexed by the passion of Boomers who stick to their current beliefs in the face of facts. Millennials with their civic focus on the global community wish we could just get along and are a bit thrown by GenX’s cynical snark and Boomers’ manic zeal. Passion and vivid vignettes capture the attention of parents and teachers much better than the chill machinations of mathematics and abstruse permutations of science. Except, to quote Neil DeGrasse Tyson, “The good thing about science is that it’s true whether or not you believe in it.”

In some ways the apparent tensions mirror the disputes between the Association for Psychological Science and the American Psychological Association. One such dispute is the issue of clinical psychologists being resistant to evidence-based treatment and relying too heavily on clinical experience over research evidence. There is a broad research base examining why practitioners are doubtful or dismissive of scientific studies. Two major explanations are the existence of fundamental differences in beliefs about the nature of evidence, and the role of cognitive consistency models, such as the phenomenon of cognitive dissonance. In the field of gifted education, established scholars have deeply held intuitions about the nature of giftedness and challenges to these intuitions create cognitive tension to the extent that scientific evidence can be discounted in favor of beliefs based solely on experience. This is dangerous because a resistance to scientific knowledge will alienate the field of gifted education from both mainstream education and psychology.

The future of the study of giftedness and advocacy for gifted education is in the hands of the newest generation of scholars. They are intellectuals who were mentored to develop task commitment and dogged persistence in the face of challenge. They embrace science over sentiment. And at the risk of being the “boy who called Kuhn,” I do think that a paradigm shift is inevitable.
A little back history – and a bit of looking forward: just exactly what is going on???

Gifted education has had a curiously vague course in New Zealand. An ongoing issue for this country has always been about how to define giftedness – and if you can’t define it, how can you provide for it?

The solution, if so it can be called, has been official advice to schools to choose a definition for themselves. The intention is commendable – to recognise the many differences brought about by the different structures schools have – city versus rural, socio-economic differences, different ethnic mixes, and so on. But it has always been a debatable provision, given that giftedness has not generally been included in teacher training in this country. So how are they to know what definitions exist, let alone to choose one?

There’s some history to this. Way back in the 1930s, Minister of Education Peter Fraser and his Director General of Education Clarence Beeby set out a guiding statement which acted as the touchstone for the development of the New Zealand education system:

The Government's objective, broadly expressed, is that all persons, whatever their ability, rich or poor, whether they live in town or country, have a right as citizens to a free education of the kind for which they are best fitted and to the fullest extent of their powers. So far is this from being a mere pious platitude that the full acceptance of the principle will involve the reorientation of the education system.

This is quite an extraordinary statement. What it achieved was to put the child right at the heart of the education system. Not the country’s economic goals, not industry’s or business’s requirements, not the wishes of parent, school or country for higher achievement than someone else’s: the child.

Having a child-centered approach like this has many profound implications for children, teachers and teaching. One of those implications, one might reasonably think, would be better provision for gifted children.
But in practice it has not quite worked out like that. Much like the US, New Zealand during the 19th century had been flooded by European immigrants, mostly British, seeking to escape the poverty and hardship of their home country and, in particular, the narrow and demeaning confines of the British class system. But in New Zealand, that never translated into a belief that any man could achieve wealth and position, but rather into a very sturdy independence of spirit in which every man (and now woman) was equal. Consequently equity of provision was often interpreted as meaning “the same for everyone” rather than “to each according to their individual needs”.

For gifted children and their parents, this has led to the suspicion of elitism. That acts like a locked door for many such children. Indeed, the question parents most frequently ask is, “How can I avoid the teacher thinking I’m just a pushy parent if I say I think my child might be gifted?” Teachers too are often reluctant to consider this possibility, and we still hear statements such as “Of course every parent thinks their child is gifted”, not ill-meant, but reflecting genuine lack of knowledge. Given the lack of teacher training in this field – presumably because of this fear of elitism, at official levels as well as amongst teachers – it’s hardly surprising that such misunderstandings continue.

Thus for decades there was no official backing for any aspect of gifted education. There was a brief flurry of interest when the US reacted to the launch of Sputnik and, a while later, a year best perhaps forgotten when the Ministry released two papers on gifted education which flatly contradicted each other and led to no changes.

And then came the 1990s. That decade saw an unexpected surge of activity – the first major national conference, with Renzulli as keynote, another in Christchurch, with Linda Silverman as keynote, the first national professional gifted education center (independently funded), the establishment of a “One Day School” for gifted children using a child-centered teaching model, more professional development, and, at last, a Ministry-funded panel which led to an official handbook and the hugely valuable appointment of a handful of advisors.

Continuing the momentum of the 1990s, the turn of the century saw the establishment of a Ministerial Working Party. Its most important outcome was a change in the national regulations making it mandatory for schools to identify and meet the needs of gifted learners. Mandatory! This was an amazing change to have achieved. Undoubtedly it has led to a significant increase in the number of teachers who have become aware of the needs of gifted learners, and there have been other related positive developments, including much more research, more universities offering papers, the ability to bring international leaders in the field to this country, people like Gagné, Silverman and Piechowski, and so on.

Still it will take years yet to ensure all teachers have access to adequate training in this field so that that mandatory regulation can actually be universally implemented. Sadly such forward movement was put on hold over this last decade with a different Government which broke with tradition and moved from a child-centered approach to a measurement and standards-based approach. It has not been a happy time to be a teacher.
But a recent change of government has brought with it an Associate Minister of Education who is proactively interested in gifted education. Already we have seen gifted education included in a nation-wide contract to develop “networks of expertise” to support teachers in schools. The whole country has been asked to contribute to forming a new plan for “curriculum, progress and achievement”, with specific opportunity within that to comment on gifted provision, and gifted provision is now to be included within the official Disability and Learning Support Plan, meaning, we believe, that at last the promise of that mandatory regulation can come within reach. However, we still don’t have any national agreement on what we mean by giftedness!

Thus it’s very relevant that a particularly significant and exciting development during the 1990s was the emergence for the first time of research relating to Maori perceptions of giftedness, initially through the work of Jill Bevan-Brown, a Maori scholar of distinction, and then through a number of others. It’s hard to explain to anyone outside this country how interwoven Maori cultural concepts are becoming into the cultural life of the whole New Zealand community. Giftedness must have a special place in this process. What so distinguishes the Maori concept is that a person’s qualities are ranked above his or her abilities, because those qualities determine how one uses those abilities, a profoundly different approach but one that aligns itself with the work of writers like Parkyn and Roeper. Furthermore, Maori link giftedness to spirituality and to service to the community.

It takes time of course to absorb such a deeply different concept, but here, in this approach, surely lies the opportunity for New Zealand to develop a concept of giftedness unique to itself in its richness and yet also perhaps thought-provoking beyond these shores.
Imagine a talent show on a large and elegant cruise ship. Some passengers show their talents in verbal skills, others in mathematical skills, still others in music, science, art, drama, or debate. The show is exciting! Someone notices, however, that the ship is sinking—that what the talent the ship most needs is someone who can figure out how to right the vessel before it sinks and goes the way of the Titanic. But the metaphorical talent show, like the band on the Titanic, goes on, and the ship keeps sinking.

The world is endangered. It faces enormous problems—hunger, poverty, rising rates of diseases of the aging like Alzheimer’s, antibiotic resistance, income disparity, pollution, climate change, ideological polarization, election of would-be dictators, and senseless wars, to name a few. What does gifted education need to look like to prepare young people to thrive in the world of the future?

A bad place to start, I believe, is with IQ and its proxies (SSAT, ERB, SAT, ACT, GRE, etc.). According to James Flynn, IQs rose 30 points during the span of the years of the twentieth century. That is an enormous increase. It is essentially the difference between what traditionally would have been viewed as an average IQ (100) and a “gifted” IQ (130+, or so). So, from the perspective of the year 1900, the average student of today would have been labeled as IQ-gifted (just under the top 2% or so) in 1900. But if you, as I, look to our gifted children to help save the world and even make it prosper in the future, how are we doing? IQ seems powerless to solve or even adequately address any of the serious problems noted above. We should not be surprised.

IQ tests are about problems with right and wrong answers. The problems are so-called “well-structured,” with clear paths to solutions. Problems we face in our everyday lives have no right and wrong answers. They have better or worse answers, and what solution constitutes which (better or worse) often differs according to people’s points of view. Such real problems are “ill-structured,” with no clear paths to solution. IQ alone does not, never has, and never will provide the paths to solution of such problems. If we want to develop our gifted children to be able to solve or even to address such problems, we need a new approach—before our metaphorical cruise ship sinks like the Titanic.

I suggest that there are at least four missing ingredients to at least some traditional gifted programs, although of course some less traditional programs already incorporate some of these elements.
Gifted Education for Creativity

Many gifted educators, such as Paul Torrance, Joseph Renzulli, and others, have talked about the importance of creativity in giftedness. But educators sometimes slip in the assumption that creative giftedness is a fixed trait. It’s not. There is little if any solid evidence for the heritability of creativity (in contrast to the existence of various sources of evidence for at least some heritability of IQ). Teaching for creativity is about teaching an attitude toward life—namely, that creative people are willing to forge their own path rather than merely letting others do it for them.

The first element of this attitude toward life is a willingness to “defy the crowd.” Creative people are not content just to do what they are told to do. But if a gifted program is always telling students what to do—perhaps to do what others do, but just a little faster—then gifted students will internalize the wrong message. Whatever may work in gifted education, you don’t get to be a gifted adult by doing what others do, just a little faster. You need to forge your own path, often leaving others to follow a different, more traveled road.

The second element of this attitude is a willingness to defy yourself. That is, you need to be able to put your past ideas—into the past. It is often difficult for us to let go of ideas that, even if they were useful in our lives at one point, no longer are useful in the present. We sometimes hang on to the past, even knowing at some level that it is past. But to be creative, one has to move forward into the future, and be willing to give up the security of hanging onto ideas that no longer work for us. We have to face the challenges of the future rather than the moribund challenges of the past.

The third element is a willingness to defy deeply imbued convictions and conventions of which we may not even be aware. They may be unconscious. The most creative people are constantly questioning not only what they are conscious of—what others are doing and what they have been doing—but also that which is below the surface.

To teach for creativity, therefore, is to teach attitudes toward life—willingness to defy traditions, but also willingness to take sensible risks, willingness to defy obstacles, willingness to be courageous when others are telling us we are out of line.

Gifted Education for Common Sense

Common sense is not something we are born with, but rather, something we learn from experience. It’s what makes our lives livable. And our research shows that it is largely independent of IQ. One can have a high IQ and little common sense, or vice versa.

Today, reading programs more and more have emphasized factual content. Grade 2 Journeys (Book 1 for Common Core), for example, has lessons on animal traits, family time, animal traits (again), getting along with others, places around town, animal homes, agriculture, weather, traditional tales (How the Chipmunk Got His Stripes), Ocean Life, animal and human interactions, music, school differences, special ways to communicate (the story of Helen Keller), and personal safety (Officer Buckle). Certainly the chapters on getting along with others and on personal safety are about common sense, and perhaps some of the others touch on common-sense issues as well. But the emphasis is on presentation of factual content. In earlier times—in the 1950s when I learned reading from the Scott-Foresman basal series (sometimes called “Dick, Jane, and Sally”)—all of the lessons were stories about children and their interactions with others. Some of the stories were more interesting than others, but their goal was not just to teach reading but also to teach the common sense of everyday living as a child.

If we do not teach children to think in a common-sensical way, and if we don’t learn about it in other settings, then how exactly do we expect children to develop such common-sense thinking skills? The Dick, Jane, and Sally series may not have provided exciting readings by today’s standards, but it did teach children how to react in the face of everyday interactions.
Gifted Education for Wisdom

Wisdom is the use of analytical (IQ-based), creative, and common-sensical (practical) skills, as well as knowledge to achieve a common good, over the long as well as the short term. Wisdom goes beyond the other skills because it concerns how we look out for others’ interests, not just our own. Wisdom in a sense transcends the other skills. Wise people seek to balance their own interests with the interests of others. They reflect deeply on problems and realise what they do not know as well as what they do know. They seek to understand and appreciate others’ points of view, not just their own.

I recently did a text analysis of readers at the second-grade level. In the early McGuffey readers at the turn of the 20th century, there was heavy emphasis on teaching students to think wisely. In the Scott-Foresman series of the mid-20th century, there was some emphasis. In current reading series, there is hardly any emphasis on wisdom at all.

Gifted Education for Passion

In the end, teachers of gifted education need to help gifted students find their passion. Quite simply, it is in the areas that students are passionate about that they will make a difference, no matter what their abilities may be in other areas. Each student needs to find his or her own path to making the world a better place.

Gifted education today can take many forms. But it is handcuffed by the expectations of schools for high performance on standardised tests. The tests are incomplete—they do not measure the creative, common-sensical, and wisdom-based skills and passion that are so important to making giftedness not just an abstraction, but rather something that makes the world a better place. Let’s teach our gifted children not just to be smarter and smarter, but to make the world a better place through IQ plus creativity, common sense, wisdom, and passion. The goal—to educate gifted children in making a positive, meaningful, and enduring difference to the world. We need to do it now, before our ship sinks.
Does Gifted Education Serve the Gifted?

Giftedness has been recognised at least since Biblical times (remember Joseph, the dream interpreter who foretold 7 years of famine). It probably pre-dates the Bible, but we have no written records, just the evidence of the frescos of Minoan Crete (Eisler, 1987). There have always been extraordinary individuals. In *The Republic*, Plato (n.d.) advised testing the metal of youth, and preparing the golden ones to become philosopher-kings who could rule with wisdom. Plato’s vision laid the foundation for selecting and educating gifted children. Yet, somewhere along the way, gifted education veered in a different direction. The pursuit of wisdom was traded for the pursuit of success. The idea of “golden ones” was dismissed as elitist, politically incorrect. Everyone deserves an equal opportunity to be successful. But does everyone have an equal capacity to be wise?

Giftedness is not about doing well in school, or awards, or the potential for success. It is not a race to the top. It is a state of being. It is the search for meaning, truth, beauty, congruity, wisdom. There is no curriculum. It is about wrestling with the big questions of life, questions for which there are no answers. “Why am I here?” Not everyone asks these questions. Giftedness is about who you are, not what you do. This perspective was reinforced by a ninth grader who shared her definition of giftedness with me: “Giftedness is when someone is unsatisfied with the information they are given, so they go out of their way to learn more and enjoy doing it” (E. Meckley, personal communication, October 4, 2018).

We have been told that there is no evidence that the gifted population is wired differently (i.e., more sensitive, intense, overexcitable). However, in an earlier issue of the *Conceptual Foundations Network Newsletter*, Steenbergen-Hu’s (2017) recent meta-analysis of studies of overexcitability (OE) revealed that “highly gifted individuals significantly outscored non-gifted comparisons on Intellectual, Imaginational, and Sensual OEs at a significance level of 0.001 (6 studies).” Shedding light on a serious issue in the study of giftedness—sample selection—she admonished the field to become more aware of how low, moderate and high levels of selectivity affect findings. “It is reasonable to argue that a prerequisite for correctly assessing the giftedness-OE relationship is first to ensure how giftedness is determined and assessed.” This advice is critical to obtaining valid research results in this field.
It may sound counter-intuitive, but evidence of qualitative differences in the gifted population cannot be garnered in research conducted with children in gifted programs. The selection criteria for most gifted programs are so broad that it is challenging to defend why these students need special educational provisions compared to their peers. It is also questionable, as Steenbergen-Hu points out, to consider “university students majoring in creative programs” an appropriate gifted sample. I don’t think this is the group Plato had in mind to groom as wise leaders.

To clearly recognise the impact of level of giftedness on research results, it is instructive to examine levels of functioning at the other end of the spectrum. Special education offers a continuum of services related to degrees of difference from the norm. Functional differences intensify with each standard deviation.

- **At -2 standard deviations (SD) from the norm (around 70 IQ), mildly impaired children qualify for special education services because they have significantly different needs from the rest of the school population.**
- **At -3 SD (55 IQ) children, the moderately disabled require assistance and supervision in nearly all aspects of daily living.**
- **At -4 SD (40 IQ), the severely disabled are learning self-help skills. They are unable to function independently.**
- **At -5 SD (25 IQ), the profoundly disabled are unable to care for their own needs (Spruill, Oakland & Harrison, 2005).**

The gifted are not a homogeneous group. Giftedness is the mirror image of intellectual disability. It, too, occurs on a continuum.

- **120 – 129 IQ** 91st % +1.33 SD academically talented (advanced)
- **130 – 144 IQ** 98th % +2 SD moderately gifted range
- **145 – 159 IQ** 99.9th % +3 SD highly gifted range
- **160 – 174 IQ** 99.99th % +4 SD exceptionally gifted range
- **175+ IQ** 99.999th % +5 SD profoundly gifted range (Wasserman, 2003)

Just as one cannot make valid generalisations about the severely disabled by studying the mildly impaired, one cannot gain illumination into the qualitative differences of the highly gifted by studying the academically talented. There are functional differences in individuals 2, 3, 4, and 5 SD from the norm in either direction. When we place extremely gifted children in a one-size-fits-all gifted program, their needs are not recognised. And when placement in a gifted program is how we select our gifted sample, we will not recognise the qualitative differences in the highly gifted.

Quantitative differences become qualitative differences at the extremes. This principle can be seen clearly when we observe what happens to water at different temperatures. Slightly cold or slightly warm water is still water. But when water becomes extremely cold it turns into ice and when it becomes extremely hot it turns into steam. Steam and ice have qualitatively different properties from water. The brightest 5 or 10% of the school population is very warm water, but it is not steam. And the children in the lowest 5 or 10% of the school population do not qualify for special education services; the degree of their differences is not statistically significant.

Whatever the cutoff score for admission to a gifted program, most of the IQ scores of the group cluster around that cutoff. In the scatter plot below, the isolated dots furthest from the cutoff are outliers. These students are significantly different from the majority of their classmates, but those differences will be invisible in group means. To understand these individuals, they need to be studied separately.
Giftedness, like its counterpart at the other extreme of intelligence, is not primarily an educational issue. You do not become gifted when your school develops a gifted program, and cease to be gifted when your district runs out of funds. It is atypical development, which becomes apparent as early as infancy (Louis, 1993; Alomar, 2003) and remains throughout the lifespan (Fiedler, 2015). Atypical development leads to atypical life experiences, the feeling of being an outsider, significantly different learning needs. The further one veers from the norm in either direction, the more evident are these qualitative differences.

The study of giftedness originated in the field of psychology with the investigation of individual differences. The founder of our field, Leta Stetter Hollingworth, studied both extremes. Hollingworth developed some of the first programs for the gifted, all aimed at those at the 99th percentile on an individually administered IQ test. Over time, as gifted education sought favor in egalitarian school systems, the field was compelled to broaden the definition of giftedness from 1% to 2%, then to 3%, then to 5%, and now to 10%. Some define the top 20% or 33% of the school population as gifted. The broader the definition, the less defensible gifted education becomes: children at the 90th percentile are not qualitatively different from children at the 85th percentile. This gives rise to the question, “Does gifted education actually serve the gifted?” The answer depends on how broadly the program defines giftedness.

The principle difference between giftedness and gifted education may be that they are two different disciplines: psychology and education. The early psychologists who studied giftedness—Alfred Binet, William Stern, Lewis Terman, Leta Hollingworth—were fascinated by individual differences. The psychology of individual differences examines qualitative differences in the experiences of individuals at the extremes.
Gifted education today is designed for academically talented students who are eager to succeed. It focuses on aptitude in specific domains, achievement or the potential for recognised achievement, and degree of effort (motivation). Provisions include differentiation in the regular classroom, enrichment, talent development, competitions, and coaching for a success mindset.

By way of contrast, giftedness involves 2-3% of the population that is significantly different in general intelligence. These individuals have unusual development of abstract reasoning, are asynchronous, prefer complexity, show overexcitabilities, tend to be empathic and morally sensitive, are driven by their own inner agendas rather than by school success. Their abilities can be documented on IQ tests. They are acutely aware of their differences and thrive when they find others like themselves. These qualitative differences are not as evident in academically talented students. When research on the academically talented provides no support for these qualitative differences, it is misguided to report that significant differences do not exist. They do exist in more selective samples.

The following international studies, from 1942 to 2015, have found qualitative differences in empathy, perspective taking, and moral sensitivity in gifted children, when compared to typical children. The studies are from the United States, Canada, Australia and Israel:

- Gifted children had greater empathy and used higher levels of care-oriented moral reasoning than children of average ability (Hay, Gross, Hoekman & Rogers, 2007).
- Gifted children showed higher levels of empathy than average children and empathy levels increased with age (Lovecky, 2009).
- Gifted children scored higher than non-gifted children on emotional empathy (Schechtman & Silektor, 2012).
- In studies in Canada and the U.S., 20 years apart, with different instrumentation, gifted preschoolers demonstrated advanced perspective-taking (Tarshis, 1981, Tucker & Hafenstein, 2001).
- Gifted third graders showed advanced sensitivity to feelings and perspective of others when compared with non-gifted classmates (Salzman, 1989).
- Children over 180 IQ were troubled at a much younger age than average children over issues of right and wrong and the problem of evil (Hollingworth, 1942).
- Children above 160 IQ were more advanced than age peers in conceptualization of moral precepts such as fairness, justice, and sense of responsibility for self and others (Gross, 2004).
- Gifted children had more advanced levels of reasoning on moral dilemmas (Chovan & Freeman, 1993; Howard-Hamilton, 1994; Janos & Robinson 1985).
- The majority of children brought to Gifted Development Center for assessment were described by their parents as sensitive (799 out of 916), compassionate (811 out of 913), morally sensitive (810 out of 919) and concerned with justice and fairness (818 out of 914) (Silverman & Lovecky, 2015).

It is time to heed Steenbergen-Hu’s advice and become aware of when sample selection biases misrepresent giftedness and lead to erroneous conclusions. Let us value the inner quality of wisdom over the external aim of success.
References


Giftedness, writ large, is easy to define, at least in adults. It represents the output, thinking, work habits, and outlook of individuals who are highly successful, innovative, and productive. These worthies are valued in all fields, often showered with awards and praise, and studied by others in their discipline. As interesting as these gifted adults may be, however, they are not the reason that gifted education exists, at least not directly. Gifted education exists, in my opinion, because of the many failures of teachers, parents, and others over the years in recognizing the talents of those children who became acknowledged experts in their fields as adults. Thomas Edison is reported to have spent only 12 weeks in school, as his teachers found him too difficult to teach. Albert Einstein was a poor student, one whom his teachers considered mentally deficient. Sarah Vaughan was denied the opportunity to sing with her church’s choir, and instead made to play the piano. These scenarios, which involve children whose gifts are universally admired, became gifted adults in spite of, not because of, their teachers and schools. These, and many others, were not provided with appropriate opportunities and challenges growing up. These children, and others like them, are the reason gifted education exists.

For the past 30 years, critics of gifted education have proliferated. These critics claim gifted education is unfair, or that it is inequitable, or that it favors some children over others. Those who argue against gifted education are wrong, and often display an ignorance about teaching, schools, and bright children that is staggering in its enormity. This mistaken approach leads for calls to dismantle gifted education programs and to replace them with “advanced academics.” Such efforts are detrimental to gifted children.

Who is to blame for efforts to dismantle gifted education? Several groups bear blame for this. “Experts” who are neither teachers nor gifted. “Equity” advocates who seek to benefit some children at the expense of others, or at least to prevent some children from engaging in appropriate academic activities unless these are available to all, including those who would not benefit from them. Publishers and authors who seek to broaden their market share at the expense of gifted children. Administrators who wish to avoid conflict regarding the allocation of resources at all costs.
Problems, Conundrums, and Challenges

Why demand that those who posit theories and schemes about gifted education have some knowledge of and experience as teachers? For the same reason who tend to prefer physicians who attended medical school and completed their internship. There is a great difference between “studying” something and understanding it. Those who have not been teachers do not understand why teachers are concerned with classroom discipline (it assures children’s safety), or that school boards determine curricular policies, and teachers merely administer them. Similarly, in mixed-ability classrooms, most teachers will be most concerned with those children who struggle the most, not those who excel. Why is this? Because teachers know what happens to children who lag behind their peers to a significant degree, such as high drop-out rates, lower lifetime earnings, and increased chances of incarceration.

Those who demand that all students receive the same instruction in the name of equity also threaten gifted education. Certainly all children deserve a high-quality, appropriate, and enriching education. But those services that are appropriate and enriching for gifted children often are not the same as those for the general education population. Just as we do not provide chemotherapy to cardiac patients just because they are in the same facility as cancer patients, we should not worry about whether every student is given the “same” experience. Instead, we should focus on providing every student the right experience, based upon assessment data, his or her interests, and what is known about the child’s learning profile. If we did that, equity would be much closer to realization than would shutting down gifted education programs.

Publishers and authors also find it easy to chase other larger, and more lucrative, markets than that which gifted education represents. Many of the nation’s schools do not offer gifted education services. Of those schools that do, the vast majority provide gifted programming to a minority of children enrolled. This means that the potential market for books, curricular units, or other materials designed for gifted children is vastly smaller than that intended for the general education population. Rather than writing specifically for gifted children, many authors or publishers merely insert several boxes captioned, Differentiation or Enrichment, with little regard for whether these additions provide anything of value for gifted children.

Finally, administrators, both building level and central office, often dismiss the need for gifted education, preferring to concentrate on other needs. As with teachers, some of this is understandable as schools have over the past few decades been asked to do more for more groups with less. That being said, the disinclination to provide opportunities for gifted children is short sighted, especially in schools that serve large populations of diverse learners (children of color, English learners, and students from low-SES backgrounds). Gifted education programs can often enhance the opportunities available post-graduation to diverse learners. Additionally, once interest grows in developing talent, more attention is paid to those children who might benefit from gifted education.
For too long, proponents of gifted education have been too accommodating, too understanding, and too docile when gifted education programs have been attacked, scaled back, or eliminated. No more can this be our approach. Advocates for gifted education need to support and push for more services for children. When “experts” question the legitimacy of such programming, they should be asked specifically, “Were you a register-carrying teacher in a public school? For how long? When?” And if your school district is hiring experts without expertise, complaints about the frivolous use of public funds should be made.

Next, parents should understand that American public schools do not possess the monopoly on options for schooling that they once did. In many areas, charter schools provide competition for neighborhood schools, and some states provide vouchers and other tuition remission for private and parochial schools. Parents unhappy with the educational options available at their child’s home school should investigate these and see if a better fit for his or her skills and needs is available. Homeschooling is also an option—in many areas cooperative homeschooling groups permit parents who do so to pool their talents and areas of expertise to provide more and better opportunities for their children. Finally, online schools exist which, although not for every gifted child, may provide a better opportunity for gifted children whose schools and teachers choose to ignore them and their needs. Each child who is homeschooled, or attends a charter school, means a reduction in the funds available to the local public school. If enough parents vote with their feet, gifted education options will increase.

Universal screening, and the adoption of multiple measures of identification is a necessary step to begin to identify those children who might benefit from gifted education services. But universal screening and the use of multiple measures is only a start. Schools and teachers must provide teaching and programming that is tailored to develop their skills and respond to their needs. A variety of models and approaches exist to provide gifted education services. These can include pull-out programs, special classes, special schools, or acceleration—any gifted education services benefit gifted children more than no such services. And if the gifted education services provided are appropriately tailored to the skills and needs of gifted children, they are unsuitable for those children who are not gifted.

To those who suggest that to do this provides “unfair” advantages to gifted children, we must simply reply, “No, it does not.” Gifted education simply prevents gifted children from being provided inappropriate instruction, using inept instructional strategies, and inadequate learning materials. When administrators, teachers, or others assert that gifted children will “learn on their own” or that teaching to their demonstrated skills and needs is “inequitable,” parents should demand they put that in writing, and then take action to ensure that such policies are ended. The time for patience, or self-abnegation, or quiet has ended—our demands must center not on whether gifted education services are to be provided, but instead on which gifted education services are to be made available. To demand such services will minimize the chances that adults who are eminent in their fields were deprived an appropriate education as children.
Sitting criss-cross applesauce on a child’s bedroom floor surrounded by LEGOSTM and dirty clothes, things seem so clear. It is in this space and in this moment that I see him. I see his imagination, innovation, sensitivity and depth. I am a therapist who works with gifted children in their homes.

I am acutely aware of the fact that this experience is a luxury… a luxury that most teachers do not have. An endless sea of requirements and virtual aptitude measuring sticks threaten to snuff out the creativity, passion and essence of our finest teachers and the gifted children they have committed to serve. It is impossible to see when you can barely breathe.

How did we get here? It appears that our society’s pursuit for academic excellence at the expense of all else is rooted in fear, rocket fuelled by Sputnik in the 1950’s. After all, the Russians were sending someone to the moon and we had to compete. Suddenly, our gifted kids were a resource we could use to beat them (Hersey, 1960). It is now the 21st Century and the framework of our educational system remains the same. Gifted children are still primarily identified by their academic achievement and thrust on a world-centered trajectory that fast-tracks them on a path to burn out prior to even entering college.

Our world has changed dramatically in just 10 short years. While providing convenience, the rapidly advancing field of technology has added challenge to all of our lives. Our gifted kids are even more deeply impacted. It isn’t just about the timesuck or the exposure to violence; it is about the sensitivity to others, the heightened awareness of life on a global scale and the rumination which can be triggered by a simple text message.

Gifted children are gleaning a constant stream of information in as little time as it takes to type it into the search bar. The work of the gifted child is no longer to learn as much as possible. It is to figure out how to stop the endless influx of information so the mind can rejuvenate. So why is education still operating in the same way? Why are gifted children still bringing home rote homework when their learning is already extended well beyond the school day?
A Child-Centered Approach

The solution is an individualised focus on the whole child... a child-centered approach... a revolutionary change to education as we know it.

Individualised everything

It is time for gifted education to pave the way for our new society. Part of the evolution of our species is to individualise everything. The business world has figured this out. Our preferences are tracked down to the ply of toilet paper we use. Cookie cutter simply doesn’t fly anymore... anywhere.

Different strokes for different folks: Gifted children with learning differences

Imagine a world in which children learned to embrace differences and understood how their unique attributes were beneficial for the common good. I don’t mean talking about embracing differences. I mean truly embracing differences. To do this, we have to take a hard look at the way we think about “twice exceptional” children. How can we teach children to honor differences in one another when we openly describe children outside of the norm as “disordered”? Do we think that they don’t notice this dirty little word that stands out at the end of most diagnoses like a bright red caboose? How wonderful it would be if children were not required to be diagnosed with a disorder in order to get the support they need to navigate our educational systems.

Many of history’s greatest contributors would likely meet criteria for today’s “twice exceptional” label (West, 2009). Twice exceptional children with innate goal-directed persistence will often go on to do great things, not in spite of their differences, but because of them (Davis, 2010; West, 2009). The rest are at risk of falling through the cracks.

Understanding self

My young client’s head hangs low. Sheepishly, she steals upward glances. Intuition is her guide as she assesses my intentions. It isn’t what I say that matters, it is what I see.

When gifted children are referred to me, they usually feel that something is wrong with them. They are too sensitive, too angry, too anxious, too scattered, too introverted, too disruptive, too loud, too quiet, too... too... too. They have no idea who they are as gifted individuals.

Gifted education is in the unique position to incorporate the social and emotional aspects of giftedness into curriculum. If we only focus on academic preparedness, we are failing to meet the needs of the whole child. When children understand themselves as gifted individuals and realise how they contribute to their community, they are better equipped to do life.

Tell me what I need, what I really, really need

School and work take top priority in our culture. The gifted population perpetuates and suffers in this paradigm as our drive for excellence urges us to push our bodies and our minds to exhaustion and illness. For decades, we have known that autoimmune disorders are prevalent in the gifted population (Benbow, 1986). We are teaching children “grit,” but we are not teaching them self-care. In fact, we are pumping out excelling humans who are completely disconnected from what it means to be human.
Accessible Resources

Some of the resources we need are right at our fingertips, but sorely overlooked.

**Personality development**

First and foremost is the Theory of Positive Disintegration which was developed by Polish psychologist and psychiatrist, Dr. Kazimierz Dabrowski (1902-1980). This complex and multifaceted theory of personality development is centered on the internal journey of the individual through five possible levels ranging from egocentrism to altruism (Mendaglio, 2009). Dabrowski believed that anxiety and tension were necessary for advancement to each level. As part of the theory, he identified five domains of overexcitability or “superstimulatability” (direct translation of the Polish “nadpobudliwość”) (Falk, Miller, Piechowski & Silverman, 2016). This powerful theory provides a foundation for accessing the deepest, most luminous aspects of ourselves.

Minutiae beckons us to the external side of life each day, temporarily blinding us to what is real and meaningful. There is no greater privilege and responsibility than playing an influential role in a child’s life and it must be handled with thoughtful care. When we prioritize achievement, we allow minutiae to have its way, robbing us of the true essence of a child.

**Movement**

Anyone who works with gifted children has observed that psychomotor superstimulatability is common in this population. They have an innate need for movement that is beneficial in helping them to process information and emotions. Movement also boosts the neurotransmitters serotonin, norepinephrine and dopamine (Barron, 2012). Despite the known benefits, our educational systems continue to nix movement in order to make room for academics, with the notion that our children will be more equipped to compete. It all can start looking a bit counter-intuitive.

Our society has packaged movement as an avenue for attaining beauty and weight loss and as a tenet of competition. We must teach children from an early age that movement is necessary for well-being. It is to thriving as food and water are to surviving. In meeting the needs of the whole child, movement is yet another area in which gifted education can be the torchbearer.

**Mind rest**

Since anxiety is an innate trait for most gifted children, it is imperative that they learn the importance of resting the mind (Sisk & Kane, 2018). Some progressive schools are incorporating yoga, meditation, mindfulness and journaling into the school day. However, these opportunities are offered primarily in K-8 and appear to be virtually non-existent in high school. This seems ironic in light of the intense focus on college and life-preparedness that takes place during these pivotal years.

**Social and emotional development**

Educators chose their profession to teach, not to be therapists. However, giftedness cannot be separated from gifted education. The social and emotional aspects of giftedness come to school every day with the child. Teachers of gifted children report that they are “floundering” with the social and emotional complexities of this population. At a minimum, it would behoove us all to teach gifted children about themselves and what they need to function at their very best. A collaborative partnership between parents and teachers could enable this to happen at home as well as at school. Sadly, right now, there is so much division. Parents blame teachers. Teachers blame parents. Blame does not serve our children well.
Contribution with a Purpose

Human beings are wired for interdependence. We are happiest when our positive attributes are utilized for the common good. Historically, purpose has provided motivation for problem solving, alleviating boredom, and contributing to the greater community (Bronk, 2013). Unfortunately, modern convenience has left a gaping hole in this aspect of children’s lives today. That void can be filled when their capabilities are experienced as an essential component of home and community.

Conclusion

It is hard to raise gifted kids today. It is hard to teach gifted kids today. It is certainly hard to be a gifted kid today. In the big scheme of things, we are all on the same team. We wish for each gifted child to feel valued, experience success, and have positive relationships that bring them joy. We all need to collaborate a little more and compete a little less. It starts with us. Just as we suggest to parents that they model the behaviors they wish to see in their child, so shall we as a field do the same. It is in the coming together of giftedness and gifted education that gifted children will truly flourish.

References


In my research with gifted women who achieved eminence, I drew upon two decades of my work and proposed a new theory of talent development in women that suggested that the cumulative and contextual experiences of women of accomplishment differ from those of men in several ways, especially in intellectual, personal and work-related perceptions. In studying the life experiences of eminent women, one of my participants, an award-winning children’s writer, for example, wove memories of her Hispanic heritage and parenting into her literary work, incorporating the insights and creative experiences she had gained as a mother and through reflections on her own childhood. Other gifted women in my research about eminent women made careful choices about the development of their talents, achieving at high levels by careful and steady work, while embracing and sometimes even celebrating the detours that occurred in their lives. These women often stopped their straight path to talent development and to pursue intensely personal choices, such as raising children, supporting partners or parents that became ill, and sometimes working for the common good of their communities or the betterment of others.

All of the eminent women that I studied experienced intensity in their lives, characterised by their need and sense of obligation to pursue and develop their talents. Many compared their own lives to the lives of their contemporaries—other similarly talented women who did not attain the same level of eminence as the participants in my study, but who appeared to live much calmer, and in some cases, happier lives. And in some cases, the eminent women that I studied wished that they could have taken different paths, with less intensity. But that did not happen, because all of them explained, in a similar way, that they had something inside of them that had to come out and be developed.

Based on this research with gifted women, I proposed the following definition about the process of talent development in women.

Feminine talent development occurs when women with high intellectual, creative, artistic or leadership ability or potential achieve at high levels in an area they choose and when they make contributions that they consider meaningful to society; these contributions are enhanced when the women develop personally satisfying relationships and pursue what they believe to be significant and consequential work.
The gifted women I have studied, both those who achieved eminence and those who did not, told a similar story, as they were all extremely bright in school, but as they grew up, they began to feel ambivalent about their future and their responsibilities to loved ones. Their dreams for demanding and interesting careers and important work wavered and diminished and they began to doubt what they previously believed they could accomplish. Their beliefs about their abilities as well as their self-confidence may have been undermined during childhood or adolescence. Some acquired various levels of "feminine modesty," leading to changes in self-perceptions of ability and talent, which subsequently affect others’ perceptions of their potential. Some fell in love in college and suddenly and unexpectedly, the dreams of the person they loved became more important to them than their own dreams and they lowered their aspirations to pursue the relationship. Some decided to become nurses instead of doctors, and some completed a Bachelor's degree instead of a Ph.D. Some accepted less challenging work that was different from what they had dreamed about doing a decade earlier, but that enabled them sufficient time to raise their families and support their partner’s work. Some talented women born after the women's movement were surprised to find that they had to make choices that benefited those they loved, after being consistently told that they could "have and do it all." They learned, often to their surprise, that they could not.

The reasons for the successful accomplishments of some highly talented girls and women and the failure of others to realize their high potential in meaningful work is complex and depends upon many factors, including values, personal choices and social-cultural forces. Some gifted women have a sense of destiny about their own potential to produce meaningful work that makes a difference. Reis’ research suggests that gifted women make active choices to pursue their talents because they had a sense of destiny about the importance of their work. Many personal choices and barriers faced this diverse group and it was in overcoming and successfully negotiating these obstacles that some of their motivation and determination emerged. The development of a creatively productive life and the attainment of eminence is complex and decidedly personal. What one participant regarded as an obstacle, another perceived as an intriguing challenge. While some were negatively influenced by their parents’ lack of support and withdrew from relationships, others used this anger and rebelled, and eventually became eminent in their selected area of endeavor. The ways in which the same barriers differentially affect talented women provides the fascination about conducting research on the individual paths they follow to achieve high levels of accomplishment. Not all gifted females experience the same barriers, but my research suggests a combination of the following that occur across the lifespan and differentially affect productivity at different ages and stages: personality characteristics such as modesty, dilemmas about abilities and talents, personal decisions about family, decisions about duty and caring (putting the needs of others first) as opposed to nurturing personal needs, religious beliefs, and social issues. Some of these dilemmas cannot be resolved to the satisfaction of everyone involved. Rather, they shift or are eliminated when changes occur in a woman’s life, such as when her children grow up, her marriage ends, a new relationship starts, or she changes a home or work environment. If our society is to more actively help talented girls and adult women to realize their abilities and potential, expectations about women’s personal choices and work process and environments must be altered, and our society must support diversity of life choices.
And so, I believe that some Gifted Education programs and practices have not been able to educate our brightest young girls and women about the obstacles they will face and the challenges that will confront them in future education and career opportunities. Gifted and talented girls and women will face conflicts between their own abilities and the social structure of their environments, and they will encounter external barriers (lack of support from families, stereotyping, and others. Teachers and parents of talented girls and women should encourage them to develop their strengths and to be resilient but not expose them to the courage they will need to challenge authority and emerge from obstacles with their dreams and aspirations intact. And these young women must learn to focusing on their specific strengths and interests, have clear plans that are not derailed by early romantic relationships. And they must find mentors and role models to support their unique differences and talents consistently across their lifespans.

References


Joyce Vantassel Baska

The Curriculum Concept of content modification that guides differentiation

What are the important conceptions about curriculum that gifted educators should use as they embark on program development? After all, our conceptions and assumptions about a phenomenon influence how we respond to it. The most critical understanding that impacts curriculum work has always been how gifted students differ from the norm, and the implications of those differences for curriculum changes. Individual differences research has documented the criticality of understanding that individual students vary greatly from each other in respect to learning rate, the capacity to form complex patterns of thought, and to make connections among stimuli (see Detterman & Thompson, 1997). These documented differences then provide a rationale for curriculum to be responsive and thus differentiated. In the most widely used definition of differentiation in the field, curriculum/content modification is seen as linked to the concepts of instruction and assessment for modification as well (see Hughes, Kettler, O’Shaughnessy-Dedrick, & VanTassel-Baska, 2015).

Moreover, we also have over 100 years of research suggesting that there is a need for two types of responses in program organization, regardless of the area of giftedness, and those are acceleration and grouping (Steenhagen-Hu, Makel. & Olszewski-Kubilius, 2016). In order for curriculum to be successfully altered for gifted students, it must be both advanced to their functional level in some or all areas and delivered in a congregation of other gifted students who can provide additional stimulation for both cognitive and affective learning outcomes.

Most researchers in the field also feel strongly about the need for other elements in good curriculum design, especially as they relate to the goals and outcomes of the curriculum. Passow (1986), for example, valued the inclusion of moral and ethical leadership as an outcome for a curriculum for the gifted. Sternberg & Grigenko (2000) have promoted the teaching of intelligence as a set of higher level skills to be learned, and Tomlinson et al. (2006) have stressed the value of a parallel curriculum that employs higher level concepts as organizing variables. My work has consistently addressed an integrated curriculum model, one that includes an emphasis on multiple interrelated goals and outcomes for gifted learners., regardless of level or subject matter (see VanTassel-Baska & Little, 2017).

Yet educators often ignore these basic conceptions of design in the process of delineating curriculum in schools for the gifted. Acceleration is rarely used as a routine treatment for advanced learning capacity, and grouping is often not practiced in ways that promote advanced learning rather than retard it. In the absence of the consistent use of these two differentiation tools, the rest of the differentiation picture is incomplete as both design and implementation hinge on these two factors being adequately addressed. They also are the factors often out of teacher hands as school grouping policies may be dictated by the principal or central office, and acceleration practices employed at the behest of the principal in consultation with parents and other teachers.
Content modification
Providing advanced learning opportunities also requires educators to adjust the curriculum not just in respect to rate and pace but also to level, using relevant diagnostic tools. Thus the concept of content modification is of central importance. The easiest approach to this process is through a diagnostic-prescriptive model, applied to the basic curriculum. The approach, used most often in math and second language learning, could be done in all subjects to ensure that level and rate of learning are addressed. The following checklist may help:
— has the student been assessed for advanced level of learning in math, reading, science, writing?
— has a curriculum match been found to address level of functioning and stage of development in each area?
— have materials been identified for use? (eg. locally developed, commercial)
— has an assessment plan been identified to document the proposed learning?
— have teachers received training in working with advanced learners in content modification strategies?
— have placement procedures been worked out?
— have communication procedures been developed to share decisions for curriculum advancement?
— have relevant content standards been addressed?

Learning through content advancement is the central concept for elementary programs to apply in their programs for the gifted, followed by advanced classes at secondary level. Content modification is often challenging for elementary and secondary programs for the gifted, however. Several reasons seem apparent.

1. Teachers are often not sufficiently trained in content to work at levels beyond where they are teaching, often 2-3 grade levels.
2. Teachers often have not worked on the vertical articulation of standards in order to understand how the process can be standards-aligned.
3. Principals often reject changes being made for some students and not others, making it difficult for teachers to “go it alone” in making student-based decisions about learning.
4. Educator beliefs that all students can do the same level of work at the same time.

Content modification needs to be a routine strategy that teachers use with both individual students and groups of gifted learners. The following table exemplifies the types of modifications needed in each subject area. Such modifications do not all need to be made by teachers if research-based materials are available for use in the classroom since this template has been used in the design of the majority of them.
Use **Acceleration** to elevate the level of curriculum stimulus

Add **Complexity**

Design in **Depth**

Incorporate **Critical Thinking**

Make the challenge more **Abstract**

Design in **Creativity**

Employ **Metacognition**

These strategies then become the basis for teacher modification of existing curriculum, in this case a reading passage.

**Classroom-based example of content modification**

A basic reading passage may illustrate how a teacher could apply these content modification/differentiation techniques. The following short passage engages students in understanding the importance of George Washington to our country’s growth and development.

A name that stands out in US history more than many others is George Washington. George Washington was the first president of the United States. He was born in Westmoreland County, Virginia in 1732. As a young man, he was a surveyor. His military career began with his involvement with the Virginia militia, including a notorious mission he undertook to deliver a message to the French in the Ohio Valley from Governor Dinwiddie; he almost lost his life on the return trip home after he fell from a raft into the icy waters of the Allegheny River. Several years later, he was given command of the Virginia militia forces due to his heroism. He resigned in 1758 and returned to his home, Mount Vernon. He married a rich widow, Martha Custis, later that year.

While Washington focused on his farming for the next few years, eventually expanding his 2,000 acre farm to 8,000 acres, he also became involved in politics. He was elected into the Virginia House of Burgesses, and in 1774, he was one of Virginia’s representatives in the Continental Congress. When the Revolutionary War began, Washington became the Continental army’s commander in chief. He was elected as the first president of the United States in 1789. Washington laid the foundations for the role of a president during his first term; he served a second term, during which his focus was foreign affairs. He refused a third term, and retired to Mount Vernon in 1797; he died two years later.

In order to make the passage more differentiated for gifted learners, teachers may systematically apply the template components below:
1. **Acceleration** of the reading may occur through several approaches. Perhaps the easiest is to use the online system that upgrades the Lexile level of any nonfiction reading to appropriate levels. This is a good place to start. Another technique is to assess student Lexile level and locate a more advanced reading on the same subject of Washington. Advanced work in reading may also be designed, using multiple texts. Ask gifted students to read three commentaries about George Washington so that they may be compared. A third approach might be for the teacher to rewrite the passage so that it focuses on the elements of Washington’s accomplishments that she wants to stress and uses more advanced vocabulary.

2. **Complexity** may be added by asking students to do a comparative analysis of the different passages read, analyzing the key factors that made Washington important to our history, synthesizing his contribution in a sentence, and assessing his work in comparison to the next two presidents who followed him. (Written)

3. **Depth** may be accomplished through having gifted students develop an original obituary for Washington that synthesizes his contributions and highlights why he is important to study today.

4. **Critical thinking** may be focused on by ensuring that students have answered the following questions:
   --How was Washington able to lead? What qualities made him a leader?
   --Why did Washington employ the military strategies he did during the Revolutionary War? Name three approaches he employed and his rationale for each.
   --Rate Washington as a president. How effective was he, do you think? What criteria will you use to rate him?
   (Oral or written)

5. **Abstraction** was incorporated through the focus on Washington as a leader where students needed to understand the concept of leadership to complete the prepared activities. If the teacher wanted to make the activities more abstract, she might ask gifted students to apply one of the following concepts to Washington and explain how it was relevant: independent, patriotic, visionary. (Oral or written)

6. **Creativity** was employed in the lesson by giving students choices in the concept of Washington they wished to comment on, and on the obituary to be developed. Teachers might also work with students to craft an individual project on presidential leadership or on the concept of leadership applied to other fields or on ideal leadership qualifications. Ask them to craft a proposal for their project that focuses on goals and outcomes, approaches to doing the project, and how they will assess their work. They also need to specify whether the project will be a paper/essay, graphic representation of ideas, or a film to visually capture the ideas.

7. **Metacognition** may be employed by the teacher asking gifted learners to comment on the following three questions after doing their work on Washington:
   --What new insights did you gain about Washington the man, Washington the leader? Would you continue to teach him as a model of presidential leadership? Why or why not?
   --What did you learn about your capacity to analyze, synthesize, and evaluate information? How would you rate yourself on a 1-5 scale, 5 being high?
   --What skills would you like to develop further that would improve your independent project work?
   (Oral or written)
This example of the **differentiation/content modification** process illustrates well how teachers may accomplish this task. If they have limited time, they may wish to delete #3 and #6 since both depth and creativity are accomplished through other work being assigned. If they wish to extend the lesson, any of the features may be used as homework assignments with follow-up discussions the next day in class. The example may also be used as a model for any non-fiction lesson to be employed in the classroom from K-12, with some customization.

**Grouping**
The best curriculum match to research-based grouping approaches would be either to have gifted students in a special class or to employ cluster grouping in the regular classroom. Either of these approaches might be successful as long as the cluster grouped model has a trained teacher who knows how to modify this same lesson for other students and can apply the open-ended inquiry approach built into the task demands. The example clearly demonstrates how the activities are differentiated for gifted learners and not suitable for all learners in the classroom, given differences in Lexile levels, conceptual levels, and learning rates. Thus content modification appropriate for the gifted must be used with those who can handle the level and extent of the demands of the assignment.

**Special needs learners**
Gifted students who exhibit characteristics or needs that require accommodations to be made to the proposed advanced lesson on Washington in order to be successful should be worked with individually, and modifications in each aspect of the lesson considered. Accommodations may vary by group or individual student (Baska & VanTassel-Baska, 2018). For example, minority children might benefit from study of Obama as President and use him as the contrast to Washington. Children from poverty might benefit from additional readings or websites where they can learn more about the idea of leadership and the presidency. Twice exceptional students might require more time on specific aspects of the assignment, especially the written portions or provide oral responses one-on-one rather than in the whole group. These accommodations may or may not be required, given the individual learner.

**Conclusion**
The purpose of this paper has been to demonstrate what differentiation looks like in the process of redesigning materials to meet the needs of gifted learners. More specifically, it has introduced the core differentiation moves for content modification in order to accomplish differentiation for gifted learners in a lesson on George Washington. It has also addressed the need for grouping gifted learners to efficiently carry out the lesson and to extend the learning.

Our conceptions of curriculum differentiation matter a great deal in how we modify and deliver advanced opportunities for the gifted. The field needs to remain vigilant to ensure that these processes are employed in order to elevate the challenge for the gifted in all of their subject-based learning.
References


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<td>Friday, November 16, 8:00 a.m. to 9:00 a.m.</td>
<td>Identification for What?: The Challenge of Identification-Services Mismatch</td>
<td>Mattie Oveross, University of North Texas &amp; Jeb Puryear, ACS International Schools</td>
<td>M100 G</td>
</tr>
<tr>
<td>Friday, November 16, 10:30 a.m. to 11:30 a.m.</td>
<td>Talent Development or Gifted Services: Moving from Either/Or to Both/And</td>
<td>Monica Simmonds, Richardson ISD</td>
<td>101 C</td>
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<tr>
<td>Friday, November 16, 2:00 p.m. to 3:00 p.m.</td>
<td>The Work of the National Research Center on the Gifted and Talented: Lessons Learned</td>
<td>Carolyn M. Callahan, University of Virginia; Joseph S. Renzulli, University of Connecticut; Sally M. Reis, University of Connecticut; &amp; E. Jean Gubbins, University of Connecticut</td>
<td>Auditorium 2</td>
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<tr>
<td>Friday, November 16, 4:30 p.m. to 5:30 p.m.</td>
<td>Policies That Support Talent Development: A Panel Discussion on Access and Opportunity</td>
<td>Wendy Behrens, Minnesota State Department of Education; Paula Olszewski-Kubilius, Center for Talent Development; Eric Calvert, Center for Talent Development; and Julia Link Roberts, Western Kentucky University</td>
<td>M101 AC</td>
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<tr>
<td>Date &amp; Time</td>
<td>Title</td>
<td>Presenter</td>
<td>Location</td>
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<td>Friday, November 16, 4:30 p.m. to 5:30 p.m.</td>
<td>The Legacy Archive Project</td>
<td>Stephen T. Schroth, Towson University; Todd Kettler, Baylor University; Abbey Cash; Ken Dickson, Educational Support &amp; Consulting Network; Bridget DuRuz, University of Washington; Debra Troxclair, Lamar University; Del Siegle, University of Connecticut; Sylvia Rimm, Family Achievement Clinic; &amp; Linda Silverman, Gifted Development Center</td>
<td>200 A</td>
</tr>
<tr>
<td>Saturday, November 17, 8:00 a.m. to 9:00 a.m.</td>
<td>Conceptual Foundations Network Business Meeting</td>
<td>N/A</td>
<td>205 A</td>
</tr>
<tr>
<td>Saturday, November 17, 1:15 p.m. to 2:15 p.m.</td>
<td>Public Attitudes Towards Gifted Education and Next Steps</td>
<td>Elizabeth Jones, The Institute for Educational Advancement; &amp; Shelagh Gallagher, Engaged Education</td>
<td>M100 IJ</td>
</tr>
<tr>
<td>Saturday, November 17, 2:30 p.m. to 3:30 p.m.</td>
<td>Sun of Gender: Talented Women and Eminence in Visual Arts, Writing, Science, and Other Domains</td>
<td>Jane Piirto, Ashland University</td>
<td>200 C</td>
</tr>
<tr>
<td>Saturday, November 17, 2:30 p.m. to 3:30 p.m.</td>
<td>A National Perspective on Gifted Education from the State Directors of Programs for the Gifted</td>
<td>Mary Kathryn Stein, Arkansas Department of Education; &amp; Wendy Behrens, Minnesota State Department of Education</td>
<td>M100 IJ</td>
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<tr>
<td>Date &amp; Time</td>
<td>Title</td>
<td>Presenter</td>
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<tr>
<td>Saturday, November 17, 2:30 p.m. to 3:30 p.m.</td>
<td>The Harrison Bergeron Effect: No, Everyone is NOT Gifted or Talented</td>
<td>James Delisle, Growing Good Kids</td>
<td>Auditorium 2</td>
</tr>
<tr>
<td>Saturday, November 17, 3:45 p.m. to 4:45 p.m.</td>
<td>True Collaboration: When University and School District Work Toward Program Change</td>
<td>Karen Rogers, University of St. Thomas; Tania Lyon, Mankato Area Public Schools; Sheri Allen, Mankato Area Public Schools; &amp; Karen Westberg, University of St. Thomas</td>
<td>M100 D</td>
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<tr>
<td>Saturday, November 17, 3:45 p.m. to 4:45 p.m.</td>
<td>A Multifaceted Evidence-Based Look at Giftedness, Personality and Qualitative Differences</td>
<td>Shelagh Gallagher, Engaged Education</td>
<td>101 F</td>
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<tr>
<td>Saturday, November 17, 3:45 p.m. to 4:45 p.m.</td>
<td>Reconceptualizing Underachievement—for the Sake of Gifted Underachievers</td>
<td>Jean S. Peterson, Purdue University</td>
<td>M100 D</td>
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<tr>
<td>Sunday, November 18, 9:15 a.m. to 10:15 a.m.</td>
<td>NCRGE's First Three Years' Findings on Identifying and Serving Underserved Populations</td>
<td>Del Siegle, University of Connecticut; E. Jean Gubbins, University of Connecticut; Carolyn Callahan, University of Virginia; Rashea Hamilton, University of Connecticut; &amp; Annalissa Broderson, University of Virginia</td>
<td>101 B</td>
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</tbody>
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