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For those teachers who are having difficulties in setting up stimulating programs for gifted students in the regular classroom, I highly recommend the following book by Joan Franklin Smutny and S.E. von Fremd: ***Teaching Advanced Learners in the General Education Classroom: Doing More with Less!*** (2011, Corwin). These difficulties may stem from the lack of proper resources or information related to teaching the gifted. By discussing major areas of education, the authors have provided an excellent resource for helping to overcome various obstacles including: identifying highly capable students, determining their interests, selecting and organizing stimulating lessons (at basic and more intensive levels, depending upon available resources), and differentiating instruction in the four essential subject areas. Smutny and von Fremd also emphasize the importance of developing gifted students' creative thinking, and interests in the arts and humanities. This practitioners' guide was developed by obtaining suggestions and feedback from classroom teachers in many different states. In addition, both authors have extensive hands-on experience in teaching the gifted and helping teachers to design effective programs for these students.

I would like to discuss some the key features of ***Teaching Advanced Learners. . . .*** as examples of why the book can help to improve instruction for the gifted in the regular classroom. Chapter 1, Understanding Advanced Learners, emphasizes that the current testing mentality in the public schools hinders the identification of students with high intellectual, creative and sensibility levels. It provides many practical ways for overcoming this problem by improving teachers' observational and assessment skills. Chapters 2 and 3 are concerned with Making the Most of Your Resources and Creating Appropriate Goals for Advanced Learners. Both of these chapters have detailed recommendations for identifying available resources and setting up appropriate goals. The chapter on goals is particularly useful because it includes a ten-point summary for establishing effective goals.

Chapters 4 and 5 focus on Meeting the Needs of Advanced Students, first by using beginning strategies and then by applying more advanced ones to extend learning. The beginning strategies in Chapter 4 emphasize modifying current teaching strategies to make lessons more challenging, and providing gifted students with more subject matter choices. Chapter 5 addresses more extensive classroom changes such as compacting, tiered activities, learning centers, and creativity/arts integration. Chapters 6 and 7 carry forward the information presented in the previous sections by showing how it applies to teaching the four subject areas to advanced students. Chapter 8 offers some creative ideas for inspiring teachers to become better educators of the gifted, and is followed by a Resource Section of useful books, web sites and publishers. I recently received an inquiry from a parent regarding useful resources for teaching the gifted. Smutny's and von Fremd's book was my first choice, and I also recommended that it be used by her child's classroom teachers.

Articles in Spring 2012 Issue – Emphasis on Teaching the Arts and Humanities

1. Discussion of the Patience and Persistence of Great Artists by Eugene Avergon and Diana Avergon**.**
2. Introduction to Christopher Burns**'** latest eBook collection of English and American poetry in which he talks about some characteristics of gifted poets.
3. Teaching Critical and Creative Writing by Robert E. Myers.
4. Teaching Gifted Children about the Importance of Patents in American Industrial Development by Harry E. Roman.
5. The Life and Contributions of Irving Berlin to American Music and Culture by Michael E. Walters.

Maurice D. Fisher, Ph.D., Publisher

Patience, Perseverance and Releasing the Extraordinary: A Look at Gifted Artists and Domain Mastery

Eugene Avergon Diana Avergon
Art by Choice Publications

Patience is referred to as the willingness to endure pain, difficulty, provocation, or annoyance. It is also seen as a capability for calmly awaiting an outcome or result. Perseverance is viewed as adhering to a course of action. These may not be the first words that leap into one's mind when thinking about great artists. Yet, patience and perseverance are seminal to domain mastery, be it in painting, sculpture or any of the visual arts.

Michelangelo and Leonardo da Vinci are well known for their extraordinary works of art. Why is it that we often refer to these two particular artists when we think of greatness? Could it lie in the fact that when we view their drawings, paintings or sculptures, a recognizable mastery is evident? How did Michelangelo and Leonardo da Vinci hone themselves to excel? How do great artists strive?

"Practice makes perfect" is a well known phrase when referring to success in sports, music and virtually all fields. The Renaissance Masters knew this concept well. Contemporary artists follow this lead. Leonardo da Vinci spoke about forming strong concepts before beginning to create with one's hands. This points to focused attention on one's powerful ideas and passions. Diligence, practice, patience – we acknowledge and relate to these words as we set out to achieve. Young gifted artists are encouraged here to reference master artists, both from Renaissance and current times, who chose domains and then fervently sought to become exceptional in them.

First, it is important to identify some of the characteristics that young gifted artists share. Imagination, speed of getting ideas down and interest in specific media and themes are traits of the gifted. Knowing what they wish to create, choosing how to work, and "living into" the art are characteristics that describe. Many of the visually gifted draw well before two years of age. They score well in IQ tests, display a good sense of design and evidence inventiveness (Foeken, 2005). This interest in specific media or themes, this knowing what they wish to create, this choosing how to work – all of these can drive enthusiasm to excel in a domain, an attribute seen in gifted young artists.

Regarding domain mastery, we can view some recent relevant research. Dan Coyle's The Talent Code (2009) discusses that when we work and engage in trial and error in a methodical manner over a long period of time (deep practice), something happens to us neurologically – we develop myelin. This myelin is a wrapping or binding substance around the neural pathways. The more wrapping or binding, the more accurate and fast the thought processes and skills become. This would indicate a technique for domain mastery.

With Michelangelo, his specific sculptural interest was in working to release the human shape from within a block of marble. Born 1475 in Caprese Italy, by the age of 14 he had exceeded his teacher Ghirlnadaio in drawing skills. Yet his passion lay in learning the human figure by working in stone. At 15, Michelangelo was studying sculpture. With many others at the palace of Lorenzo de Medici, he became an apprentice artist. Classical Greek and Roman works were Michelangelo's guides as he labored with three dimensional forms.

Although painting and architectural work took up much of his life, Michelangelo's fervor for depicting the human figure sculpturally never left him. At age 60, he spent some time each day, as he had in his youth, working with hammer and chisel. He displayed the same zeal as he had had as a younger artist.

"A friend observed, 'I have seen Michelangelo, although more than 60 years old and no longer among the most robust, knock off more chips of a very hard marble in a quarter of an hour than 3 young stone carvers could have done in 4 [hours], an almost incredible thing to one who had not seen it' " (Somervill, 2005, p. 83).

Leonardo da Vinci, 1452-1519, is known not only for his art but also for the many domains in which he excelled. In his early teens he served as an apprentice. In this program Leonardo learned many different skills in working with his hands – this was a hallmark of the workshop program in which art students studied and learned.

In 1482, da Vinci opted out of the apprenticeship program to become a court artist. Perhaps he wanted to pursue his many diverse interests. As Leonardo did extensive research into anatomy, botany, geology flight and hydraulics, he displayed genius in excelling in many spheres. He recorded his ideas on hundreds of notebook pages. Leonardo has been called self absorbed – it could be viewed that he was pursuing his passion to understand subjects and media in ever more complex ways.

Leonardo da Vinci kept lifelong notebooks in which he sketched, drew and redrew. He was known to work images and thoughts over and over, constantly seeking to find out and to learn more and more from them. Leonardo believed that in order to draw well, one had to learn to finish works and have patience with that process.

" 'Many wish to learn how to draw, and enjoy drawing, but do not have a true aptitude for it. This is shown by their lack of perseverance, like boys who draw everything in a hurry, never finishing or shadowing' " (The Talent Code, 2009).

Why did the Renaissance produce so many extraordinary artists? In part the answer lies within this method of education available to them – skills learned through apprenticeship. This suggests using a master artist as a model for learning – the student then working prodigiously on repeated sketches, drawings or sculptures to excel in the domain. Reference is made to these emerging Renaissance artists:

"We might think of them as divinely inspired geniuses, but as scholars have pointed out, the Renaissance artists themselves did not share this view. Instead, they saw themselves as craftsmen—akin to a watchmaker or a brilliant tailor. This attitude—unselfconscious, detail-oriented—helped to fuel the immense amount of hard work that created their fluency" (The Talent Code, 2009).

Artists of our century can be researched for their captivating biographies which focus on experiences with domain mastery. Drawing constantly, contemporary artist Wayne Thiebaud (b. 1920) considers it his research. He is known for bringing his sketchbook to hospitals, churches, museums, athletic events and concerts. Wayne believes in discipline as a way for an artist to choose his own limitations. Thiebaud is perhaps best known for his paintings of pies and cakes. Working hard at mastering the painting of these geometric solids, Wayne painted the same subjects over and over, trying out various media and different compositions. He diligently returned to familiar subjects and strove to simplify his work, to make it clearer.

"He did new drawings and paintings of things he liked: pies, hot dogs, cups of coffee, plates of bacon and eggs, club sandwiches, and penny machines full of gum balls and candy" (Rubin, 2007, p. 47).

When asked by students what to paint, Thiebaud said that they should find something that they really love. It is fascinating to look at how a love of subject and media can drive great artists to exhibit amazing powers of perseverance and patience in exploring a theme.

Martin Puryear (b. 1941) installed two large pieces at the San Francisco Museum of Modern Art in 2008. Ladder for Booker T. Washington, 1996, was made from a split sapling and is 36 feet long. Ad Astra, rising 63 feet, reached the fifth floor of the museum. As an artist, Puryear has taught and worked continuously, garnering awards, residencies, exhibits and international recognition.

In his youth, Martin learned woodworking skills from his father and enjoyed using hand tools for early woodworking in junior high school. Tools and handwork became eminently important to the sculptural work of Martin Puryear.

Working as a Peace Core Volunteer in Sierra Leone, Martin apprenticed with a local carpenter to learn wood joinery and carpentry. During a stay in Sweden, Puryear discovered a small silver chest in pear and chestnut wood at the National Museum. He found the creator of this piece, a cabinet maker and native of the Kamchatka Peninsula in eastern Siberia. Martin spent some three weeks in James Krenov's studio, serving as an assistant and observer of Krenov's master woodworking.

Puryear is known for his bold minimal forms, his belief in integrity of materials and for his fine craftsmanship. Martin's hand tools, his hand work, his knowledge of wood and natural materials – these have played a lifelong role in the creation of works that have acclaimed him as a master American sculptor.

Latvian born in 1938, Vija Celmins has lived and worked in New York and in California. In a 2007 retrospective drawing show at the Hammer Museum in Los Angeles viewers were able to see four decades of solid and patient work. Her drawings showed land, sea and sky. In a format using partial views, images that Celmins drew over and over were revealed – a few yards of water, the night sky or spider webs.

Celmins uses media (pencil, charcoal and oil) to re-describe photographs and observations. Over long periods of time and with incredible attention to detail, her works build up to emerge as exquisitely beautiful and technically masterful. Holding an MFA in painting from the University of California, Vija has become an internationally renowned artist.

"With a palette focused on the gradations between black and gray, Celmins has been known as a painter of refined representational images of night skies, ocean waves and spider webs. ...In all of her work, the precisely rendered paintings suggest the importance of patience – the artist's in making a precisely rendered painting, and ours in viewing it" (The Menil Collection, 2010-11).

In conclusion, students are urged to read the biographies of great artists. This might serve as encouragement for entering the lengthy process of art making – working in an area of interest, focusing on a strong concept, spending time with it, learning from trial and error and being patient with the journey. Somewhere along this path, one can look for the emergence of skills and perhaps, the releasing of the extraordinary.

Images of Artists' Works can be viewed at:

http://www.artcyclopedia.com/artists/michelangelo_buonarroti.html

http://www.artcyclopedia.com/artists/leonardo_da_vinci.html

http://www.artcyclopedia.com/artists/thiebaud_wayne.html

http://www.artcyclopedia.com/artists/puryear_martin.html

http://www.artcyclopedia.com/artists/celmins_vija.html

References

Benezra, Neal with an essay by Storr, Robert (1991). Martin Puryear. New York: Thames and Hudson Inc.

Coyle, Daniel (2009). The Talent Code. New York: Bantam.

Foeken, Willemina (Posted on June 9th, 2005). Identifying Artistically Gifted Children.
Retrieved from: http://www.artisticnetwork.net/arts/260/identifying-artistically-gifted-children.html

Nash, Steven with Gopnik, Adam (2000). Wayne Thiebaud: A Painting Retrospective. New York: Thames & Hudson Inc.

PBS Art 21 Series, (n. d.). "Martin Puryear Biography"
Retrieved December 10, 2008 from: http://www.pbs.org/art21/artists/puryear/index.html

Rubin, Susan Goldman (2007). Delicious.: The Life and Art of Wayne Thiebaud. San Francisco: Chronicle Books LLC.

Sollins, Susan (2003). Art in the Twenty-First Century. New York: Harry Abrams, Inc.

Somervill, Barbara A. (2005) Michelangelo Sculptor and Painter. Minneapolis: Compass Point Books.

The Talent Code (2009). Retrieved from: http://thetalentcode.com/2009/03/30/florence-italy/

Vasari, Giorgio (2006). The Life of Michelangelo. London: Pallas Athene.

Vija Celmins. (n.d.).Retrieved May 21, 2011. Retrieved from http://www.ulike.net/Vija_Celmins

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"Brevity is the soul of wit." **William Shakespeare**

"The best portion of a good man's life is his little, nameless, unremembered acts of kindness and of love." **William Wordsworth**

"To begin, begin." **William Wordsworth**

"A morning-glory at my window satisfies me more than the metaphysics of books." **Walt Whitman**

"And there is no trade or employment but the young man following it may become a hero." **Walt Whitman**

"Celebrity is the chastisement of merit and the punishment of talent." **Emily Dickinson**

"A word is dead when it is said, some say. I say it just begins to live that day." **Emily Dickinson**

Introduction to *Immortal Poets* (2011, The Seashell Press, Kindle Edition) – Available on Amazon.com

Christopher Burns, Editor and Publisher

The meaning of a poem is enhanced by the reader's own experience; great poems give beautiful expression to feelings we all have (the theme of *The Seashell Anthology of Great Poetry*). But the meaning of a poem is also enhanced by knowing something of its context, and that is the organizing idea behind this collection. Even the briefest description of the poet's life and times can often set the words singing in a new way.

For example, "The Second Coming" by William Butler Yeats is disturbing enough even if you know little about Yeats or his world. Its vision of impending chaos can be as terribly true about yesterday's social failure as about tomorrow's economics. But in 1919 when he wrote it, Yeats was worried about the rising tide of anarchy in Russia, in Germany and in Ireland. His mystical belief that the human race was getting a warning from a common subconscious—a *spiritus mundi*—gives the verse an even greater strangeness. He thought the horror of World War I was a prelude to the coming of an anti-Christ, "slouching toward Bethlehem to be born."

Robert Frost's "Stopping by Woods on a Snowy Evening," extraordinary by itself, becomes more haunting against the background of Frost's difficult life, having by then buried his mother and two of his children and committed his sister to an asylum. There are people behind these poems, and even the briefest account of their fascinating lives adds another dimension to their verse.

The scope of this collection extends from the eighth century to 1941; a second volume of modern masters is planned to cover the period from 1941 to the present. The focus has been on the poets consistently admired for the last fifty years, drawing deeply from their best work. About two hundred of the poems included here appear also in *The Seashell Anthology of Great Poetry*, and in the *Norton Anthology of Poetry*. They are the classics. But the cost of printing such books has made it difficult for any anthology to select more deeply from these authors. Now with ebooks we can, including more from Shakespeare (27), Dickinson (21), Millay (16), Whitman (15), Sandburg (14), and Frost (13). It also allows us to add the full text of such long works as "The Waste Land," "Rime of the Ancient Mariner," "Evangeline," and "The Raven," as well as generous excerpts from Chaucer's "Canterbury Tales," Whitman's "Song of Myself," and Fitzgerald's "Rubaiyat of Omar Khayyam"—547 poems in all, over a thousand pages for students and poetry lovers old and new.

A special effort has been made to include popular poetry so often neglected by the big anthologies, including "The Charge of the Light Brigade," "Casey at the Bat," "The Cremation of Sam Magee," "Twas the Night Before Christmas," and "High Flight." Though not the "high poetry" getting critical attention today, they are widely loved. For better or worse, these are often the poems people memorize and recite on rafting trips, in the cockpit on long commercial flights, around campfires and on stage at school.

This is not intended to be a museum of poems in which authors, styles, and ages are somehow equitably represented, a specimen for every type. There are other, better books for that. This is a collection to be read for pleasure. Archaic spelling and punctuation have been lightly corrected to modern usage in order to remove the obstacles to understanding they sometimes present.

How do poets happen?

Looking back over these lives it is notable that so many wrote so wisely at an early age: "God's World" was published by Edna St. Vincent Millay at the age of 21. When he published "To Helen," Poe was only 22. "The Love Song of J. Alfred Prufrock" and "Ode to a Nightingale" were published when their authors were 23. "Ulysses" was published when Tennyson was 24, "Kubla Kahn" when Coleridge was 26, and "The Highwayman" when Noyes was 26. But they kept going. Half the poets in this collection lived at least to 65, and many of them wrote throughout their lives. Thomas Hardy did his best work when he was seventy.

They were lawyers and doctors and farmers and bank clerks, rich and poor, educated and uneducated, married, single and in love with the wrong person. And they had two great skills in common. First, they knew the joy of language and had the skill to use it well. De la Mare, in "Silver," describes how "Slowly, silently, now the moon, Walks the night in her silver shoon." And second, they had the capacity for insight—the ability to see in the world around them a surprising truth the rest of us had missed. Read Shakespeare's "Let's talk of graves." Robert Frost spoke often of these two skills, reminding us that a good poem says well what it means to say, but a great poem says something worth saying.

There is a third characteristic great poets appear to share, and it should give us pause. Recent studies in child development have suggested that some people, gifted children in particular, respond to events around them more emotionally than others. They are often enthusiastic, deeply absorbed in their pursuits, endowed with vivid imagination, and emotionally vulnerable. They are verbally

precocious; they have imaginary friends; and they can work alone for hours in an abstract world of their own creation.* One study describes a four-year-old boy who just watched the movie Charlotte's Web, and it helps us think about Emily Dickinson in a new way:

"[Michael] left the theater sobbing uncontrollably because the spider had died, leaving her children alone in the world. He cried for hours that day and continued speaking about death and sadness for months afterwards. His parents were concerned as he withdrew into himself. His teacher said that he wouldn't mix with other children and didn't want to play with his friends."**

Some poets are like that. An increased capacity for emotional response may allow people greater enjoyment of love, beauty and the world around them, but it also makes them vulnerable to greater disappointment, depression and despair. Of the 121 poets in this collection, four died of alcoholism and eight took their own lives—a rate of suicide one hundred times greater than the norm.

Great poets also bloom in bunches. The Elizabethan theater certainly provoked a new wave of verse, and when Cromwell shut the playhouses down in 1642, many of those playwrights turned to poetry. In the next twenty years ten of the great poets included here were alive, drinking together, preaching, fighting and writing poetry in London. A hundred and fifty years later, in the two revolutionary decades beginning in 1800, another eight of the great poets—the Romantics—created a similar surge. And they were all friends. In the years leading up to the American Civil War, poetry exploded after a long colonial silence. Eight of the great poets included here were writing at the same time within fifty miles of each other. Together with New England novelists Hawthorne, Melville, Twain, and Harriet Beecher Stowe, they constituted the most extraordinary literary crescendo in history. The Harlem Renaissance, the early Imagists, the Georgians, and the Modernists were close friends and rivals, reading and reviewing each others' work. Magazines certainly played an important part in shaping and sustaining all of these movements, but beyond that we can only wonder how it is that art—the most individual of enterprises—seems to flourish so in groups.

Traveling to poetry

Ancient Persians believed that between Heaven and Earth there is a third layer where every element of our experience exists in its ideal form, where art and music live, where we go in our songs, in our paintings and in our dreams to meet in their more perfect embodiment those long gone from the world below. Of course it is just a metaphor; all cosmologies are. But it gives us a way to think about poems as timeless models of experience to which we travel for solace, pleasure, and inspiration. Poems, too, are meeting places. I think of an anthology as a grand old hotel along the New England coast (or a run-down country house in England) where all the dead poets live, walking in the garden with their poet friends. A few of the old masters, Wordsworth, Tennyson, Whitman, Longfellow, slouch side by side on a sunny bench, wearing their big hats. Kipling restlessly taps his tennis racket against his leg, staring out to sea. Others stand at the window in their room, speaking softly again and ever again their immortal words. Waiting for us.

*Dabrowski, K., & Piechowski, M. M. (1977). *Theory of Levels of Emotional Development*. Dabor Science Publications.

**Sword, Leslie (2003). Gifted Children: Emotionally Immature or Emotionally Intense? Australia: Gifted and Creative Services.

Christopher Burns is a long-time media company executive and reader of poetry. A former Army officer, an amateur musician, and a father of five, he served as Senior Vice President of the Minneapolis Star and Tribune, Vice President of the Washington Post Company, and Executive Editor of UPI, the worldwide wire service. He is the author of two novels, Island Wilderness and In Sorrow All Our Days, as well as Deadly Decisions, a study of how groups manage and mismanage information. His first poetry anthology, *The Seashell Anthology of Great Poetry*, has long been one of the best selling poetry books on Amazon. *Immortal Poets*, his new anthology published in the Spring of 2011, is a longer, deeper selection from the great poets of English and American literature, and includes a brief biography of each poet, and a profile of each poetic movement from the Middle English minstrels to the Imagists of the mid-20th century.

Inducing Critical and Creative Sets When Teaching Writing
R. E. Myers

The University of Georgia's Task Force on General Education and Student Learning formulated 43 recommendations for creating a "campus life centered on learning." The fourth initiative proposed is to "incorporate significant writing assignments into courses across the university so students are exposed to rigorous writing experiences throughout their undergraduate careers." Georgia's emphasis upon writing is typical of the increasing stress most colleges and universities are putting on writing skills. If the history of American education runs true to form, there will also be an increased emphasis on writing skills in the secondary schools, and in turn

an increased emphasis in the elementary schools. When pressure is applied at the top, the effects are felt all the way down to the primary grades.

Professional writers say that they can only improve their writing by doing more writing. For years teachers also had the same notion about how to improve their students' writing, and the frequency with which they administered writing sessions was their main focus. Today teachers are told that the writing students do should be more self-critical; students should spend more time thinking about what they want to write and a good deal more time criticizing what they have written. Students are told to be like professional writers in much the same way as an earlier generation of students was told to think like mathematicians. Many people believe that the model of the mathematician didn't work for those befuddled students, but we are more hopeful regarding the efficacy of the professional writer model in improving student writing.

Disregarding the procedural aspects of teaching writing (pre-writing, first draft, editing, second draft, etc.), I see two general approaches to teaching writing to young people. One might be called the critical approach. If the teacher is trying to get his/her students to write a persuasive essay, for instance, one or more essays can be read and these questions can be asked before the students attempt to write an essay:

1. Does the essay have facts, examples, quotations by authorities, or anecdotes to back up its argument?
2. Is there a thesis statement at the beginning?
3. Is the beginning of the essay attention-grabbing?
4. Are the special terms defined?
5. Is the argument logical or reasonable?
6. Does it have a strong conclusion?
7. How could the essay be improved?

This approach induces a "critical set" and supposes what is learned will influence the student's writing.

The other way of pointing out the salient features of a persuasive essay is to present students with questions such as the following:

1. What is it that you care an awful lot about being done or not being done?
2. Who do you want to read your essay and be influenced by your thinking?
3. What would be a good way of approaching this subject for this audience? Would that approach be the best one to take to convince your audience that you are right?
4. What evidence can you present to back up your argument (facts, quotes by authorities, examples, anecdotes, analogies, etc.)?
5. Are your facts, examples, quotes, etc. interesting?
6. How can you grab the reader's attention at the beginning?
7. Can you make your language forceful without appearing to be dogmatic?
8. What is the best way of summing up your argument in a succinct and convincing fashion?

With these questions, the teacher is trying to induce a "creative set." Of course, you can combine the two approaches, but my recommendation is that you place more emphasis on inducing a creative set. My reasoning is that, although students may be able to analyze an essay and determine its strengths and weaknesses, those findings won't necessarily guide them in putting words together in an effective essay of their own. In addition, the critical faculty tends to dominate the creative faculty. When the critical set is emphasized, students (and teachers) look for negatives rather than positives. If the students worry unduly about mistakes and omissions, spontaneity and enthusiasm may be lacking in their essays.

Many of us in education have a misconception about how gifted students respond to tasks such as writing stories, poems, essays, et al. Generally speaking, they respond as less talented students do. Gifted students don't automatically jump at the chance to write. A great many groan and moan, just as their peers do. (And some are also notoriously lazy.) Accordingly, the way a teacher leads into a writ-

ing assignment is particularly important to gifted students, who can take off and explore deeply and brilliantly or let their imaginations soar—depending upon which cues the teacher gives, whether inducing a critical or a creative set. In short, how a teacher leads in to a writing lesson makes a big difference in how students, including the gifted, respond.

Warmup,
Thoughtfully done,
Prodding, provoking, inspiring
Gifted students to write--
Catalyst

References

Myers, R. E. (2006). *Writing a Persuasive Essay*. Quincy, IL: Mark Twain Media.

Myers, R. E. (2009). *Golden Quills*. Manassas, VA: Gifted Education Press.

Myers, R. E. (2006). *Time to Write*. Culver City, CA: Good Year Books.

Torrance, E. P. and J. Harmon. "Effects of Memory, Evaluation, and Creativity" in *Creativity: Third Conference on Gifted Children*. Minneapolis, MN: University of Minnesota, pp. 176-182, 1961.

Teach Your Gifted Students How Wishes and Patents Power the Economy

Harry T. Roman

Enrich your G&T classroom with STEM, and technology education, and mix in some history and economics too. Show your students how the subjects are intermeshed, woven together in the tapestry of progress and civilization. I have used this discussion a number of times in the past and present it here with some interesting figures. I know your gifted students will rise to this story, seeing the relevance immediately.

When You Wish Upon a Star

In a free market economy, you have the very unique ability to wish for and actually determine your future. Patents are the blueprints we use to convert what we have (natural resources, capital, time, knowledge, etc.) into what we want.

Sometimes you can find the things you wish for in stores or catalogs; but sometimes they just are not available yet. By wishing for things, we give the creative inventors, engineers, business people, entrepreneurs, and financiers a clue, a heads-up, about what we are willing to spend money on. This gets people thinking. This gets companies allocating resources. This starts the process of making dreams come true. Companies fulfill wishes, and also stimulate us to dream even more. Patents are the secret techniques, used to transform dream dust into reality. Patents are the transfer function between our dreams and what we are willing to pay for them fulfilled.

If creative folks are listening closely and have the motivation to act on our wishes, they will attempt to make our dreams come true……in exchange for our money. It's a partnership between the market (us and our wishes and dreams) and them (the providers). At any time we are all free to act either in the role of market or provider. During the day at work we may be providers, making products or services for others to buy. At home, we are markets, consuming the products and services made by others.

The future can be seen as the sum total of all our wishes and dreams. The easy ones come to exist sooner than more difficult ones. Those that are the most far reaching often define whole time periods if they come true. Look at what the collective wants and wishes for cheap personal transportation did. It's called the car; and we certainly know what that has meant for our cities and lifestyles. Even with this, we were not satisfied and wanted to get to far away places quickly, so we wished again – and that wish grew up and became airline travel. There was an economic incentive for creative and enterprising folks to make this dream come true, and it became possible.

Successful business people pay attention to what folks are wishing for. They compete and become good (efficient) at making dreams come true. When businesses send you a marketing survey, they are interested in what you have to say, or are wishing for. This is food

for their thinking and creativity. New products and services are not created because they can be, but because someone wants and is willing to pay for them. We all have the ability to affect the future….and do.

By the way, the stock market reflects just how positive we are about the future. It is a kind of barometer that measures our good feelings, and our desires to invest money in new things that companies are trying to produce. When times are uncertain like during wars and downturns in the economy, investors – everyday people like you and me – may not want to give their money to producers and instead prefer to hold onto it or invest in something else that is not risky. When times are good and trouble-free, many people invest in companies in the hopes of sharing in their profits. It all ties into the wishing thing. If we feel positive about the future, we wish more. If we feel negative, we refrain from wishing. We are the spirit and economic stimulus upon which the great engine of our economy functions.

The Power of Patents

Today, technology accounts for over 60% of the annual economic growth of our country. Our founding fathers realized this back in 1792 when they framed the Constitution, giving the first congress the power to establish the Patent Office. They knew that for a young country to survive and flourish, it must be able to capture and use the intelligence of its people. The Patent Office is a formalized library of technological know-how; the blueprints for making things if you will. It is where we formally store our techniques for transforming raw materials and knowledge into useful products and services.

The secret punch of capitalism lies in the fact that this storehouse of knowledge has grown at a fantastic rate, allowing our country to likewise grow by leaps and bounds; and this rate of growth is still accelerating. Look at these statistics in Table 1. Today there are over 7,000,000 patents that have been awarded since 1792. It took 143 years, until 1935 before the 2,000,000th patent was issued. Just 41 years later in 1976, the 4,000,0000th patent was issued. And a brief 23 years after that in 1999, the 6,000,000th patent was born. Almost 70% of all the patents ever issued occurred since 1935. This is amazing. When do you think the 8,000,000th patent will be issued? I estimate in 2013.

Table 1: History of Total U.S. Patents Issued

No. of Patents	Year of Issue
0	1792*
5,000	1847
10,000	1853
25,000	1859
50,000	1865
100,000	1870
250,000	1881
500,000	1893
1,000,000	1911
2,000,000	1935
3,000,000	1961
4,000,000	1976
5,000,000	1991
6,000,000	1999
7,000,000	2006
8,000,000	2013**

*U.S. Patent Office Founded.
**Estimated by Author.

Key Facts:
1. 1847 thru 1935, the approximate span of the Edison era, patents increased from 5,000 to 2,000,000. This was a time span of 88 years.

2. 1935 thru 2013, an approximate span of 78 years, yields an increase of patents from 2,000,000 to 8,000,000.

3. About 70% of all patents issued have occured between 1935 and present.

We also learn quite a bit from new products and ideas that never quite caught on. Only about 60% of the original ideas submitted for patents get approved or issued, but that does not mean we cannot use "failed" patents at a later date by combining some of their contents with something totally different, or use it in an unforeseen way. We need lots of ideas to attempt to fulfill lots of wishes. For every product you see on a store shelf, there were probably 50 ideas that did not make it as successful products. They did not fulfill wishes completely, or perhaps, at the right price. All this "failed" knowledge is still useful and may be recycled into something else at another time. Major events like war also teach us how to fulfill wishes and envision the future. Think about the innovations World War II brought to fruition.

Some Major World War II (1939-1945) Innovations

Radar (and later the microwave oven)
Rocketry and the Space Program
Advanced Radio Communications (leading to TV)
Use of Electronic Computers (for solving complex mathematical problems)
Code Breaking and Encryption
Improved and Deep Diving Submarines
Modern Commercial Air Travel
Jet Aircraft and Turbine Engines
Modern Antibiotics
Nuclear Power
Anti-Aircraft Defenses
Radio Guided Missiles

That's a Wrap

This wishing stuff is neat, but the tough part is to make wishes that will come true in a reasonable amount of time, and at an affordable price. After all, wishing for a new kind of toothpaste is quite different from wishing for the ability to mine the precious metals out of a nearby asteroid. If we dream too big and complex, we may have to wait for a long time for someone to make it come true. The future, like anything else, has a price. Wishing with wisdom has a place, allowing us time to enjoy our wishes.

It all starts with your wishes and ends when you pull out your wallet and make a purchase. Someday, you might even be the one to take your wish right to the marketplace. It happens all the time. Small business owners are doing that even as you read this. You can do it too if you want that special wish to come true bad enough, and know others want it too. You can put your own product on store shelves. I know lots of inventors who do this all the time, even some in their 70s who have done it for the first time. It is all up to you.

Go ahead make a wish….. or listen very carefully to all those wishes….either way, our economy and its citizens benefit. What a country!

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Tips for Teachers

Check out the technological history of the U.S. This a great place to start discussing how these great chunks of time and technological advancement changed and impacted our country. Have your gifted students look at both the pluses and minuses of the changes and how the overall impacts affected our way of life.

Technological Milestones of the United States

1800-1850: Canals, steam power, textile manufacturing.

1850-1900: Railroads, steel, the emergence of natural gas, water, telephone, sewage, and electric utilities.

1900-1950: Electric power, automobiles, hydropower, chemicals, mass media, communications, and R&D labs.

1950-2000: Computers, electronics, aerospace, pharmaceuticals, nuclear power, a national highway system, TV and biotechnology.

What will we wish for in the next 50 years: Cancer-free life? Colonies on the moon? Zero polluting cars? Robot servants to give us a life of leisure? Pleasure machines? Clones? Ability to make copies of anything? Clothing that changes with weather?

Table 2 is another great G&T topic for discussion. Look how fast the lifetimes of products have shortened. Surely, this has impacted our society and way of life; and also how companies develop new products. Make sure your students have a chance to discuss this and relate it to common products today like computers, hand-held devices, clothes, automobiles…etc. Perhaps you can empower your students to work in teams to explore families of technologies and how change rumbles through an industry. How has this accelerated pace for invention affected global competition?

In the 21st century world, what we know and how fast we can do something with it will make a significant difference in competitiveness. The speed of invention and innovation is already reflecting this hyper-fast competition. Take a look at the table below which shows the life cycles for typical products and technologies.

Table 2: Shrinking Product Lifetimes

Year	Life Cycle (years)
1960	10.0
1965	7.5
1970	5.8
1975	4.1
1980	3.0
1985	2.0
1990	1.0
2000	0.6
2010	Less than 0.6

Encourage your gifted charges to study the patent system and learn about inventors who may reside right there in your state. Where does your state stand in the listing of states with the greatest number of inventions and patents? Check out www.uspto.gov for some interesting searches about who invented what! What other patent search sites are there?

Could you invite an inventor into the classroom to discuss how and why they invent? Have your G&T students develop some questions to ask before your inventor guest arrives. Are there some invention challenges you might want to give the students beforehand or afterwards?

Study Thomas Edison, the iconic American inventor and his ideas about what he referred to as his "invention factory." Check him out at www.thomasedison.org and www.edisonmuckers.org. What were Edison's four great inventions?

Irving Berlin (1888-1989): The Giftedness of an American Icon and Musical Innovator

Michael E. Walters Center for the Study of the Humanities in the Schools

"….Unlike Izzy Baline, who was irrevocably rooted in the Lower East Side, Irving Berlin had no particular identity; he could portray, in turn, an Italian, Irishman, German, Jew, Black—whatever suited his whim and whatever he decided the market demanded." (Laurence Bergreen, 1996, p. 46)

Benjamin Franklin was an original observer of an important aspect of the American Experience (The Library of America, 2005). This is the ability of gifted individuals to reinvent themselves. This self-invention is based on the cornerstone of multiculturalism, and many gifted individuals positively respond to the multicultural contours of their social milieu. Irving Berlin represents the epitome of the gifted individual who creatively assimilates the many cultural expressions he has encountered.

Berlin was an Eastern European Jewish immigrant who came to the United States with his family at the beginning of the 20th Century. He was five years old when he left Russia. When his family first came to America, they lived in despicable poverty, trapped in the slums and tenements of New York City's Lower East Side. His mother only spoke Yiddish. Incredibly, despite being linguistically grounded in a folk language, and being from an economically deprived background, he wrote some of the major lyrics of American music. The songs such as "White Christmas," "Easter Parade," "Blue Skies," "There's No Business Like Show Business," and "God Bless America" are a part of America's musical and social cultures. For example, in the 2011 Macy's Thanksgiving Day Parade, a high school band from Alabama (dressed in American Revolutionary garb) played many of Irving Berlin's songs. The TV host did not describe the performance as being that of Irving Berlin's music, but as being representative of all American music.

In a very short time of less than twenty years, Berlin went from a singing waiter in a saloon to being a writer of both the words and melodies of popular music. His talent has been described by his biographer, Laurence Bergreen, as "musical wit" (1996, p. 110). This means that his songs possess thematic moods, emotional charm, and they are entertaining. Berlin easily transported himself from one musical genre to another. He went from composing the sheet music of Tin Pan Alley to writing the music for cinematic classics such as "Holiday Inn" (1942), and developing major Broadway productions, e.g., "Annie Get Your Gun" (1946, and the movie version in 1950). Almost every major entertainer of the 20th Century performed his songs – Fred Astaire, Bing Crosby, Ethel Merman, and Frank Sinatra are a few examples. He was also a respected stage performer. Despite the fact that he lacked formal musical training (e.g., he could only compose in the key of F-sharp), he was able to produce great songs that reflected all aspects of American culture. This in itself is remarkable since he dictated his compositions to a secretary-arranger.

Berlin remained a "son" of the Lower East Side immigrant culture. He would be devoted to his mother and family throughout their lives, and was not ashamed of his cultural roots. For many second generation Americans, he exemplified the idea that giftedness was an expression of artistic and social mobility. For example, one of his colleagues included George Gershwin who wrote Broadway lyrics and symphonic works. This past New Year's Eve, the New York Philharmonic played Gershwin's "Rhapsody in Blue," and his folk opera "Porgy and Bess" is currently being performed on Broadway. Irving Berlin and his generation are examples of the gifted individual's ability to become American cultural icons.

Bergreen, Laurence (1996). ***As Thousands Cheer: The Life of Irving Berlin***. New York: Da Capo.

The Library of America (2005). ***Benjamin Franklin: Autobiography, Poor Richard, and Later Writings***. New York.