CONCEPTUAL FOUNDATIONS

Newsletter of the Conceptual Foundations Network of the National Association for Gifted Children

Volume 19, Issue 1

Editor's Message

The Worst of Times, Or is It?

Robert A. Schultz, PhD
Network Chair

In my home state—Ohio—there is a political struggle occurring that pits business against labor; and, business is currently winning. I remember (vaguely) this same sort of event occurred when I was very young. People marched in the streets carrying signs can chanting through bullhorns. It was a tumultuous, but exciting time.

In our little corner of the education world, the Ohio struggle is playing itself out as a shifting in monies from the state. There is no mandate to serve the gifted in Ohio; but, there is a mandate to identify. This unique (stupid if you ask me!) system means that parents are told of their child's identification, but then the decision to service is left up to local school districts.

If you live in a suburban or affluent district, chances are good that services are provided. But, if you live in an urban or rural district, it is anyone's guess as to any service provisions.

Budget shortfalls and fear are being drummed up as a rationale for tightening belts and cutting services. In reality, the focus of society has become one of political revenge. We've lost sight of the future—at least beyond a biennial view of things. And, in Ohio, the identification money is being shifted to a general fund with the idea that individual districts will "do the right thing."

I don't know about what the right thing really is, but I do have some ideas. I want to encourage all of our Network members to consider a few of my ideas. Take them for what they are—suggestions to consider, not a political agenda to use to draw a hard line in the sand.

1. **Financial Literacy**. When interest rates are low, it often is a good time to make a long-term acquisition. Due diligence and research help you decide upon a good or service to purchase based on cost benefit analysis. Consider changing your viewpoint to one of investment rather than cost reduction (or panic). If we start to focus our discussions on how investing in the Gifted is likely to pay dividends in the near future, we change the mindset of our society in current times.
2. **Audit Culture**. We live in a time where the government is focused on accountability. If money is being spent, then someone or something is accountable for proof that the cost-benefit ratio leans on the latter. But, using international tests as key benchmarks is a bit off kilter. The tests and results rarely correlate with current educational practices. We are constantly looking over our shoulders, back in time, to compare what we are currently doing with how students performed up to 10 years ago. Audits are fine. They help you understand where resources are flowing to help you gauge the future allocation. But, this isn't how the Audit Culture of

Index

This is an example of paragraph text. You can delete it and enter copy of your choice.
This is an example of paragraph text. You can delete it and enter copy of your choice.
This is an example of paragraph text. You can delete it and enter copy of your choice.
This is an example of paragraph text. You can delete it and enter copy of your choice.

The Worst of Times…

Continued from page 1

society is being used in education. So, let's start to point out some of the nuances and inconsistencies, especially that teaching to a test basically stops all intellectual growth (for students and teachers).

3. **Best Practices and 21st Century Skills.** Are there any such things? Don't they need to constantly change? And, aren't 21st Century Skills a list of things that were 19th Century Skills with "new-fangled names"? I'm acting a little cheeky here. But, adding another list of things we are supposed to do as educators doesn't bode well. Just look back to the mid-1990s. There were all sorts of lists of important skills and benchmarks being tossed around. Yet, not one of them….not one!....ever was achieved. This isn't a sign of failure, just of misplaced priorities. The needs of gifted children should guide our educational plans and curriculum, not a focus on esoteric skills that try to prepare you for jobs that don't exist. Besides, if we want to play a nice little game, let's use the Audit Culture focus to pin down the instigators who forwarded and promoted these missed benchmarks and hold *them* accountable for their failures….
4 **Global Competitiveness**. Just what does this mean? Our businesses are already globally competitive, and smartly move factories overseas to take advantage of low cost labor. If we are wanting to prepare our citizens (our kids) to be globally competitive, does not this mean preparing them to work for $5 a day? That's what it will take to be on par with economic globalization from the business cost-benefit analysis. I'm sure we don't want that for our kids—at least I don't want that for my kids! I say we just skip this one and do the following.
5. **Leadership and An Entrepreneurial Attitude.** Let's prepare children—especially the gifted—to be nimble and flexible thinkers; creative and imaginative planners; and, to take imaginative leaps of faith with their ideas. These are the ways of thinking and being that have always made America and Americans great innovators. Investing here will take a change in social perspective (fortunately most all of us in Gifted Education already hold this perspective. Hooray for us!). Let's help others understand that you invest in strengths in order for them to flourish and grow. You help nurture interests and passions if you want children to be happy and successful. You take risks, fail and learn to be resourceful and resilient when challenged by ideas and life's complexity.

If you don't hear from me for a while, it's likely I have now drawn the ire of the political machine. No worries. I'm already considered—as many of you are—to be an indoctrinating liberal since I labor at a university as a Professor.

Thank goodness! I at least get the opportunity to challenge people's thinking and beliefs. Isn't this an exercise of American democracy and the Bill of Rights? Look out…that one might be next on the chopping block.

Let's prepare children—especially the gifted—to be nimble and flexible thinkers; creative and imaginative planners; and, to take imaginative leaps of faith with their ideas.

For more information about the Conceptual Foundations Network, please visit:
http://www.nagc.org/

NATIONAL ASSOCIATION FOR Gifted Children

Conceptual Foundations Network

National Association for Gifted Children,
1707 L Street NW, Suite 550
Washington, DC 20036
(202) 785-4268

Terman: Contribution and Conundrum

By Kris Wiley
Graduate Research Assistant
University of Virginia

At NAGC 2009, Howard Gardner introduced a legacy of theorists informing gifted education in the western world. Prominent among them was Lewis Terman, co-developer of the Stanford-Binet Intelligence Test and author of *Genetic Studies of Genius* (1926). *Studies* was a description of research in which Terman identified over 1400 high-ability students in California and studied them, building an unprecedented body of knowledge regarding gifted youth in America.

In focusing on young students with high ability, Terman boldly explored relationships between human ability and a surprisingly comprehensive spectrum of factors. He asked about parentage and head size, ethnicity and taste in books.

Unavoidably, his work reflected his context, dwelling uniquely on quantitative methodology and expressing prominent social prejudices of the time. For these reasons, both his methodology and his conclusions have been criticized for a nearly a century. He has been accused of being a racist, a sexist, and a eugenicist, but many of the questions he asked are immutable, and they persist in contemporary research and practice.

Terman's Context

Terman was born in 1877 in Indiana, the twelfth of fourteen children on his father's farm. His academic abilities, however, took him quickly through undergraduate and master's degrees at Indiana University to a Ph.D. in Educational Psychology from Clark University. After working as a principal for one year and a professor at Los Angeles State Normal School for four, he became a professor at Stanford University in 1910. He held this position for 32 years until his retirement.

It was in 1921, after formalizing the concept of the Intelligence Quotient (IQ) and revising the Simon-Binet scale for use in America (thus the Stanford-Binet scale), that Terman began his *Genetic Studies of Genius*. His intent was to shed some light on the nature of children who could now be empirically identified as "gifted" using the Stanford-Binet. The scope of his inquiry was admirable, with questions ranging from breathing capacity to "intellectually superior relatives". While many of his results seem quaint by today's standards (the favorite girls' book in the sample was *Anne of Green Gables*, while boys preferred *Treasure Island*), there are others which still form the core of academic inquiry today.

Identification

Terman considered several methods for identifying talented students for his sample, and he ordered them in a theoretical hierarchy of preference. He considered his newly developed IQ scale to be the best option for objective identification, but he also felt that achievement tests had strong validity. Below these standardized instruments he placed the age-grade status of a student as an indicator of accelerated advancement, followed by teacher recommendation, which he considered subjective and more than a little dubious. In fact, he interprets his data as indicating the following: "…if one would identify the brightest child in a class of 30 to 50 pupils it is better to consult the birth records in the class register than to ask the teacher's opinion."

Ironically, because of the functional constraints of an individually administered IQ test, Terman's initial pool of candidates was almost entirely identified through teacher recommendation of "bright" pupils. Nevertheless, his reservations resonate in contemporary literature. When Moon and Brighton (2008) used vignettes to elicit the value sets that primary teachers bring to gifted identification, they found that teacher beliefs exhibited a "deficit-oriented framework," maintaining a traditional focus on what are perceived to be negative characteristics as outweighing extraordinary capabilities. In their review of the literature on such deficit ideologies, Ford, Harris, Tyson & Trotman (2002) further pointed out that "deficit thinking can exacerbate misunderstandings of these cultural characteristics." The relationship between personal value sets and gifted services was highlighted by Speirs-Neumeister, Adams, Pierce, Cassady and Dixon (2007), who found that among 4th grade teachers in an urban setting, behaviors which did not match the expectations of the teacher negatively impacted teacher recommendation for gifted services.

He has been accused of being a racist, a sexist, and a eugenicist, but many of the questions he asked are immutable…

Terman
Continued from page 3

The impact of this dynamic is difficult to overemphasize. Populations which began the century as underrepresented become thought of as less likely candidates for gifted service. Perception turns to reality through teacher recommendation, and a cycle of exclusion is propagated. This cycle is articulated by Siegle and Powell (2004), who analyzed teacher responses to descriptions of gifted students to show that "educators are influenced by published behavior characteristics of giftedness" (p. 27). When those published characteristics originate in a prior imbalance, the imbalance is replicated. Unfortunately, while teacher recommendation seems inevitably subject to broad misconceptions, it is also indispensable in the identification process. The potential of such prolonged and focused attention for identifying cognitive capability cannot be ignored. And even if we were to decide that teacher recommendation had no value, we would face Terman's conundrum of effectively applying any other measurement instrument equitably across all possible candidates. Siegle and Powell suggest a combination of clear definitions and educator training to remedy the situation.

As an interesting side note to Terman's foreshadowing of teacher recommendation issues, grade-level acceleration was for him a method of identifying talent and not a service. Terman asked teachers to recommend their top 1-3 pupils for screening, but he also asked for the youngest pupil in the class under the presumption that this student was likely to have been accelerated into the grade. His numbers bear this out, indicating that the youngest student in a given class was more likely to qualify as highly gifted on the Stanford-Binet than the student nominated highest by the teacher (students could, of course, hold both honors). This seems especially ironic, given the current disparity between positive research findings on acceleration (Colangelo, et al., 2010, and Seon-Young, Olszewski-Kubilius, & Peternel, 2010) and continuing hesitation on the part of educators and parents as documented in *A Nation Deceived*.

Characteristics of the Gifted

After screening for candidates and then identifying his sample through high scores on the Stanford-Binet, Terman collected a horde of statistics on the characteristics of his students. From these he drew several conclusions which still inform practice today. For example, boys were favored in his final sample at a ratio of 831 to 613, leading him to the conclusion that "exceptionally superior intelligence occurs with greater frequency among boys than among girls." Terman dealt with this imbalance in great detail, suggesting four possible explanations: favoritism on the part of nominating teachers; "superior vigor" of the fathers of gifted children resulting in altered sex ratios; decreased miscarriage in families of the gifted; and greater variance in male IQ test scores, resulting in both higher and lower scores. He did not posit validity concerns in the Stanford-Binet as a potential explanation.

Terman also found ethnic and racial trends among the students in his sample. Jewish families were disproportionately represented, while Latin "blood" and African Americans were found to be "deficient". In keeping with some of the beliefs he exhibited outside his studies (in particular as a member of a eugenicist organization called the Human Betterment Foundation), Terman felt that these results were proof that some races were more cognitively capable than others. These conclusions supported a legacy which still holds power over conceptions of giftedness. While Terman considered the potential impact of language in the Stanford-Binet on minority test scores, he ultimately dismissed it as a source of the disparity on the basis that "the relatively good showing made by certain other immigrant groups similarly handicapped would suggest that the true causes lie deeper than the environment" (p. 57). Needless to say, such a claim today requires considerably more empirical support than he provides.

Race still defines the discussion of imbalanced representation in gifted programs. A body of literature has been developed around causes of underrepresentation. Ford, et al., (2002) treated the idea that majority cultural concepts of giftedness often neglect the existence of minority cultural capabilities. In addition, Steele and Aronson (1995) have introduced the concept of "stereotype threat," through which test scores can be depressed in a subject who feels the pressure of a self-perceived stereotype. Despite how his own attitudes on the nature of race might now be judged, Terman predicted a fundamental factor in identification and service to gifted children for a century.

Finally, Terman also predicted the still existent impact of socioeconomic status (SES) in gifted

And even if we were to decide that teacher recommendation had no value, we would face Terman's conundrum of effectively applying any other measurement instrument equitably across all possible candidates.

Terman
Continued from page 4

identification. He found that the "professional class" was highly represented in the fathers of his sample students. In addition, he analyzed the fathers of his sample using the Barr Scale, which was a ranking of the intelligence necessary to perform each of dozens of jobs. Fathers of students in the sample scored a mean of 12.77 on the scale, roughly equivalent to the intelligence necessary to be a stenographer or librarian. Control fathers averaged 7.92, in the vicinity of a plasterer or baker. The order of the jobs on the scale and their relative scores were devised by a committee of twenty men, whose own occupations are undisclosed.

Socioeconomic status still engages our society as a powerful predictor of identification as gifted. In reviewing a recently developed assessment aimed at being culture neutral, Carman and Taylor (2010) found that "even after adjusting for ethnic differences, children from low-SES families were half as likely as other children to be identified." It is important to note in that research that SES operates as a predictor even after accounting for ethnic differences, despite the significant relationship between the two. This builds on the findings of McBee (2006), who found that "[i]n general, nominations for low-SES students are less accurate than nominations for high-SES students."

In the face of a persistent achievement gap based on SES and the amplification of that gap across school years, an increased emphasis on talent development for all students in the primary grades would go a great distance toward capturing talent which might otherwise go hidden.

Another Century

Lewis Terman was a product of his context, and many of his conclusions seem ludicrous in the context of contemporary America. However, the value he perceived in studying talented youth laid the groundwork for much of the service delivered to students with these unique learning needs over the past century. As we look into the next hundred years of finding those kids and figuring out what to do with them, *Genetic Studies of Genius* promises to be a relevant touchstone, both encouraging the research and implicitly reminding us to keep an eye on our own biases as we approach the study of our students.

Resources

Carman, C. A., & Taylor, D. K. (2010). Socioeconomic status effects on using the naglieri nonverbal ability test (NNAT) to identify the Gifted/Talented. *Gifted Child Quarterly, 54*(2), 75-84. doi:10.1177/0016986209355976

Colangelo, N., Assouline, S. G., & Gross, M. U. M. (2004). *A nation deceived: How schools hold back America's brightest students*. Iowa City: University of Iowa.

Colangelo, N., Assouline, S. G., Marron, M. A., Castellano, J. A., Clinkenbeard, P. R., Rogers, K., Calvert, E., Malek, R., & Smith, D. (2010). Guidelines for developing an academic acceleration policy. *Journal of Advanced Academics, 21*(2), 180-203.

Ford, D. Y., Harris III, J. J., Tyson, C. A., & Trotman, M. F. (2002). Beyond deficit thinking. *Roeper Review, 24*(2), 52.

McBee, M. T. (2006). A descriptive analysis of referral sources for gifted identification screening by race and socioeconomic status. *Journal of Secondary Gifted Education, 17*(2), 103-111.

Moon, T. R., & Brighton, C. M. (2008). Primary teachers' conceptions of giftedness. *Journal for the Education of the Gifted, 31*(4), 447-480.

Seon-Young Lee, Olszewski-Kubilius, P., & Peternel, G. (2010). The efficacy of academic acceleration for gifted minority students. *Gifted Child Quarterly, 54*(3), 189-208. doi:10.1177/0016986210369256

Siegle, D., & Powell, T. (2004). Exploring teacher biases when nominating students for gifted programs. *Gifted Child Quarterly, 48*(1), 21-29. doi:10.1177/001698620404800103

Speirs Neumeister, K. L., Adams, C. M., Pierce, R. L., Cassady, J. C., & Dixon, F. A. (2007). Fourth-grade teachers' perceptions of giftedness: Implications for identifying and serving diverse gifted students. *Journal for the Education of the Gifted, 30*(4), 479-499.

Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology, 69*(5), 797-811.

Terman, L. M. (1925). *Genetic studies of genius: Mental and physical traits of a thousand gifted children.* Stanford University, California: Stanford University Press.

Socioeconomic status still engages our society as a powerful predictor of identification as gifted.

The Vexing Legacy of Lewis Terman

By Mitchell Leslie

(Reprinted by permission of Stanford Magazine. Published July, 2000)

The legendary Stanford psychologist helped hundreds of gifted children and showed America that it's okay to be smart. But behind his crusade was a disturbing social vision

TO THE LOS ANGELES juvenile authorities in 1923, Edward Dmytryk was an ordinary runaway trying to escape a vicious father who tore up his schoolbooks and clubbed him with a two-by-four. Mr. Dmytryk wanted his 14-year-old son back -- if only, as the caseworker suspected, because Edward brought home vital income.

While the authorities deliberated, a letter arrived from Professor Lewis Terman, the nation's most famous psychologist and the man who had planted the term "IQ" in America's vocabulary. He wasn't a relative or family friend; he had never even met the boy. But the Stanford professor believed Edward deserved a break because he was "gifted" -- a word Terman coined to describe the bright kids he devoted his life to researching.

Edward's high score on an IQ test had qualified him for Terman's pathbreaking Genetic Study of Genius. Terman, who had grown up gifted himself, was gathering evidence to squelch the popular stereotype of brainy, "bookish" children as frail oddballs doomed to social isolation. He wanted to show that most smart kids were robust and well-adjusted -- that they were, in fact, born leaders who ought to be identified early and cultivated for their rightful roles in society.

Though the more than 1,000 youngsters enrolled in his study didn't know it at the time, they were embarking on a lasting relationship. As Terman poked around in their lives with his inquisitive surveys, "he fell in love with those kids," explains Albert Hastorf, emeritus professor of psychology. To the group he always called "my gifted children" -- even after they grew up -- Terman became mentor, confidant, guidance counselor and sometimes guardian angel, intervening on their behalf. In doing so, he crashed through the glass that is supposed to separate scientists from subjects, undermining his own data. But Terman saw no conflict in nudging his protégés toward success, and many of them later reflected that being a "Terman kid" had indeed shaped their self-images and changed the course of their lives.

Thanks to Terman's timely letter, for example, Edward Dmytryk went to a good foster home. You may have seen his name in the titles for *The Caine Mutiny*, one of the 23 films he later directed.

FORTY-FOUR YEARS after Terman's death, the study is still going on. About 200 of his "kids" are alive, still completing periodic questionnaires on their health and activities and returning them to Stanford's psychology department. The Termites, as they're fondly nicknamed, have been tracked for nearly 80 years now, through nearly all the milestones of life. It's the longest-running survey ever carried out. And although Terman didn't conceive it as such, the study established a powerful new research approach: the longitudinal investigation, in which scientists follow a group of people over many years to learn how factors in early life influence later variables such as health and longevity.

Marred by design flaws, the genius study yielded few momentous conclusions beyond reassuring Americans that it's okay to be smart. Yet the archives have a value that Terman never envisioned: they provide an unmatched record of lives that spanned almost all of the 20th century. Researchers have pored over the Terman files to explore historical phenomena (did World War II veterans suffer lingering effects of combat?) as well as broader questions (does personality influence life span?). Social scientists have called the archives a national treasure because they tell the life stories of so many Americans.

A story of a different kind emerges from Terman's own writings -- a disturbing tale of the beliefs of a pioneer in psychology. Lewis Terman was a loving mentor, yes, but his ardent promotion of the gifted few was grounded in a cold-blooded, elitist ideology. Especially in the early years of his career, he was a proponent of

‘There's a certain delicacy about talking about him, because he was probably one of the first really big names Stanford had.’

Terman Legacy
Continued from page 6

eugenics, a social movement aiming to improve the human "breed" by perpetuating certain allegedly inherited traits and eliminating others. While championing the intelligent, he pushed for the forced sterilization of thousands of "feebleminded" Americans. Later in life, Terman backed away from eugenics, but he never publicly recanted his beliefs.

Looking back, what are we to make of the man and his work? That's a question Al Hastorf has been grappling with. The former Stanford provost and vice president is the third director of the Terman study (he succeeded psychology professor Robert Sears), overseeing the project from his office in Jordan Hall. An amiable and restless man with a wry sense of humor, Hastorf has been pondering Lewis Terman's legacy for a chapter he's writing in a book on pioneering psychologists.

"There's a certain delicacy about talking about him," Hastorf begins, "because he was probably one of the first really big names Stanford had."

TO MOST PEOPLE at Stanford, the name Terman evokes another person entirely: Fred Terman, '20, Engr. '22, the engineering professor, dean and provost who helped launch California's electronics industry in the 1950s and who was Lewis Terman's son. But while Fred got his name inscribed on buildings on and off campus, Lewis probably had as much impact on people's lives, because he almost single-handedly introduced IQ testing in America.

Terman was obsessed with intelligence. He had deep sympathy for the gifted, identifying with their yearnings and frustrations. This likely traced back to his childhood in rural Indiana, where he was the 12th of 14 kids in a prosperous farming family. Born in 1877, little red-haired Lewis preferred intellectual games and reading over sports or outdoor play and felt physically outclassed by his playmates, according to biographer Henry Minton. Back then, few farm kids stayed in school past eighth grade, but Terman was "fiercely ambitious for more education," as Sears, the study's second director, wrote in a biographical sketch. That drive, fueled by timely loans from his family, took Terman first to the local teachers' college, then to Indiana University and finally to Clark University in Massachusetts, a topflight school for psychology research. There, he completed a PhD dissertation comparing mental and physical abilities of smart and dull children. At the time, psychology had just established itself as a separate discipline from philosophy and was still seeking its course and methods.

Suffering from recurring tuberculosis, he moved in 1905 to the more equable climate of Southern California with his wife, Anna, and their two small children, Fred and Helen. For the next five "fallow years," as he described them, Terman worked as a high school principal and then as a professor of pedagogy at a teachers' college. In 1910, Stanford offered him a job in its fledgling department of education. He later moved to the psychology department, which he chaired for 20 years.

Eager to measure human minds, Terman plunged into intelligence testing soon after he arrived at Stanford. The original intelligence test had been designed five years earlier by French psychologist Alfred Binet as a tool to identify "slow" children needing special help. Terman and his Stanford colleagues translated Binet's test, adapted the content for U.S. schools, set new age norms and standardized the distribution of scores so that the mean score would always be 100. Terman called the new version the Stanford-Binet test.

With questions ranging from mathematical problems to vocabulary items, the Americanized test was supposed to capture "general intelligence," an innate mental capability that Terman felt was as measurable as height and weight. As a hardcore hereditarian, he believed that genetics alone dictated one's level of general intelligence. This vital constant, which he called an "original endowment," wasn't altered by education or home environment or hard work, he maintained. To denote it, he selected the term "intelligence quotient."

In 1916, Terman sprang his test on America. He released *The Measurement of Intelligence*, a book that was half instruction manual and IQ test, half manifesto for universal testing. His little exam, which a child could complete in a mere 50 minutes, was about to revolutionize what students learned and how they thought of themselves.

Few American children have passed through the

HINDSIGHT: Hastorf (below) took over the study after Sears (above) died in 1989. Terman "was a very nice guy," Hastorf says, "but I have some things I would argue with him about."

~ Courtesy Stanford Archives

Terman Legacy
Continued from page 7

school system in the last 80 years without taking the Stanford-Binet or one of its competitors. Terman's test gave U.S. educators the first simple, quick, cheap and seemingly objective way to "track" students, or assign them to different course sequences according to their ability. The following year, when the United States entered World War I, Terman helped design tests to screen Army recruits. More than 1.7 million draftees took his tests, broadening public acceptance of widespread IQ testing.

The Stanford-Binet made Terman a leader in a fervent movement to take testing far beyond the schoolhouse and Army base. Proponents considered intelligence the most valuable human quality and wanted to test every child and adult to determine their place in society. The "intelligence-testers" -- a group that included many eugenicists -- saw this as the tool for engineering a fairer, safer, fitter and more efficient nation, a "meritocracy" run by those most qualified to lead. In their vision of a vibrant new America, IQ scores would dictate not only what kind of education a person received but what work he or she could get. The most important and rewarding jobs in business, the professions, academia and government would go to the brightest citizens. People with very low scores -- under about 75 -- would be institutionalized and discouraged or prevented from having children.

IQ tests and the social agenda of their advocates roused critics right from the start. To the journalist Walter Lippmann, the intelligence-testers were "the Psychological Battalion of Death," seizing unparalleled power over every child's future. Lippmann and Terman dueled in the pages of the *New Republic* in 1922 and 1923. "I hate the impudence of a claim that in 50 minutes you can judge and classify a human being's predestined fitness in life," Lippmann wrote. "I hate the sense of superiority which it creates, and the sense of inferiority which it imposes." In a sarcastic rejoinder, Terman compared Lippmann to the creationist William Jennings Bryan and other opponents of scientific progress, then attacked Lippmann's writing style as "much too verbose for literal quotation." Though he could never match Lippmann's eloquence, in the end Terman won the war: intelligence testing continued to spread. By the 1930s, kids with high IQs were being sent into more challenging classes to prepare for high-earning jobs or college, while low scorers got less demanding coursework, reduced expectations and dimmer job prospects.

THE GENETIC STUDY of Genius grew out of that social vision. Terman was disturbed that most Americans didn't share his high opinion of precocious children -- "early ripe, early rot" was the way they put it back then. A decisive study, he thought, would sweep away that bias.

Using the Stanford-Binet and other tools, his assistants scoured elementary schools in Los Angeles, San Francisco and the East Bay, identifying a core group of 643 children with IQs of 135 or higher. Terman also enrolled subjects from earlier studies, along with hundreds of young people identified by volunteer testers or recommended by principals. He included the siblings of many participants, and even signed up his son and daughter.

By 1928, Terman had 1,528 subjects between the ages of 3 and 28. As a group, they were overwhelmingly white, urban and middle class. Nearly all lived in California. The gender imbalance -- 856 boys, 672 girls -- puzzled Terman for the rest of his life (were boys smarter, or were teachers more likely to recommend them?). The group was lopsided in other ways as well: there were only two African-Americans, six Japanese-Americans and one American Indian.

Terman pledged not to release their names, and most never publicly declared their participation. Nonetheless, about 30 names have come out over the years -- including several Termites whose involvement was announced only in their obituaries. The group included some prominent figures, like physiologist Ancel Keys, who discovered the link between cholesterol and heart disease; physicist Norris Bradbury, former director of the Los Alamos National Laboratory; *Life* journalist Shelley Smith Mydans, '36; and Hollywood big shots Edward Dmytryk and Jess Oppenheimer (see sidebar). We also know that two children who were tested but *didn't* make the cut -- William Shockley and Luis Alvarez -- went on to win the Nobel Prize in Physics. According to Hastorf, none of the Terman kids ever won a Nobel or Pulitzer.

For each child he enrolled in the core group, Terman amassed a thick dossier detailing

WHIZ KID: Robinson, 92, says being a Termite boosted his self-esteem.

~ Courtesy Stanford Medical Center

Terman Legacy
Continued from page 8

physical health, interests, ancestry, reading habits, play, home life, household income and parental occupations. He wanted to know how many books the child's parents owned (on average, more than 300), and he dispatched assistants to interview the families and evaluate their homes. From this mass of data, he concluded that, by and large, these were well-rounded, happy and healthy kids. And in 1925 (before he had even finished enrolling subjects), he spread the word in a 650-page book, *The Mental and Physical Traits of a Thousand Gifted Children.* Terman had achieved his goal, says Hastorf: "He established the fact that bright people are normal people."

The study was supposed to end there. But to Terman, his children were like characters in a novel whose gripping first chapter he had just read. Enthralled, he decided to follow them as their lives and careers developed. And they obliged with a surprising amount of cooperation, filling out questionnaires about their sex lives and political attitudes, their earnings and religious beliefs, their physical and mental health, their satisfaction with life and marriage. Every five to 10 years, a new survey dropped into their mailboxes. The project inspired such loyalty that most Termites stayed in touch even under trying circumstances. Surveys sent out in 1945, for example, came back from servicemen around the world, including several who filled them out in foxholes at the front.

In all, Terman contributed to four books charting the changing attitudes, fortunes and health of the group. (A fifth report, by Sears and Carole Holahan of the University of Texas, came out in 1995.) He remained immersed in the study after he retired from Stanford in 1942, right up until his death in 1956. Sears -- a Termite himself -- renamed the project the Terman Study of Gifted Children and focused on how the group coped with aging. Hastorf, who took over after Sears died in 1989, sees his role today as maintaining the archives for others who want to use them. Most of the survivors are now in their 80s and 90s, he says, and the project will continue until the last one dies.

LIKE ANY PIONEERING effort, the study has its share of flaws. Some derive from Terman's own blunders: haphazardly selecting subjects, meddling in their lives and failing to establish a comparison group. The project also shares a constraint of all longitudinal studies, Hastorf notes: they're "locked in time," documenting a particular historical period but with limited relevance to other eras. All in all, the study tells us a lot about the development of some very bright Californians whose lives were roiled first by the Great Depression and then by World War II.

The kids proved remarkable in some ways and ordinary in others. One distinction was their avid pursuit of higher education. Two-thirds of the Terman men and women earned bachelor's degrees -- that's 10 times the national rate for their time and all the more impressive because most did so during the Great Depression. The Termites also swarmed to graduate school. "There were 97 PhDs, 57 MDs and, sadly enough, 92 lawyers," Hastorf says. The women in the group, who reached adulthood in the 1920s and '30s, foreshadowed later trends. They had fewer children than others of their generation and bore them later in life. More of them went to college and graduate school, more had careers and more remained unmarried.

In other ways, the Terman kids were just run-of-the-mill 20th-century Americans. Some died young from accidents, diseases or suicide. A few were arrested; one went to prison for forgery. About 40 percent of the men served in World War II. Five men died in combat, while two were killed in war-industry accidents. As a group, Terman's kids got divorced, committed suicide and became alcoholics at about the national rate. They were no more -- and no less -- stable than the general population.

Some intriguing findings about their personalities emerged from a 1993 study of the archives. Reanalyzing the data, psychologist Howard Friedman of UC-Riverside looked for links between longevity and several personality traits. Conscientiousness, he found, had the greatest life-extending effect. Self-esteem had no effect, while cheerfulness actually seemed to shorten their lives -- "perhaps because it . . . led people to ignore risks to their health," Friedman told the *New York Times.* The *Times* article concluded, "Score one for those pious voices of prudence: being cautious and somewhat dour is a key to longevity."

AS A SURROGATE FATHER -- and a man with a point to prove -- Terman yearned to see his kids become high achievers. Financially, the

'Sometimes, I would ask myself, Am I up to this? Then I would think, Dr. Terman thought I was.'

Terman Legacy
Continued from page 9

group lived up to his expectations. In 1954, American men in white-collar jobs earned a median salary of about $5,800, but their counterparts in the Terman group boasted a whopping $10,556.

Many who did well in their fields had received no boost from Terman beyond an occasional pat on the back and the knowledge that they'd qualified for his study. For others, like Dmytryk, Terman's intervention was life-changing. We'll never know all that he did for his kids, Hastorf notes. But it's clear that Terman helped several get into Stanford and other universities. He dispatched numerous letters of recommendation mentioning that individuals took part in his project. And one time, early in World War II, he apparently pulled strings on behalf of a family of Japanese-Americans in his study. Fearing they were about to be interned, they wrote to Terman for help. He sent a letter assuring the federal government of their loyalty and arguing against internment. The family remained free.

From a scientific standpoint, Terman's personal involvement seems foolish because it probably skewed his results. "It's what you'd expect a mentor to do, but it's bad science," Hastorf says. As a conscientious researcher whose work got him elected to the National Academy of Sciences, Terman should have known better -- but he wasn't the first or last to slip. Indeed, the temptation to meddle is an occupational hazard among longitudinal researchers, says Glen Elder Jr., a sociologist at the University of North Carolina. A certain degree of intimacy develops, he explains, because "we're living in their lives and they're living in ours."

It's difficult to gauge Terman's influence on the kids because so many are deceased or still anonymous. One survivor willing to speak on the record is Russell Robinson, a retired engineer and former director of aeronautical research at NASA Ames. He was a high school student in Santa Monica when, he recalls, "someone in the school system tapped me on the shoulder and said, 'Dr. Terman would like to test you, if you're willing.'" Robinson, now 92 and living in Los Altos, doesn't think being in the study significantly changed his life, but he did draw confidence from knowing that Terman thought highly of him. Several times during his career, he mentally invoked Terman to shore up his self-image. "Research is a strange business -- in a sense, you're out there alone," he says.

"Sometimes, the problems got so complex I would ask myself, Am I up to this? Then I would think, Dr. Terman thought I was."

Others have echoed that sentiment, Hastorf says. In fact, the study meant so much to some of the subjects that the Terman project now runs entirely on their bequests.

Several Terman kids have cited a negative impact on their lives. Some complained of being saddled with an unfair burden to succeed, Hastorf says, while others thought that being dubbed geniuses at an early age made them cocky and complacent. For better or worse, a quarter of the men and almost a third of the women said they felt that being a Terman kid had changed their lives. And since Terman often did his meddling behind the scenes, others may have been influenced without ever realizing it.

HIS SUPPORT OF the gifted was heartfelt, but an equally fundamental part of Terman's social plan was controlling the people at the other end of the intelligence scale. Both were aims of eugenics, a movement that gained momentum early in the 20th century.

The eugenicists of Terman's day held that people of different races, nationalities and classes were born with immutable differences in intelligence, character and hardiness, and that these genetic disparities called for an "aristogenic" caste system. Traits like feeblemindedness, frailty, emotional instability and "shiftlessness," they believed, were controlled by single genes and could be easily eliminated by controlling the reproduction of the "unfit." In the United States, the movement peddled a topsy-turvy form of Darwinism, claiming that the "fittest" (defined as well-to-do whites of Northern European ancestry) were reproducing too slowly and in danger of being overwhelmed by the inferior lower strata of society. America was jeopardized from within, eugenicists warned, by the rapid proliferation of people lacking intelligence and moral fiber. From without, the threat was the unchecked arrival of immigrants from southern and eastern Europe. Together these groups would drag down the national stock.

He established the fact that bright people are normal people. The study was supposed to end there.

Terman Legacy
Continued from page 10

Terman's letters and published writings show that he shared these beliefs and argued for

measures to reverse society's perceived deterioration. He was a member of the prominent eugenics societies of the day. "It is more important," he wrote in 1928, "for man to acquire control over his biological evolution than to capture the energy of the atom." Yet he wasn't a renegade howling from the fringe. Eugenics was "hugely popular in America and Europe among the 'better sort' before Hitler gave it a bad name," as journalist Nicholas Lemann puts it. Luminaries who supported at least part of the early eugenic agenda include George Bernard Shaw, Theodore Roosevelt, Margaret Sanger, Calvin Coolidge and Oliver Wendell Holmes Jr. In fact, Terman sat on the boards of two eugenics organizations with Stanford's first president, David Starr Jordan.

Early eugenicists managed to push through several laws. Thirty-three states, including California, passed measures requiring sterilization of the feebleminded. As a result, more than 60,000 men and women in mental institutions were sterilized -- most against their will and some thinking they were getting an emergency appendectomy. In 1924, Congress set quotas that drastically cut immigration from eastern and southern Europe. Though pressure to stem immigration had come from many sources, including organized labor, the quotas had an undeniably racist taint. Terman cheered these efforts.

During the 1930s, as the brutality of Nazi policies and the scientific errors of eugenic doctrines became clearer, the eugenics movement withered in the United States and Terman inched away from his harshest views. Later in life, he told friends he regretted some of his statements about "inferior races." But unlike several prominent intelligence-testers, such as psychologist Henry Goddard and sat creator Carl Brigham, Terman never publicly recanted.

At least one eugenic measure proved as stubborn as he was. News of the Nazis' mass sterilization program did not put an end to the practice in the United States, where sterilizations of the mentally ill and retarded continued well into the 1970s.

TERMAN LEFT a difficult legacy. On one hand, his work inspired almost all the innovations we use today to challenge bright students and enrich their education. As he followed the lives of intelligent kids, he also became their best

publicist, battling a baseless prejudice. As a scientist, he devised methods for assessing our minds and behaviors, helping put the field of psychology on an empirical and quantitative foundation. He was one of Stanford's first nationally prominent scholars, and as a department chair for two decades, he transformed the psychology department from a languid backwater into an energetic, top-ranked program. He established the longitudinal method and generated an archive of priceless data. Longitudinal studies have "become the laboratory of the social sciences" and are growing in importance as the population ages, unc sociologist Elder observes.

On the other hand, as biographer Minton points out, the very qualities that made Terman a groundbreaking scientist -- his zeal, his confidence -- also made him dogmatic, unwilling to accept criticism or to scrutinize his hereditarian views. A similar paradox existed in his social agenda. Terman was a visionary whose disturbing eugenic positions and loving treatment of the gifted grew out of the same dream for an American meritocracy.

"He was a very nice guy, but I have some things I would argue with him about," Hastorf declares. His conclusion is that Terman was as much a product of his time as a force for change -- and that, like many powerful thinkers, he was complex, contradictory and not always admirable.

Debate over heredity's contribution to intelligence remains divisive in America, particularly since racial differences in IQ scores persist -- African-Americans on average score 15 points lower than whites. No one is sure why, and the gap does not disappear when researchers factor out obvious differences in socioeconomic status and remove culturally biased questions. The topic remains explosive; witness the eruption that followed the 1994 publication of *The Bell Curve*, which posits that the black-white score difference is mainly due to genetics.

As for what IQ scores can predict about a person's future, Hastorf offers a middle-of-the road position: the tests are pretty good at identifying "school-bright" children, those likely to perform well in ordinary school settings, but

…the very qualities that made Terman a groundbreaking scientist -- his zeal, his confidence -- also made him dogmatic, unwilling to accept criticism or to scrutinize his hereditarian views.

Terman Legacy
Continued from page 11

"on the issue of what makes you school-bright, it's obviously a combination of variables – your genetic constitution, your biological health, the motivation that your parents put into you, chance."

Though the Terman kids were handpicked for high IQ, the longitudinal results tell us little about the meaning of IQ, except for one study conducted by Terman's associate, Melita Oden. In 1968, she compared the 100 most successful and 100 least successful men in the group, defining success as holding jobs that required their intellectual gifts. The successes, predictably, included professors, scientists, doctors and lawyers. The non-successes included electronics technicians, police, carpenters and pool cleaners, plus a smattering of failed lawyers, doctors and academics. But here's the catch: the successes and non-successes barely differed in average IQ. The big differences turned out to be in confidence, persistence and early parental encouragement.

In other words, intelligence alone doesn't guarantee achievement. But then, you don't have to be a genius to figure that out.

Editor's Note
Terman's legacy is maintained as his longitudinal study continues to provide valuable information. His work is now being used to study aging.
See below.

Keys to Long Life

UC Riverside study of longevity unearths surprising answers.

(Press Release Published March 11, 2011. Reprinted with permission from University of California, Riverside)

RIVERSIDE, Calif. - Cheer up. Stop worrying. Don't work so hard.

Good advice for a long life? As it turns out, no. In a groundbreaking study of personality as a predictor of longevity, University of California, Riverside researchers found just the opposite.

"It's surprising just how often common assumptions – by both scientists and the media – are wrong," said Howard S. Friedman,

Friedman and Leslie R. Martin , a 1996 UCR alumna (Ph.D.) and staff researchers, have published those findings in "The Longevity Project: Surprising Discoveries for Health and Long Life from the Landmark Eight-Decade Study" (Hudson Street Press, March 2011).

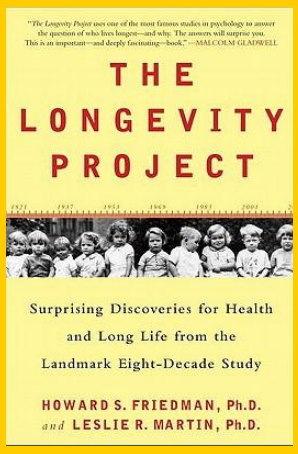
Friedman and Martin examined, refined and supplemented data gathered by the late Stanford University psychologist Louis Terman and subsequent researchers on more than 1,500 bright children who were about 10 years old when they were first studied in 1921. "Probably our most amazing finding was that personality characteristics and social relations from childhood can predict one's risk of dying decades later," Friedman concluded.

The Longevity Project, as the study became known, followed the children through their lives, collecting information that included family histories and relationships, teacher and parent ratings of personality, hobbies, pet ownership, job success, education levels, military service and numerous other details.

"When we started, we were frustrated with the state of research about individual differences, stress, health and longevity," Friedman recalled. "It was clear that some people were more prone to disease, took longer to recover, or died sooner, while others of the same age were able to thrive. All sorts of explanations were being proposed – anxiety, lack of exercise, nerve-racking careers, risk-taking, lack of religion, unsociability, disintegrating social groups, pessimism, poor access to medical care, and Type A behavior patterns." But none were well-studied over the long term. That is, none followed people step-by-step throughout their lives.

When Friedman and Martin began their research in 1991, they planned to spend six months examining predictors of health and longevity among the Terman participants.

But the project continued over the next two decades – funded in part by the National Institute on Aging – and the team eventually involved more than 100 graduate and undergraduate students who tracked down death certificates, evaluated interviews, and analyzed tens of thousands of pages of information about the Terman participants through the years.



"It's surprising just how often common assumptions – by both scientists and the media – are wrong,"

Long Life
Continued from page 12

"We came to a new understanding about happiness and health," said Martin, now a psychology professor at LaSierra University in Riverside.

"One of the findings that really astounds people, including us, is that the Longevity Project participants who were the most cheerful and had the best sense of humor as kids lived shorter lives, on average, than those who were less cheerful and joking. It was the most prudent and persistent individuals who stayed healthiest and lived the longest."

Part of the explanation lies in health behaviors – the cheerful, happy-go-lucky kids tended to take more risks with their health across the years, Friedman noted. While an optimistic approach can be helpful in a crisis, "we found that as a general life-orientation, too much of a sense that 'everything will be just fine' can be dangerous because it can lead one to be careless about things that are important to health and long life. Prudence and persistence, however, led to a lot of important benefits for many years. It turns out that happiness is not a root cause of good health. Instead, happiness and health go together because they have common roots."

Many of the UCR findings fly in the face of conventional wisdom. For example:

• Marriage may be good for men's health, but doesn't really matter for women. Steadily married men – those who remained in long-term marriages – were likely to live to age 70 and beyond; fewer than one-third of divorced men were likely to live to 70; and men who never married outlived those who remarried and significantly outlived those who divorced – but they did not live as long as married men.

• Being divorced is much less harmful to women's health. Women who divorced and did not remarry lived nearly as long as those who were steadily married.

• "Don't work too hard, don't stress," doesn't work as advice for good health and long life. Terman subjects who were the most involved and committed to their jobs did the best. Continually productive men and women lived much longer than their more laid-back comrades.

• Starting formal schooling too early – being in first grade before age 6 – is a risk factor for earlier mortality. Having sufficient playtime and being able to relate to classmates is very important for children.

• Playing with pets is not associated with longer life. Pets may sometimes improve well-being, but they are not a substitute for friends.

• Combat veterans are less likely to live long lives, but surprisingly the psychological stress of war itself is not necessarily a major health threat. Rather, it is a cascade of unhealthy patterns that sometimes follows. Those who find meaning in a traumatic experience and are able to reestablish a sense of security about the world are usually the ones who return to a healthy pathway.

• People who feel loved and cared for report a better sense of well-being, but it doesn't help them live longer. The clearest health benefit of social relationships comes from being involved with and helping others. The groups you associate with often determine the type of person you become – healthy or unhealthy.

It's never too late to choose a healthier path, Friedman and Martin said. The first step is to throw away the lists and stop worrying about worrying.

"Some of the minutiae of what people think will help us lead long, healthy lives, such as worrying about the ratio of omega-6 to omega-3 fatty acids in the foods we eat, actually are red herrings, distracting us from the major pathways," Friedman said. "When we recognize the long-term healthy and unhealthy patterns in ourselves, we can begin to maximize the healthy patterns."

"Thinking of making changes as taking 'steps' is a great strategy," Martin advised. "You can't change major things about yourself overnight. But making small changes, and repeating those steps, can eventually create that path to longer life."

"It was the most prudent and persistent individuals who stayed healthiest and lived the longest."

Looking Back and Finding Today: A Few Points from Leta S. Hollingworth[1]

By Kimberly M. Berman and Robert A. Schultz, Ph.D.
The University of Toledo

Leta Stetter Hollingworth led a fascinating life with many distinct accomplishments noted by the most eminent scientists and professors of her era. She was an accomplished clinical psychologist and psychometrician, having taught herself the intricacies and practices of conducting individual assessments using the Stanford-Binet mental test. She worked for the New York City Civil Service, having been appointed the first official psychologist for the City (Hollingworth, 1943).

She was revered as a teacher and professor at Teachers College, Columbia. In fact, Hollingworth trained several of Terman's workers prior to their hiring at Stanford. And, one of her most famous students developed a unique system of therapy with patients based on his mentor's tutoring and life's work. His name was Carl Rogers.

Following her death in 1939, *Teachers College Record* ran an entire issue in her honor. Students and professionals with whom she had worked wrote emotional renditions of their experience working with Leta and her contributions to both their lives and the field of research (see *Teachers College Record, 42*(3) for more information). And, in December 1940 a conference on giftedness was held in her honor at Teachers College (Thorndike, 1941).

Hollingworth's legacy lived on beyond her death. But, just how far-reaching was her voice and impact?

The Nature and Needs of the Whole Child

Hollingworth emphasized knowing the whole child at a time when the prevailing belief of scientific research was that large data sets provided results that were generalized to populations. This was a very distinctive viewpoint that placed Hollingworth at odds with luminaries in the field of Psychology; including her major advisor Edward L. Thorndike.

Hollingworth was one of the very first scholars working within schools to identify and develop curriculum based on the needs of learners. In a time of several notable theoretical developments and movements (e.g., Mental Measurement, Compulsory Education, the Junior High School Model, Progressive Education, and the Individualized Education Movement), Hollingworth strove to scientifically define needs and measure outcomes of her curricular efforts. It is worth stating again, Hollingworth's curricular work developed from *within* classroom settings. This was very different from the other world-renowned scholars of her time. Indeed, she chastised the lack of curriculum work within the school milieu in favor of quickly collecting data and analyzing statistics:

> It has become a fashion…in educational research to rush forth hastily with a huge load of pencil and paper tests; to spend an hour or two on a hundred children; to rush hastily home to the adding machine, there to tabulate the performances of the children, not *one* of which has ever been perceived as an individual child…If an investigator of child psychology can be saved from ever having to manage and observe a child, he can certainly thus avoid much fatigue….But those who really study children *must* be prepared to 'take pains'. (Hollingworth, 1943, p. 136, italics in original).

She designed elegant experiments and collected data from myriad stakeholder groups—including the students themselves. She worked within distinct classrooms, but also used control groups from classrooms and schools outside the experimental locations. And, she was able to lucidly present her findings to the general public as well as other scholars.

Hollingworth's work was demanding and laborious. She invested in the needs of students in classrooms over the personal need to publish results and thereby make a name for herself. She was the consummate public intellectual of her time, drawing clear and focused attention to the needs of the gifted children in schools.

'If an investigator of child psychology can be saved from ever having to manage and observe a child, he can certainly thus avoid much fatigue….But those who really study children *must* be prepared to 'take pains'.

Looking Back
Continued from page 14

On Special Perplexities

Hollingworth was one of the very first scholars to note that the nature and needs of elementary gifted children required a slowing of pace rather than rapid acceleration. She pioneered the exploration and development of an enrichment curriculum focus for elementary gifted students so that they would be provided time to naturally develop physically and mentally rather than being rapidly advanced based on content acquisition.

Working within classroom settings, Hollingworth and her collaborators observed many social and emotional behaviors ("special perplexities") displayed by gifted children that seemed quite peculiar to expected norms (Hollingworth, 1931). The majority of these situations led Hollingworth to establish a firm philosophical belief that enrichment—where depth and breadth learning about common things—was a way to provide gifted children the space and time to overcome some of their immature tendencies.

We believe a great deal of this philosophical belief stems from Hollingworth's preparations in the field of Sociology and Education. Not many of her contemporaries shared the ability to look into the dynamic interactions of a classroom and see the individuals as unique and distinctive developing selves. Most were trained as Clinical Psychologists and conducted their research in controlled (or controllable) settings.

This is an enigma from the past reflected today. In the field of Gifted Child Education the vast majority of professionals are trained as Psychologists. Few join the ranks with an Educational or Sociological foundation.

On Variance Between Gifted Subpopulations

Hollingworth focused on conducting the scientific work of verifying hypotheses in classrooms where children lived their educational lives. The children she studied became active participants in the research work. Indeed, they became active informants to Hollingworth's developing beliefs about gifted individuals; prompting Hollingworth to distinguish between sub-categorical groups of gifted individuals based on their IQ scores and observed needs. She noted that "break points" seemed to occur at various IQ levels, positing that children shared similar educational fates based on their level of intellect.

This led Hollingworth to collect case study information about the many groups of children she identified and met; but she was especially curious about the children having 180+ IQ (S-B). Her intent was to follow these children into and through their adult lives to explore and document what became of them. Thus, along with Terman and his colleagues (1921; 1925), Hollingworth was one of the earliest scholars to focus on the profoundly gifted providing us with descriptive accounts of several individuals (Hollingworth, 1942).

This initiative was prompted by one particular publication from her major doctoral advisor—a seemingly out of character essay written by Edward L. Thorndike (1916). As Hollingworth (1938) paraphrased, "The education of the best thinkers should be an education for initiative and originality" (pp. 298-299, citing Thorndike (1916)).

After meeting Child E in 1916, and throughout her ensuing career focusing on the gifted individuals she worked with in P.S. 165 and P.S. 500, and on behalf of all gifted children, Leta Hollingworth labored to identify the best thinkers in classrooms and strove to develop an enrichment curriculum that would educate them for initiative and originality.

On Positive Deviates and Society

There is no more serious question than this in all of education: How shall a democracy educate the most educable? At present these children are to a great extent lost in the vast enterprise of mass education, and are left to handle their special problems as they may, by themselves, while the energies of teachers are bent upon the main business of dealing with the ninety-nine per cent who test below 130 I.Q. (S-B). Common sense would tell us that a child who tests as far above the average as a feeble-minded child tests below cannot escape having special problems under conditions of mass education. (Hollingworth, 1939, pp. 99-100).

Hollingworth's work was guided by her sociological training. She intuitively understood that society flourished when all members were functioning at their highest levels of ability; ; thereby contributing to the richness and diversity

How shall a democracy educate the most educable?

Looking Back

Continued from page 15

of a nation. This meant that the gifted children she worked with needed just as much support to be successful as any other group in society.

Indeed, a "cause" she trumpeted for late in her career was the educational need of the positive deviates. She understood that society could benefit from the abilities and potential these children were capable of attaining. She felt that most of these children wasted the vast majority of their school day taking part in mundane tasks that taught them to be lazy or otherwise disengage their minds (Hollingworth, 1942). And, Hollingworth felt that continuing to ignore the needs of the gifted children she knew existed in public schools diminished the possibilities for society in general.

She saw firsthand how these children were trained to become complacent. And, she drew comparisons to other groups of children to further her contentions and discoveries: "…the truth is that children of great ability are virtually as helpless as any others under authorities blind to their exceptionality" (Hollingworth, 1942, p. 305).

A very common myth that arose as Hollingworth was scientifically showing gifted children needed assistance to meet their unique potentialities was that the bright take care of themselves. In an emotionally charged rebuttal to this recurring myth, Hollingworth (1937) wrote,

> Long observation of their development proves that the bright do "take care of themselves," to the extent that they seldom become financially dependent on society at large or otherwise socially burdensome. However, this is scarcely an ideal of development for a farseeing, civilized society. (p. 262).

Hollingworth advocated strongly for the gifted and highly gifted children she knew, and those of future generations. She understood that society's leaders would likely emerge from the group of gifted and highly gifted children in schools (Hollingworth, 1940) and that special training was needed to prepare these individuals for their possible duties (Kandel, Hollingworth, & Thorndike, 1938).

In a style uniquely her own, Hollingworth challenged beliefs that gifted individuals need not require benefits or special opportunities in their education. She pushed boundaries and no group was spared her poignant reprimands. "Educators can…do much to *decrease* their number, by withholding proper education from them" (Hollingworth, 1937, p. 270). This remark was as much a call to action as a rebuke for ignoring the needs of gifted children in favor of their less able classmates.

Hollingworth also realized it was not up to educators to solve the needs of the gifted on their own. "More and more it becomes clear that human welfare, on the whole, is much more a matter of the activities of *deviates* than it is a matter of what the middle mass of persons does" (Hollingworth, 1939, p. 102, italics in original). She crisply pointed at leaders in all walks of life, stating:

> … "bright children will take care of themselves." This is the routine answer given by foundations established to promote human welfare, when requests are made for grants to study and meet the need of such children. The concern of American philanthropy in the present state of public knowledge is for the chronic dependent, forever incapable of development. This criticism may be justly extended to include not only the leaders of philanthropy today, but political, educational, and other kinds of leaders, who would give all to the burdens of society and nothing to the burden-bearers. (Hollingworth, 1942, p. 305).

And, in a haunting statement, Hollingworth (1937) sounded an alarm about society that is as clear and poignant today as it was when written:

> It is upon these minds that society must depend for the conservation and advancement of that abstract knowledge which underlies the learned professions, modern finance, and all other human concerns that call for competent abstract thinking about complex matters…these children have a special and indispensable value…[t]hey can do all that the other ninety-nine per cent can do, but even more. (Hollingworth, 1937, pp. 265-266).

...continuing to ignore the needs of the gifted children she knew existed in public schools diminished the possibilities for society in general.

Looking Back

Continued from page 16

In Conclusion

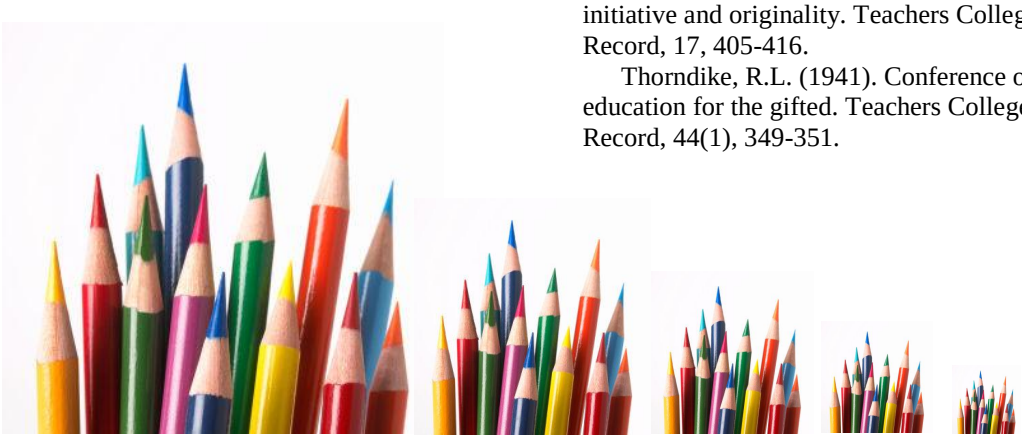
It seems to us, the question posed by Hollingworth in the opening quotation to this section is critically important today. Indeed, the arguments circulating in every Statehouse and on a federal level today are what Leta Hollingworth faced in the 1930s. A few of the constructs have been altered by the addition of catchy phraseology; but, the biases, assumptions and beliefs about the gifted are the same—*exactly* the same.

The parallels between professional training, and the emphasis on data-driven scientific (implied meaning: quantitative) research between the 1930s and current times are uncanny. Trends seem to bear out that our future is based on many events and actions of the past.

Hollingworth diligently and elegantly spoke about the needs of gifted and the highly gifted; and, the potential great loss to society if these children were not taught commensurate to their ability. We can do little better in our time than follow the lead of one of the pioneers in the field of Gifted Child Education.

This is just a beginning point, though. Becoming historically aware provides a prelude to possible outcomes of our efforts. Yet, we must continue to advocate strongly for the needs of gifted children in schools.

We looked back and found today. It still isn't a pretty sight to behold. Continuing to allow the gifted and creative to become disabled by schooling that focuses on minimum levels of proficiency and maximum accountability to esoteric standards of content attainment is an abomination.



References

Hollingworth, L.S. (1931). The child of very superior intelligence as a special problem in social adjustment. *Mental Hygiene, 11*(1), 3-16.

Hollingworth, L.S. (1937). Bright students take care of themselves. The North American Review, 243(2), 261-273.

Hollingworth, L.S. (1938). An enrichment curriculum for rapid learners at Public School 500: Speyer School. Teachers College Record, 39, 296-306.

Hollingworth, L.S. (1939). Problems of relationship between elementary and secondary schools in the case of highly intelligent pupils. *Journal of Educational Sociology, 13*(2), 90-102.

Hollingworth, L.S. (1940). Public addresses. Lancaster, PA: The Science Press Printing Co.

Hollingworth, L.S. (1942). Children above 180- IQ Stanford-Binet: Origin and development. Yonkers-on-Hudson, NY: World Book Company.

Hollingworth, H. L. (1943). Leta Stetter Hollingworth: A biography. Lincoln, NE: University of Nebraska Press.

Kandel, I.L., Hollingworth, L.S., & Thorndike, E.L. (1938). *How should a democratic people provide for the selection and training of leaders in the various walks of life? Addresses delivered before the Fifth Conference on Educational Policies, November 11, 1938.* New York, NY: Teachers College, Columbia University.

Terman, L.M. and Fenton, J.C. (1921). Preliminary report on a gifted juvenile author. Journal of Applied Psychology, 5, 163-178.

Terman, L.M. (1925). Mental and physical traits of a thousand gifted children, Genetic studies of genius: Volume 1. Stanford, CA: Stanford University Press.

Thorndike, E.L. (1916). Education for initiative and originality. Teachers College Record, 17, 405-416.

Thorndike, R.L. (1941). Conference on education for the gifted. Teachers College Record, 44(1), 349-351.

Becoming historically aware provides a prelude to possible outcomes of our efforts. Yet, we must continue to advocate strongly for the needs of gifted children in schools.

Portraits in Gifted Education, the Legacy Series: The First Four Years

By Abbey Block Cash

It was 1996, and the approaching millennium signaled many important changes, but for me personally, it marked the beginning of my leadership role with NAGC, ranging from Conceptual Foundations (CF) Assistant Programming Chair to Programming Chair, to Network Chair. It was approximately at this juncture, in 2000, that we began to discuss the need for our Network to not only build upon the foundations of NAGC, highlighting the role that CF plays, but also to recognize and honor the "foot print" of our gifted field, namely its Gifted Giants. During numerous conversations and meetings we acknowledged the significance that our eminent researchers represent, and the contributions to the field of gifted education that they have made. Early-on during our well intentioned machinations and ruminations it also became clear that we had already lost the opportunity to pay tribute to several of our Gifted Greats - namely – Harry Passow, John Gowan, Julian Stanley, Mary Frasier, and John Feldhusen, to mention only a few. It was clear; we needed to move our efforts along, quickly.

It was also at this time that I made a personal commitment to undertake Legacy, to guarantee that the contributions and theories of our most notable advocates, researchers, and leaders in the field of gifted education were recorded, preserved, and communicated, in their own voice, to inform future generations.

Initially, there were many questions shared by both CF members and NAGC about the Legacy project:

What would the interview format be?
How would the choices for honorees be made?
Who would do the interviews?
What techniques/format would be used?

To avoid permitting the forest to crowd the trees, I established a volunteer Legacy Committee, and sent a succinct, 2-page proposal to NAGC, and Nancy Green, covering the necessary guidelines. The basic ingredients included the rationale and justification for the project; the over-arching objectives; the evening time frame; the format (inspired by Bravo's Actors Studio); and the possible funding. Additional provisions were made for a reception, the tapings to include footage and photos, and committee support that opened participation to all Networks and the greater NAGC community.

Finally, lists of potential interviewees were provided, including a short list for immediate consideration - Annemarie Roeper, Alexinia Baldwin, Joe Renzulli, Jim Gallagher, Donald Treffinger, Dorothy Sisk, and Abe Tannenbaum, - among others, and a longer list to be revisited at a later time. A small sub- committee drafted Legacy objectives (i.e., To record for future generations, the words and images of leaders in the field; To create videos that can be used in the training of teachers, future leaders, and students; To stimulate new leadership in the field of gifted education; and To build upon existing theories). Legacy Committee members also explored categories for the interview such as Childhood/Background Influences, Early Entry into the Field, Seminal Theories, Personal Accomplishments, and Words of Wisdom.

It was agreed that as Legacy Chair, I would assume the role as lead interviewer, and a companion interviewer would be selected based on their connection with the researcher, and to provide insights and comfort during the interview (to date these have included Michele Kane, Stuart Omdal, Shelagh Gallagher, and Ken Dickson). Initially, my experiences and advanced degrees in program evaluation, and my extensive history doing interviews with focus groups and others, helped define my role in the project. Guiding principles came from my background with ethnographic research and the theories of connoisseurship and modern-day qualitative research proffered by such pioneers as Elliot Eisner. Prior to each videotaping, my research took shape with the many hundreds of pages I read written by the Legacy honoree, and further illuminated by the dozens of close friends, family, and colleagues I interviewed. This was further augmented with the exploration of hundreds of photos and archival data. The questions and the direction for each interview varied, and naturally emerged from this process.

Another principle directing the tapings is associated with my views, inspired from the Ancient Greeks, and in particular the writings of

Annemarie Roeper

"Giftedness includes heart and soul, and is not limited to intelligence and achievement".

"Commitment to Justice over Power"

"Child Participation and Choice"

Legacy Series
Continued from page 18

Plato; from his theories it can be inferred that the truth is in the dialogue**.** This "wisdom" underlies the veracity and integrity of exploring the writings of our Legacy honorees, and the process of interviewing them and their colleagues to learn about their understandings, theories, views, and dedication to their beliefs. No one theory defines the "answer", and the truth only surfaces after thorough emersion in the process. I am personally committed to this belief.

Commonalities

While exploring the history of our Gifted Giants, and conducting the interviews, it became clear that their backgrounds revealed far more similarities than differences. Jim Gallagher and Annemarie Roeper had mothers who were respected teachers working in the field, and Alexinia Baldwin's mother had a teaching background, as well. All four of the honorees came from nurturing, supportive homes, although money issues were sometimes a concern. Joe Renzulli, along with the others, evidenced childhood gifts in creativity and cleverness; Baldwin and Roeper displayed early altruism in their kind and giving nature.

Both Baldwin and Gallagher would have been called precocious, having skipped grades in school a few times, and the researchers pursued and valued their outside accomplishments at an early age (e.g., playing instruments, sports, earning money). All showed some level of resiliency during their youth (Renzulli and Gallagher were raised alone by mothers and extended families, and faced monetary challenges; Roeper was forced to leave her native Germany and take refuge in the U.S. during the Nazi occupation, and Baldwin suffered prejudice and "separate but equal" policies in segregated Alabama. Overall, it was difficult to avoid thinking of William Wadsworth's quote, "the child is father to the man" and linking it with the rich histories of our researchers.

All of the notable scholars boasted robust curriculum vitas (40 to 60 pages long)! Jim Gallagher maintained two in different fields – one in early childhood and one in gifted education. These resumes reflected their prolific writing accomplishments; they had written dozens if not hundreds of articles, book chapters, and books, and had presented hundreds of papers around the world. They sat on multiple boards; chaired numerous organizations (e.g., CEC, NAGC); and received dozens of awards, honors, and doctoral degrees. Some held positions of great distinction: Jim Gallagher, in the late 1960s, had served as Associate Commissioner of Education/US Bureau of Ed-Chief of Bureau of Education for the Handicapped, and also Deputy Assistant Secretary for Planning/Research/Evaluation – US Office of HEW; Joe Renzulli was named as one of 25 of the most influential psychologists in the world.

Many of the Legacy honorees identified the same influential people as having inspired their thinking, and these included Julian Stanley, John Guilford, Paul Torrance, and Harry Passow, among others. It appeared that the theories that guided their ideas and discovery were eclectic in nature, and rich in depth. Many offered quotes and words of wisdom that held great meaning for them, and that were used through the years to inspire others. (See Side Bars)

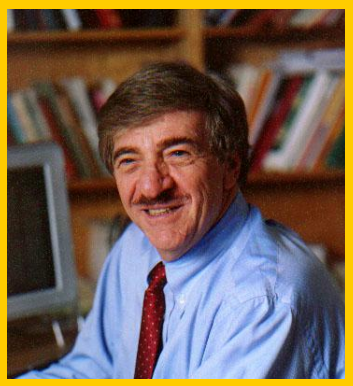
Personal Reflections and Growth:

In writing this Legacy retrospective, I have decided not to focus on some of the unfortunate mishaps associated with the tapings – although I don't mind mentioning a few! Annemarie's microphone kept falling off, and true to her consideration and strong affect directed toward others, she was overly concerned with worrying if it was going to negatively impact our taping.

Joe made it to the taping only a few minutes before the appointed time, as he was completing a previous engagement, and for a few terrifying moments, I wondered how I was going to entertain the audience of over 500 who had gathered for the event.

The debacle surrounding Jim Gallagher's taping could not be rectified as easily; a month after the stellar videotaping, we learned that tapes and footage COULD actually disappear! The entire event and interview was subsequently redone in North Carolina thanks to Linda Robinson and Wes Guthrie from the North Carolina Association for the Gifted. The taping done in St. Louis must forever remain in our collective memory.

Finally, the room where Alexinia's taping took place was removed from the major conference action; attendees had difficulty in locating it and arriving on time, causing my sympathetic husband



Joe Renzulli

"A Rising Tide Lifts all Ships"

"The woods are lovely, dark and deep.
But I have promises to keep.
And miles to go before I sleep.
And miles to go before I sleep.

By Robert Frost

Legacy Series
Continued from page 19

huband and members of the Special Pops Network to frantically distribute flyers moments before the scheduled event.

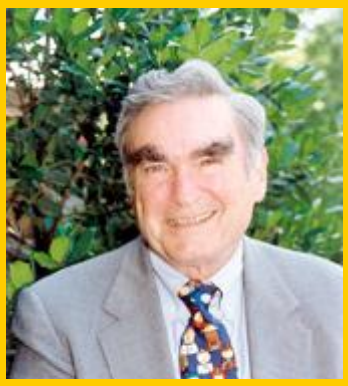
In doing my research, there were a number of surprises – fascinating ones – that were moving and inspirational. I have known Alexinia Baldwin for over 25 years, but I never truly understood the details involved with her civil rights case against the government in the 1960s. Ultimately, she was responsible for insuring that individuals of all races could sit safely and equally in transportation waiting rooms throughout the U.S. Annemarie Roeper's moving story of her encounter with a Nazi orientation and rally near her home, and subsequent exodus to America, was terrifying and moving. I am also unable to forget Jim Gallagher's colorful (and amusing) account of arranging for the famous child psychologist, John Piaget, to speak at his school, only to realize, moments before the event, that it was virtually unattended! He immediately dispatched a number of students throughout the campus with the direction: "find as many people as you can – professors, students, woman and children – and babies in carriages, and bring them in here!" The lesson to be learned for those of us who present was even famous people can attract a small audience. Finally, Joe's accounts of his entrepreneurial exploits during his pre-teen years, selling produce and whatever else he could "manage" were both entertaining and insightful as it provided a lens into the resiliency and creativity of this gifted leader.

I was somewhat surprised at the visceral reactions by the audience, the Legacy honorees, and me from time to time, during the interviews. Alexinia Baldwin's adult students were nothing short of passionate in their love and appreciation of her as their teacher, and their testimonials, gratitude, and dedicated attendance at the taping were moving to everyone. I personally became emotional when listening to Jim Gallagher's commitment and love for his family, and when he addressed our co-interviewer Shelagh Gallagher's inquiries, he did so with the closeness and fondness that only a devoted father would share with his loving daughter. Members of the audience literally cried when Joe Renzulli cried, as he recounted his years growing up in New Jersey, and the importance of his family. I was surprised when attendees made me aware that my hand had reached out to comfort him; I know he had said, "thank you", but I was unaware of what I had done until I previewed the video. Finally, Annemarie Roeper provided testimony of how she and her family had to flee her beloved family-owned school, Marienau, outside Hamburg in the 1930s, and abandon their life to find safety and freedom in the U.S.; When she spoke deeply of her dedication and love for her 15 year old boyfriend, George Roeper, who later became her husband, her story was reminiscent of material that one is more likely to find in a romance novel.

The Past is Prologue:

I have always proffered the role of the past in predicting our future, and I am happy to be able to conclude with these sentiments. The Legacy tapings have provided insights into the appreciation, regard, and respect held for the four interviewed Gifted Greats by the CF Network, NAGC, and the greater gifted community. The tapings permit today's advocates, along with generations to come, to see them, appreciate them, and to hear their stories and theories in their own voice. The Legacy tapings provide NAGC with the archival footage and as Sally Reis was the first to state, "institutional memory" that has been lacking, over the years.

Conceptual Foundations will provide the venue for our 5th annual videotaping and this year's honoree, Donald Treffinger**,** in New Orleans. I have made the decision to step down as Legacy Chair, in favor of another interviewer, Erin Morris Miller, who will be conducting the videotaping with Stephen Schroth. I'm convinced that they will do a wonderful job, and perhaps direct Legacy into new areas and formats, as is necessary. They have my complete support, and I will continue in the role of Co-Chair for a time, and an active member of the Legacy Committee. I am also confident that the "dialogue" and "truths" to be uncovered as we listen to our gifted researchers, will continue to reveal themselves; I look forward to attending Legacy tapings in the future, to discover for myself, the essence of the wisdom of our Gifted Greats, yet to be honored. I am proud to have been a founding member of Legacy, and give deserved recognition to NAGC's Executive Director Nancy Green for believing in and supporting the project. As I end this chapter, I am grateful to have contributed to the efforts to make the CF dream a reality.



Jim Gallagher

"Excellence as well as equity is a legitimate goal of American Education"

"Talent delayed is talent denied"

"The battle once won is not always won"

"We either cultivate talents or lose them among our poor and rich"

By Thomas Jefferson

Portraits in Gifted Education: The Legacy Series Presents:

"The Creative Voice of Don Treffinger"

Friday, November 4th
4:00 – 5:30 pm
Hilton New Orleans Riverside

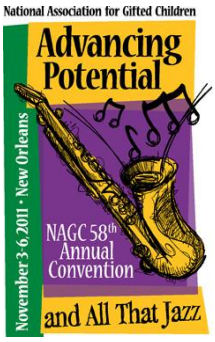
"The truth is in the dialogue"
~ Plato

The NAGC Conceptual Foundations Network Legacy Series

The Conceptual Foundations Network, in concert with NAGC, continues its dedication to videotaping notable gifted advocates, researchers, and leaders in order to preserve their legacy for future generations. For our fifth annual videotaping, you are invited to share in the insights of Don Treffinger, world famous expert on creativity, problem solving and talent development.

We are honored to be interviewing this devoted advocate for gifted and talented children.

Attendance is open to all NAGC Convention Attendees.



Alexinia Baldwin

"Err on the side of inclusion rather than exclusion"

"It is sad when a "pint" is expected to yield a "quart" and fails to do so, but it is a tragic loss to society when a "quart" produces only a "pint" or much less for lack of proper societal efforts and programs"

NETWORK OFFICERS

Chair:
Robert Schultz
The University of Toledo
2801 W. Bancroft St.
Toledo, OH 43606
(419) 530-2469
(419) 530-2466 FAX
robert.schultz@utoledo.edu

Chair Elect & Membership Chair:
Elizabeth A. Romey
College of Education
University of South Alabama
UCOM 3115
Mobile, AL 36688
251-380-2723

Program Chair
Nora Cohen
School of Education
Oregon State University
Corvallis, OR 97331
cohen1@orst.edu

Program Committee:
Barbara A. Romey
Program Coordinator
Gifted Education 9-12
Phenix City Schools
Phenix City, AL 36868

Volunteers Needed

Legacy Series Chair & Newsletter Editor:
Erin Morris Miller
James Madison University
Harrisonburg, VA 22801
millerem@jmu.edu

Assistant Newsletter Editor:
Stephen T. Schroth
Educational Studies Department
Knox College
2 East South Street, K126
Galesburg, IL 61401
sschroth@knox.edu
(309) 341-7347

Past Legacy Series Chair & Treasurer
Abbey Block Cash
377 Woodward Rd.
Nassau, New York 12123
(518) 766-7665
Acash@berk.com

Secretary:
Barbara A. Romey
Program Coordinator
Gifted Education 9-12
Phenix City Schools
Phenix City, AL 36868

Publications & Annotated Bibliography:
Don Ambrose
849 Sandy Run Road
Yardley, PA 19067
ambrose@rider.edu

Nora Cohen
School of Education
Oregon State University
Corvallis, OR 97331
cohen1@orst.edu

Our Next Issue:

Send Manuscripts to

Erin Morris Miller
James Madison University
Harrisonburg, VA 22801
millerem@jmu.edu

or

Stephen T. Schroth
Educational Studies Department
Knox College
2 East South Street, K126
Galesburg, IL 61401
sschroth@knox.edu