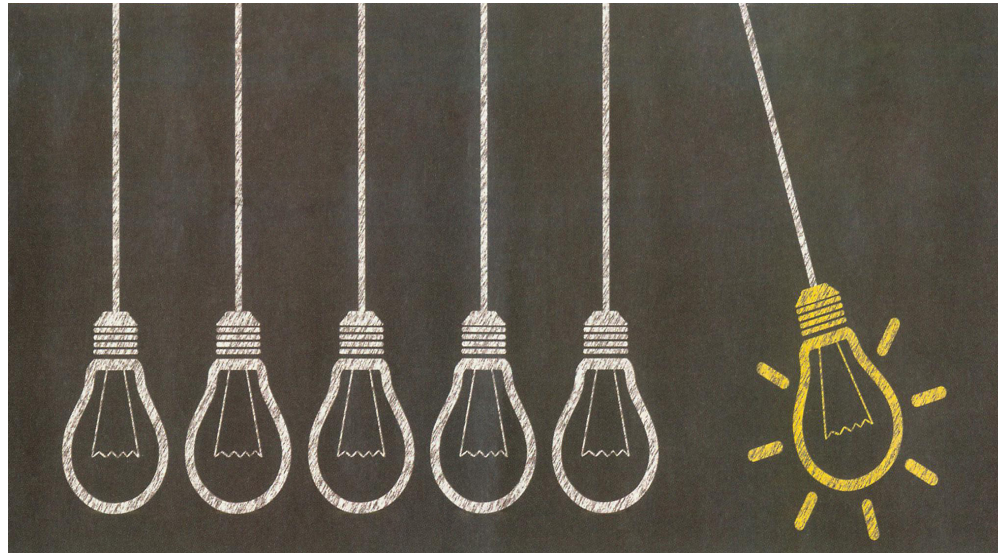


The Schoolwide Enrichment Model The What, Why, Who, and How

Joseph S. Renzulli
The University of Connecticut

The National Research Center
on the Gifted and Talented



The Renzulli Center
For Creativity,
Gifted Education,
and Talent
Development

Outline

- 1. The Big Ideas Underlying The SEM**
- 2. The Why and The Who Questions**
- 3. What is Creative/Productiveness?**
- 4. Curriculum Modification for High Achieving Students**
- 5. A Multiple Criteria Strength Based Identification System**
- 6. Underlying Theories Of Knowledge and Differentiation**
- 7. The Enrichment Triad In Action**
- 8. Enrichment Clusters [The “Growth Stock” of The SEM]**
- 9. Infusion of Enrichment Into the Regular Curriculum**
- 10. Best Resources For Creative/Productive Giftedness**
- 11. The Renzulli Learning System**

1

The Big Ideas Underlying the SEM

- Focus On Creative Productivity, An Investigative Mindset And Co-Cognitive Characteristics
- General Enrichment For All Students and Targeted Enrichment and Acceleration For Students Who Demonstrate Advanced Potential
- Maintenance of Specially trained Personnel Existing Programs and Services
- Practice Driven, Theory Based, Research Supported
- Common Goals/Unique Means
- Abundant Resources And Teacher Training
- Making Schools A Happy Place For All Students



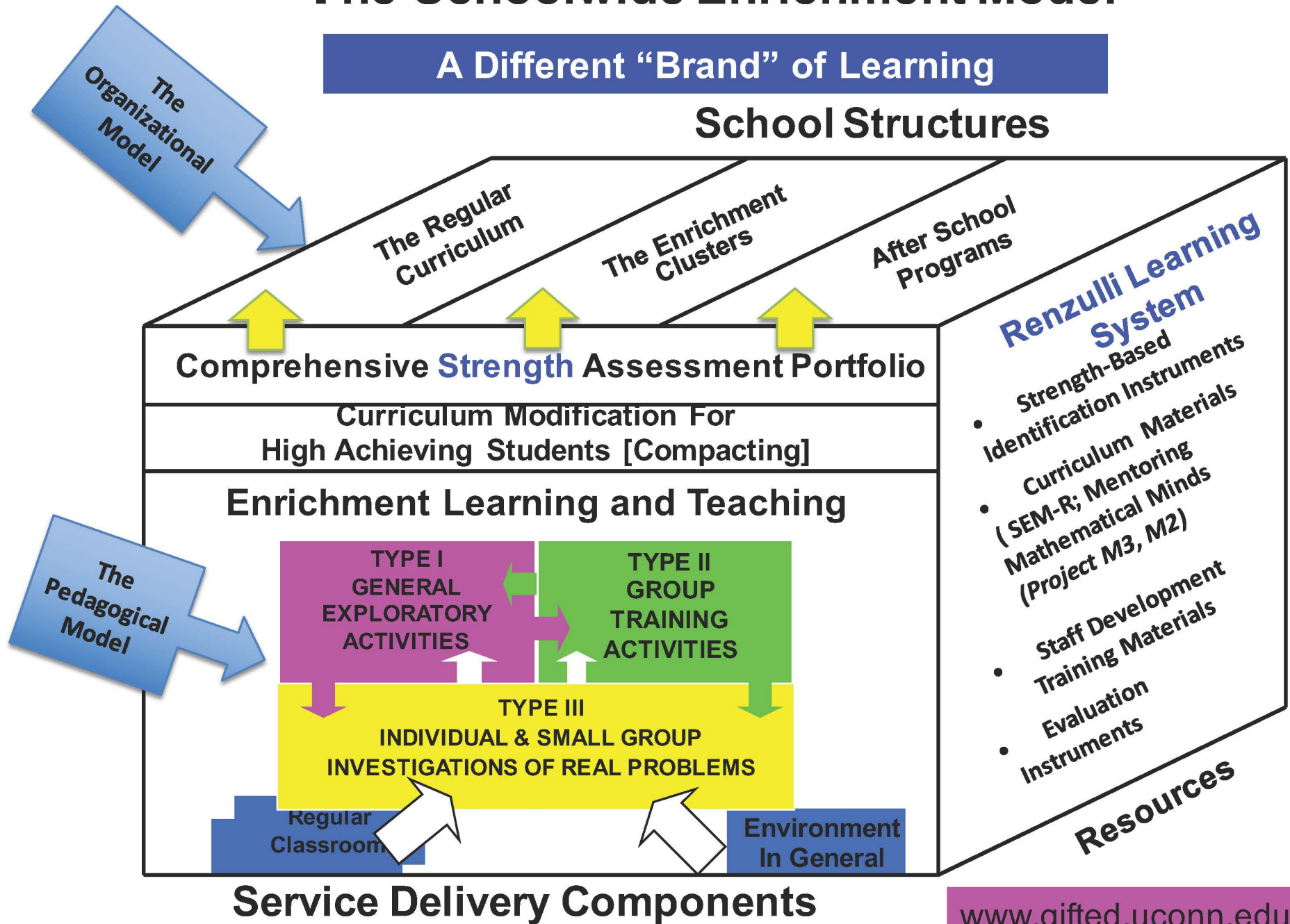
“Example is the best school of mankind and they will learn at no other.”

Philosopher, Edmund Burks

The Schoolwide Enrichment Model

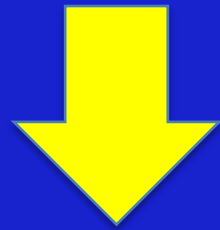
A Different "Brand" of Learning

School Structures

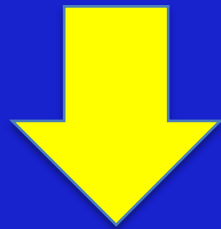


The Goals of The SEM

Enjoyment



Engagement



Enthusiasm For
Learning

Continuum of Learning Theories*

All you ever needed to know about learning theory (in one slide)!

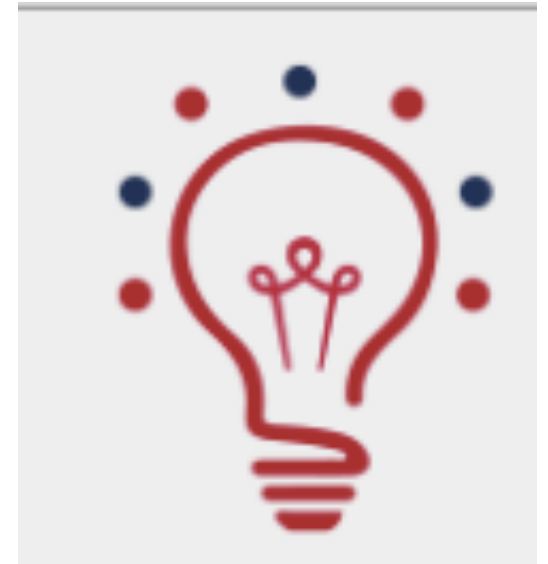
<p>Deductive Didactic & Prescriptive</p> <p>Knowledge Acquisition, Storage, and Retrieval. Prescribed & Predetermined Content</p>	<p>Pedagogy</p>	<p>Inductive, Investigative & Inquiry Oriented</p> <p>Knowledge Application, High Engagement, Motivation And Enjoyment. J-I-T Content</p>
<p>Basic Skill Acquisition Text Consumption</p>	<p>Outcomes</p>	<p>21st Century Thinking Skills Creative Productivity</p>
<p>Behaviorists</p> <ul style="list-style-type: none"> •Pavlov •Thorndike •Skinner 	<p>Major Theorists</p>	<p>Constructivists</p> <ul style="list-style-type: none"> •Pestalozzi, Torrance, •Montessori, Gardner, •Piaget & Bruner, •Dewey, Sternberg
<p>Increased Academic Achievement Higher Test Scores Technically Proficient Professional and Skilled Workers</p>	<p>National Goals</p>	<p>Inventors Creative Designers in Sciences, Arts, & Technology Innovative Leaders Entrepreneurs Writers People Who Make a Difference</p>

*Both ends of this continuum are important, and schools should integrate them whenever possible to produce the best balance between the two models of learning.

1A

The Big Ideas Underlying The SEM

- **Focus On Creative Productivity, An Investigative Mindset, And Co-Cognitive Characteristics**
- **General Enrichment For All Students and Targeted Enrichment and Acceleration For Students Who Demonstrate Advanced Potential**

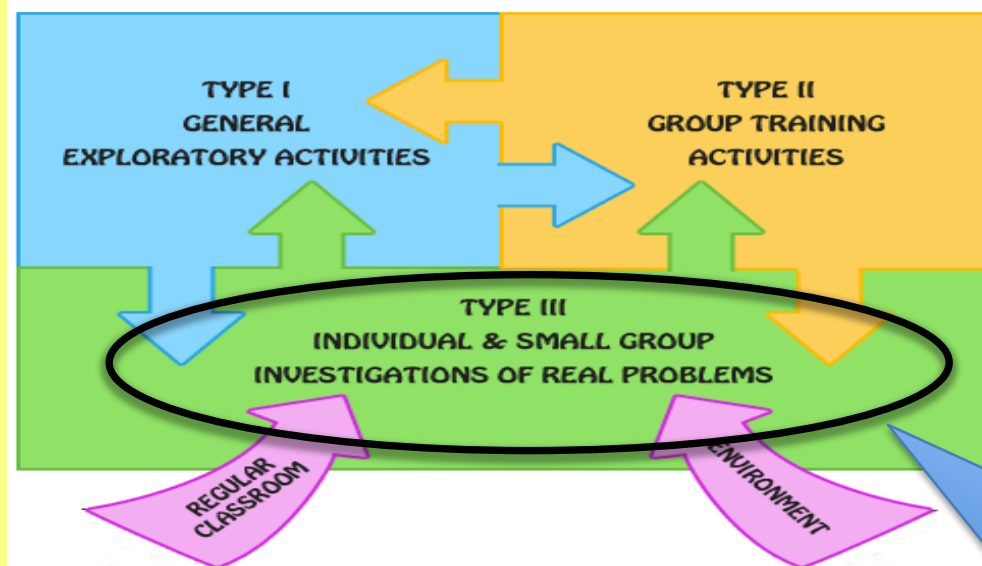


A Focus On Creative Productivity and Total School Improvement

How we differ from other gifted education and talent development models...

{ All Students

{ Candidates For Follow-Up



Enrichment Clusters For All Students }

The Enrichment Triad Model

"The young person thinking, feeling and doing like the practicing professional, even if at a more junior level than adult scientists, writers, etc."

Curriculum Compacting For High Achieving Students

What do we mean by Co-Cognitive Characteristics?

The Traditional Basics

Creative Thinking
Critical Thinking
Problem Solving
Decision Making
Productive Thinking

Planning
Forecasting
Writing
Literacy
Numeracy

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Opportunities For Creative Productivity

Intelligences Outside The Normal Curve

Contributing To Social Capital & Making A Better World

- Optimism
- Courage
- Romance With a Topic or Discipline
- Mental and Physical Energy
- Vision & A Sense of Destiny
- Sensitivity To Human Concerns

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o

The Soft Intelligences "Executive Functions"

Leadership Based on Wisdom & Responsibility

- Personal
- Emotional
- Spiritual
- Social
- Motivational
- Responsible
- Organizational
- "Getting your act together"
- Self-Regulation

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Meta-cognitive Skills in Technology

Focusing & Filtering

- The ability to identify trustworthy and useful information
- The ability to selectively manage overabundant information
- The ability to organize, classify, and evaluate information
- The ability to conduct self-assessments of web-based information
- The ability to use relevant information to advance the quality of one's work
- The ability to communicate information effectively

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<http://edudemic.com/2012/07/10-interactive-lessons-by-google-on-digital-citizenship/>

What do we mean by creative productivity?



In first grade **Kylie Copenhagen** invented a board game about ladybugs for a school science project. Today, “The Ladybug Game” is consistently one of the top-selling games at Target.com, where it competes with thousands of other games and puzzles. **“The Ladybug Game” has also been a bestseller at some of the nation's largest retailers including Target and Toys R Us.**

Kylie fell in love with ladybugs during a school science project. “In Mrs. Ditto’s class I learned that ladybugs are the coolest thing around,” says Kylie. “Since my friends liked them too, I invented a game about them. It’s fun for me to know that other kids love my game. The game has been a huge success. It’s sold over 1 million copies, and is well on its way to becoming a classic. I received a \$100,000 payment for each game sold.”

The Ladybug Game is suitable for children ages three and up. It tells the adventure story of a ladybug named Orange. The object of the game is to help Orange find his way back home (a rosebush) after a windstorm launches them airborne and they land on a faraway dirt pile. The first ladybug to find her way “home” is the winner. Along the way, the ladybugs encounter various hazards such as tall grass, praying mantis’, aphids and ants. In addition to Target and K-Mart, The Ladybug Game is also available at Meijer, Go! The Game Store, Barnes and Noble, Borders Books & Music, Fred Meyer, Toys R Us and more.

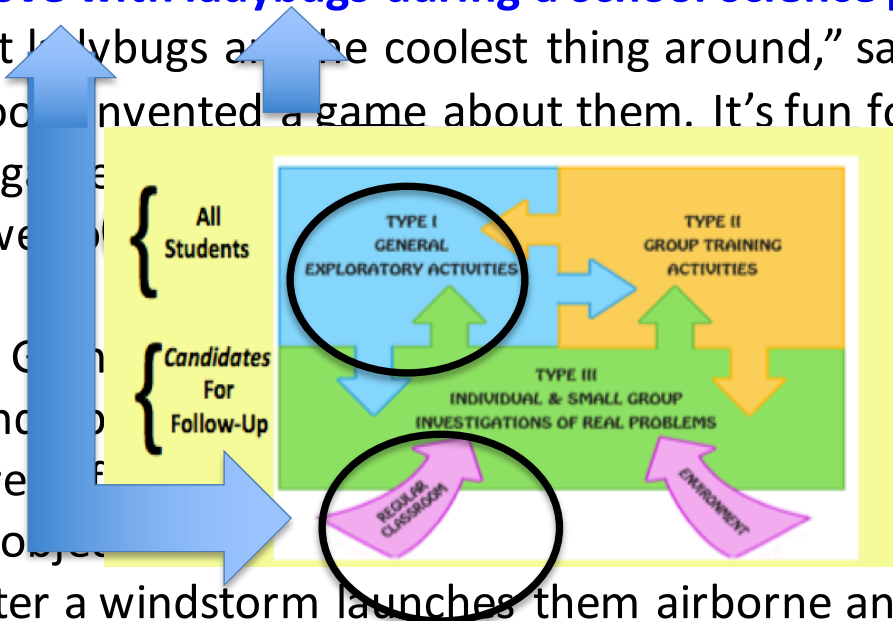
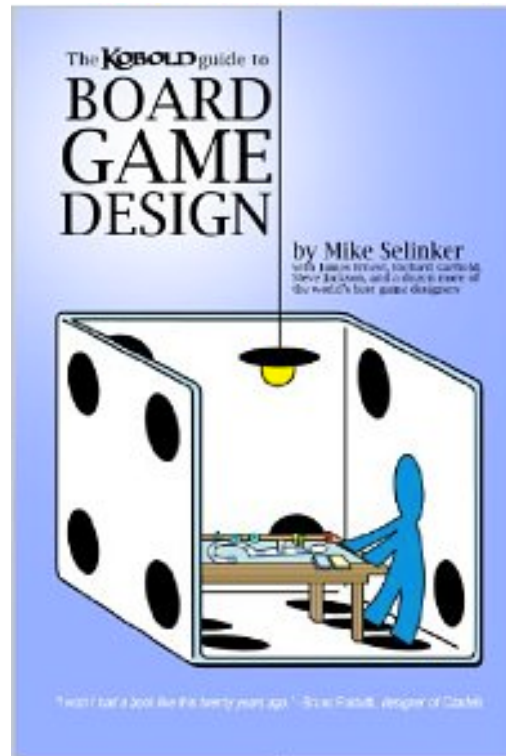


Table Games: How to Make and Play Them

Marran, Ray J.

Note: This is not the actual book cover



Type II: How-To Books





STEVE MARIOTTI, FOUNDER OF THE NETWORK FOR
TEACHING ENTREPRENEURSHIP, WITH **DEBRA DESALVO**

THE YOUNG COMPLETELY REVISED
AND UPDATED
ENTREPRENEUR'S
GUIDE TO
STARTING
& RUNNING
A BUSINESS

TURN YOUR IDEAS INTO MONEY!

Company Info

News

Contact Us

About Kylie

About the Game

BUY NOW!

Ages 3-7

THE LADYBUG GAME™

A New
Adventure
Every Time
You Play!



CONTENTS

Gameboard · 4 Ladybug pawns and stands · 61 Aphid chips · 38 Ladybug cards (33 Moving cards, 5 Aphid cards) · 8 Praying Mantis passes

[Download the rules](#) (PDF)

Ages 3 & Up For 2-4 players

In Support of Deeper Learning for All Students



Gifted and Talented? Deeper Learning Is for All Students

By Melissa Daniels, Director of High Tech Middle Chula Vista in California | March 12, 2015
| Education Week

When I was in fifth grade, I was in a gifted and talented program in a small town in south Georgia. Each Friday, we were pulled from our regular classroom and bused to another school where we explored subjects like botany, engaged in interesting art projects, and went on special field trips. At least one of those experiences had an

impact on my future; a fascinating field trip to a museum exhibit on Ramses the Great sparked my life-long interest in history and laid the groundwork for two years of teaching in Cairo, Egypt.

As a ten-year-old enjoying these engaging learning experiences, I remember wondering why all my classmates didn't get to have these opportunities. [Read more.](#)

1B

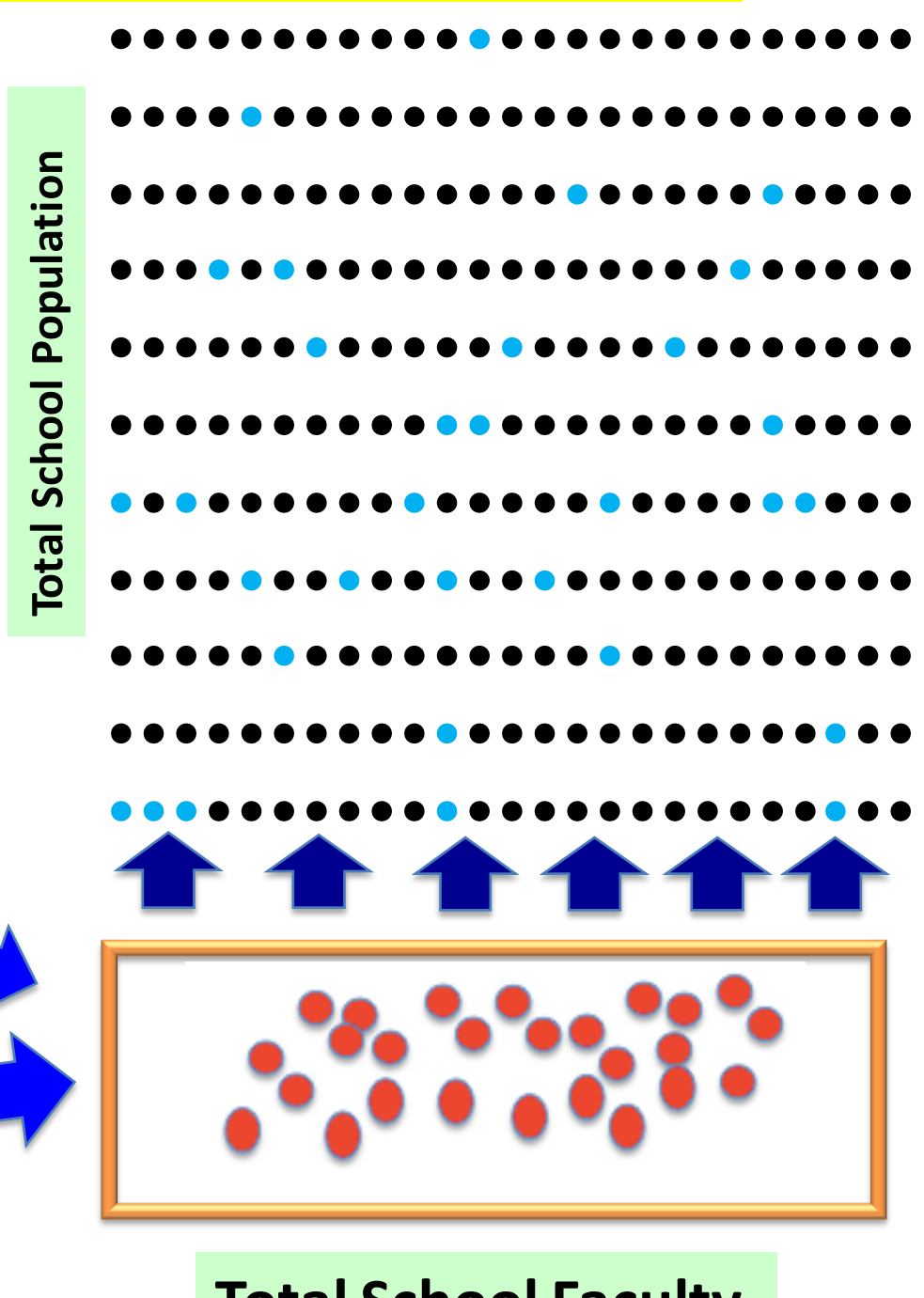
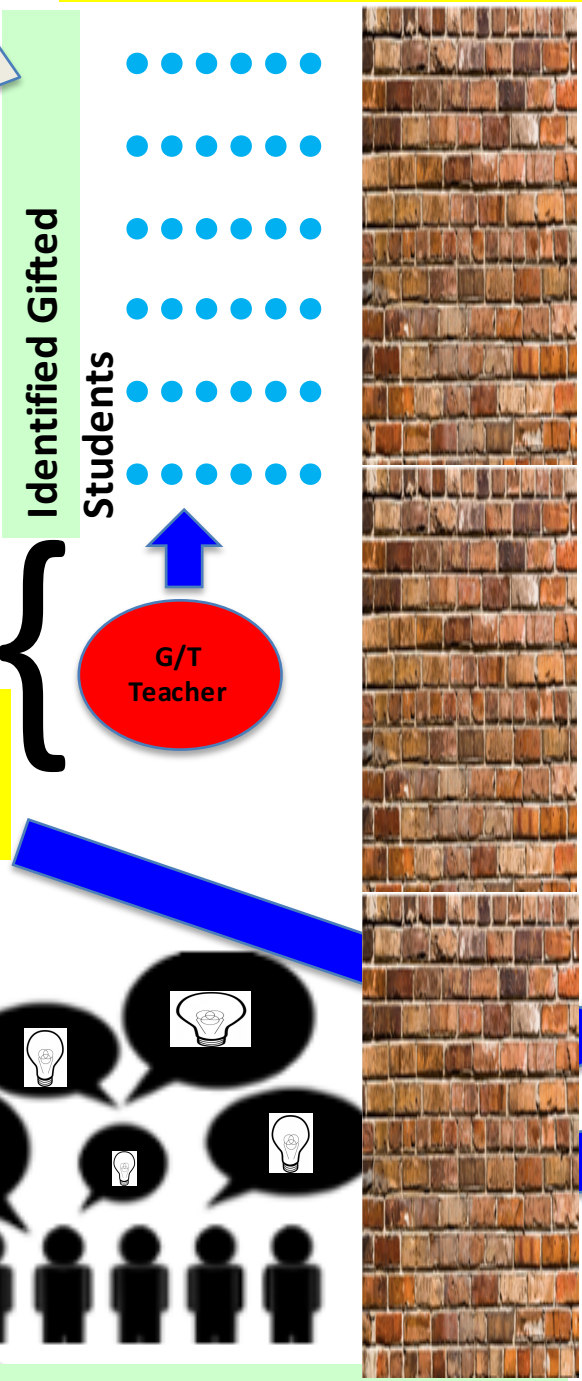
The Big Ideas Underlying the SEM

- **Focus On Creative Productivity, An Investigative Mindset, And Co-Cognitive Characteristics**
- **General Enrichment For All Students and Targeted Enrichment and Acceleration For Students Who Demonstrate Advanced Potential**
- **Maintenance of Specially trained Personnel And Existing Programs and Services**



Relationship Between the SEM and Existing Gifted Program

Knocking Down The Brick Wall



Teacher Trained In G/T Pedagogy (Acceleration, Enrichment, Etc.)

G/T Teacher

The Schoolwide Enrichment Team

Total School Faculty

Enrichment Infusion Into The Regular Curriculum

10

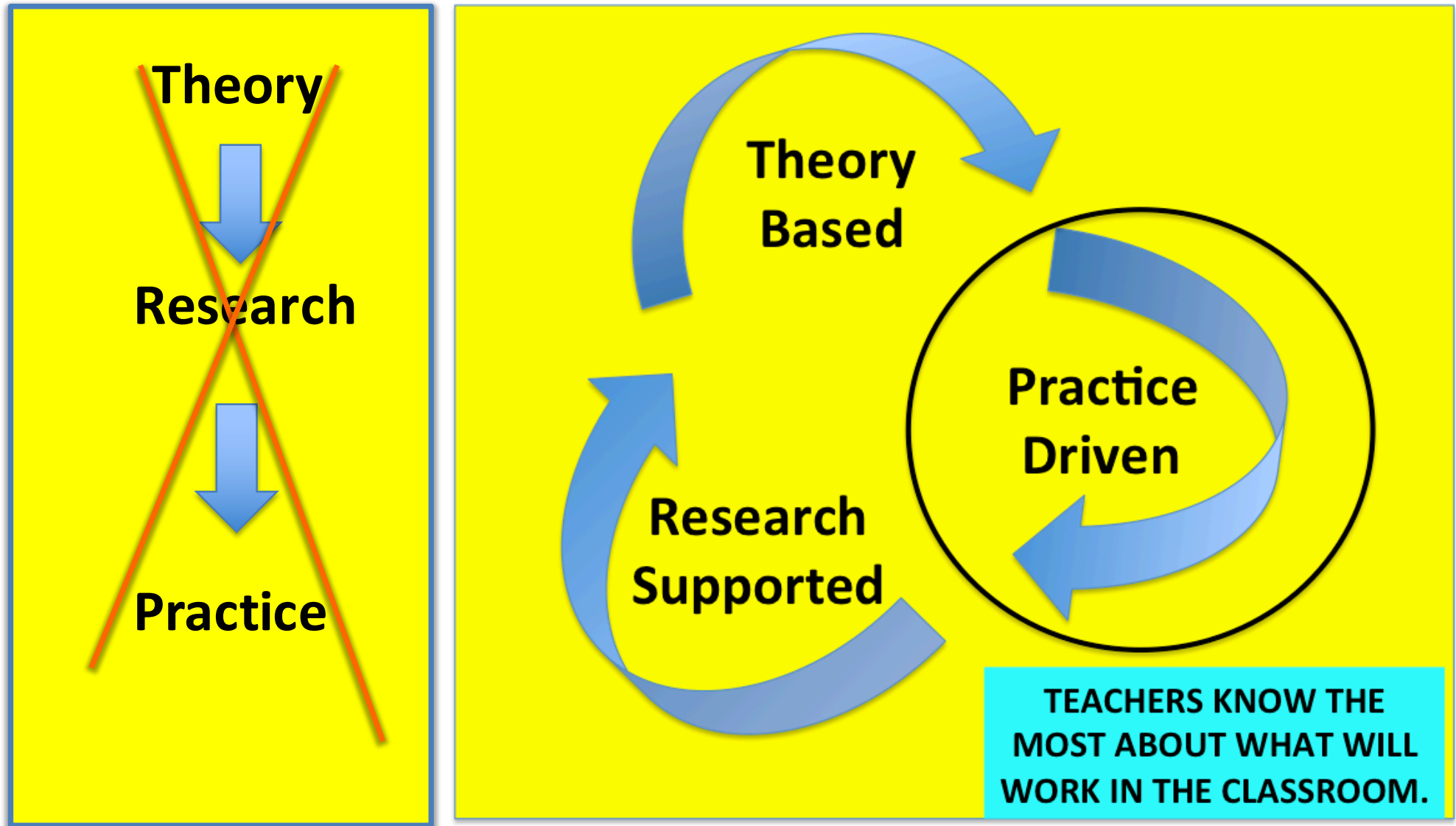
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- **Practice Driven, Theory Based, Research Supported**



Reasons why SEM programs have been successful?

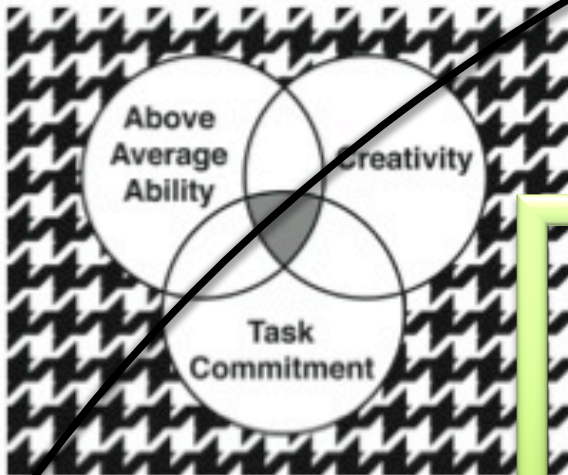
A Orientation That Starts With The Practitioner.



A Focus on Creative Productivity

Conceptions of Giftedness

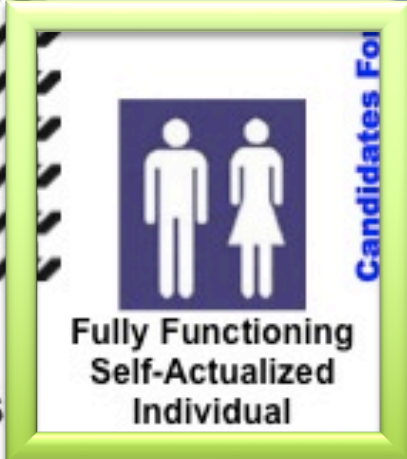
The Three-Ring Conception of Giftedness



Executive Functions

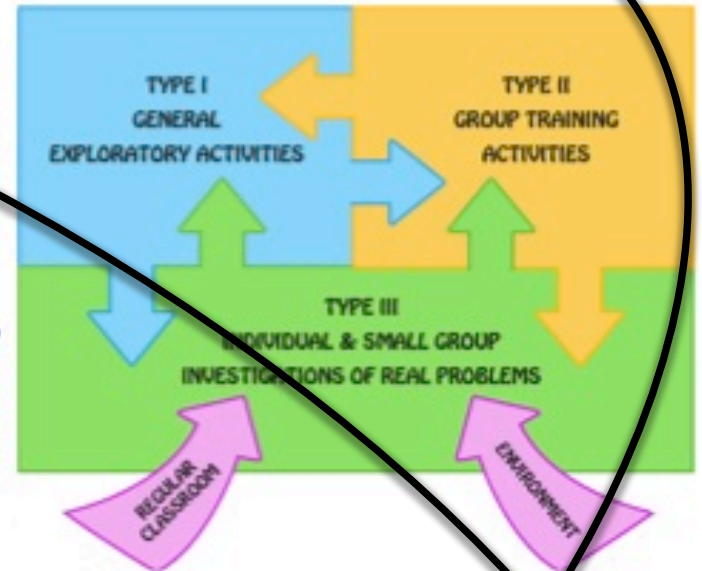
Leadership for a Changing World

- Action Orientation
- Social Interactions
- Altruistic Leadership
- Realistic Self-Assessment
- Awareness of Needs of Others



Candidates For

The Enrichment Triad



Operation Houndstooth



WISDOM
SATISFYING LIFESTYLE
THE PURSUIT OF HAPPINESS

- diversity 多样性
- balance 平衡
- harmony 和谐
- prosperity 繁荣

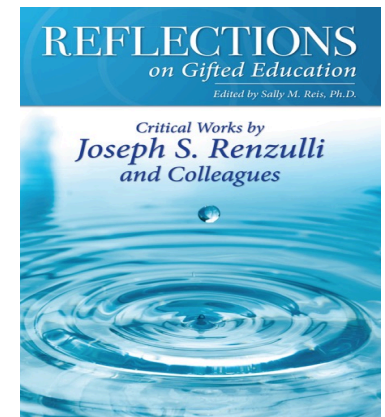
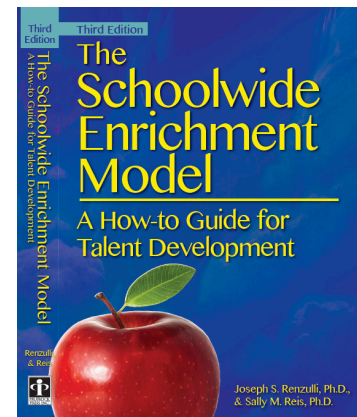
The Development of Social Capital

Leadership in a Changing World

40

Research And Development On The Schoolwide Enrichment Model

See Article by Reis at:
<http://gifted.uconn.edu/schoolwide-enrichment-model/semresearch/>



A Meta-Analysis of the Effects of Enrichment Programs on Gifted Students

Mihyeon Kim¹

Gifted Child Quarterly
2016, Vol. 60(2) 102–116
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Gifted Children
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DOI: 10.1177/0016986216630607
gcq.sagepub.com



Abstract

Although descriptions of enrichment programs are valuable for practitioners, practices, and services for gifted students, they must be backed by evidence, derived through a synthesis of research. This study examined research on enrichment programs serving gifted students and synthesized the current studies between 1985 and 2014 on the effects of enrichment programs. A total of 26 studies were included in this meta-analysis, and the findings show that enrichment programs had a positive impact on both gifted students' academic achievement ($g = 0.96$, 95% CI [0.64, 1.30], under a random-effects model) and socioemotional development ($g = 0.55$, 95% CI [0.32, 0.79], under a random-effects model). Regarding moderators of the effects, types of programs, and grade levels influenced both effect sizes of academic achievement and socioemotional development. The largest effect size was observed for summer residential programs in terms of academic achievement and for a combination of summer and academic year program in terms of socioemotional development.

Keywords

meta-analysis, enrichment programs, gifted students, evaluation

Weems Elementary School (K – 4)

Schoolwide Enrichment Model School In Manassas, Virginia

Highest ELL school in the District

Over 70% economically disadvantaged (free and reduced lunch)

Middle School Follow-Up Records

Pass Rate Data Comparing Weems
Graduates With Graduates From Four Other Feeder Schools

Reading:

Weems graduates: 80%

Other 4 feeder schools: 68.2%

Math:

Weems graduates: 85.33%

Other 4 feeder schools: 74.82%

Science:

Weems graduates: 81.330%

Other 4 feeder schools: 70.28%

Also, if you look at the run of the past few years we have been building up as well.

Reading

Weems graduates performed in the negative (-) in the 3 years prior to adopting SEM and flipped to +12 point gain in 2014-15. The other elementary graduates made a 2014-15 +6 jump whereas Weems made a +19 point jump.

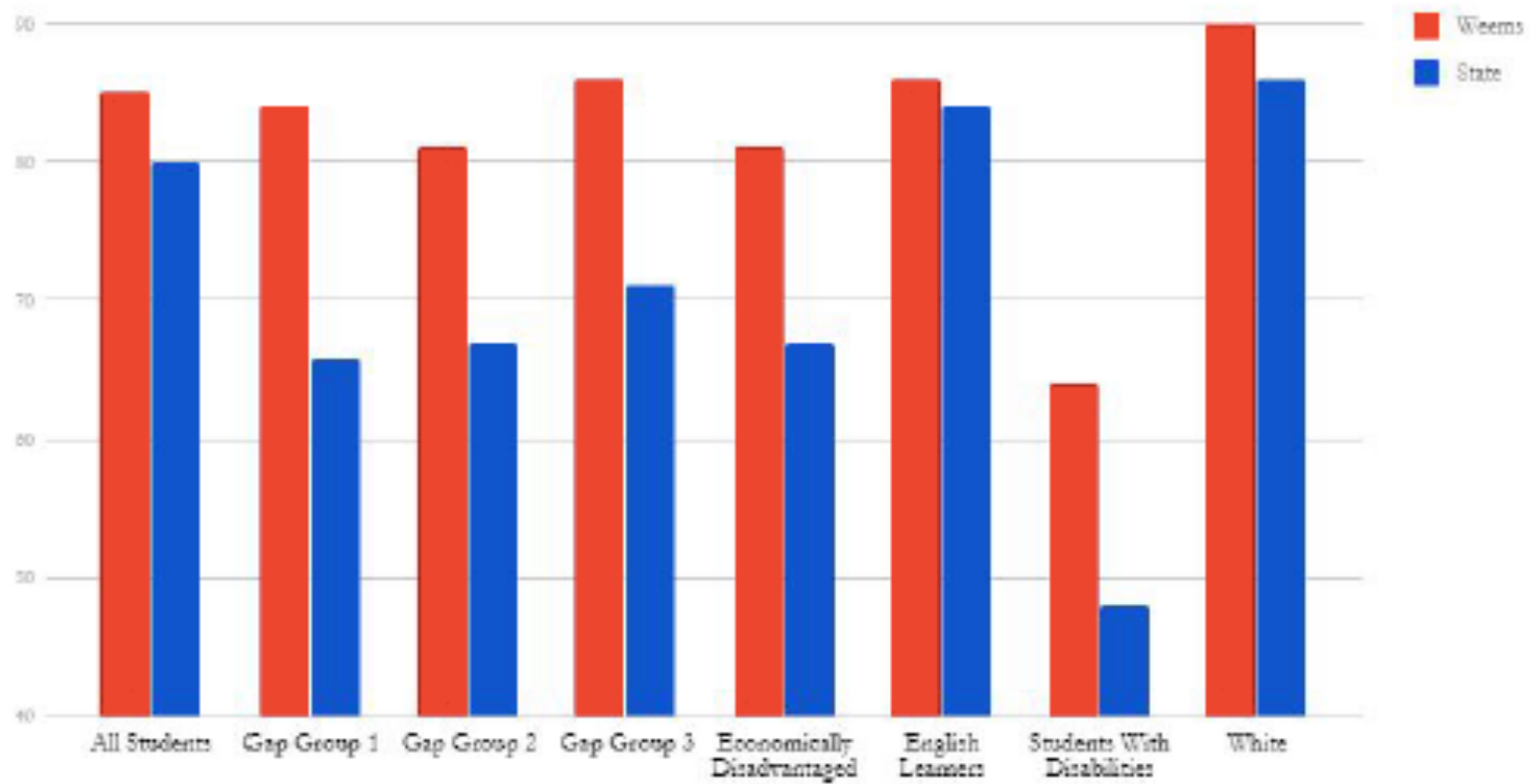
Math

Weems Outperformed in the negative before SEM years and flipped to +2 in 2013-14 and then +11 in 2014-15. The other feeder schools made a + 6 jump 2014-15 whereas Weems graduates made a +15 jump.

At Weems, more than 70 percent of students are categorized as economically disadvantaged and nearly 60 percent are identified as English learners.

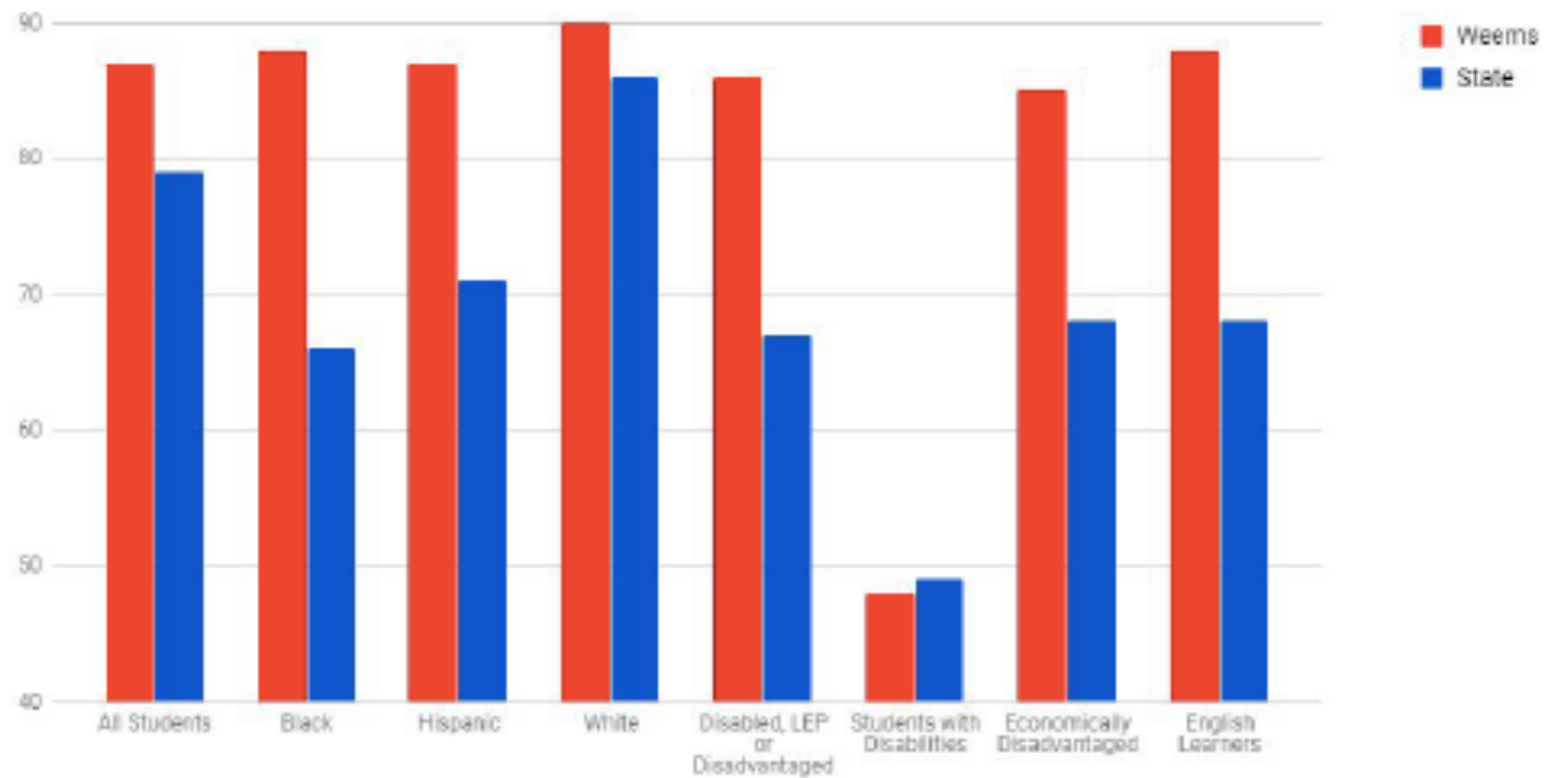
Graph 1: Reading Subgroup Achievement

Weems Compared to State Averages



Graph 2: Math Subgroup Achievement

Weems Compared to State Averages



Governor McAuliffe Announces Recipients of the Inaugural Governor's Awards for Excellence and Innovation in Education

Virginia recognizes outstanding individuals, schools and programs

RICHMOND – Governor McAuliffe today announced the first recipients of the *Governor's Award for Excellence and Innovation in Education*. This new initiative recognizes outstanding educators and leaders, schools, divisions, and community partners across five categories: closing the achievement gap, community partnerships and collaboration, innovation in education, preparing students for the new Virginia economy; and supporting school readiness. Out of more than 120 nominations, 13 were selected for recognition and honored at the Executive Mansion last night. The award categories and recipients are as follows:

Closing the Achievement Gap

Weems Elementary School

Under the leadership of Principal Dave Rupert, Weems Elementary staff has improved student achievement through the school's unique Talents and Gifts program.

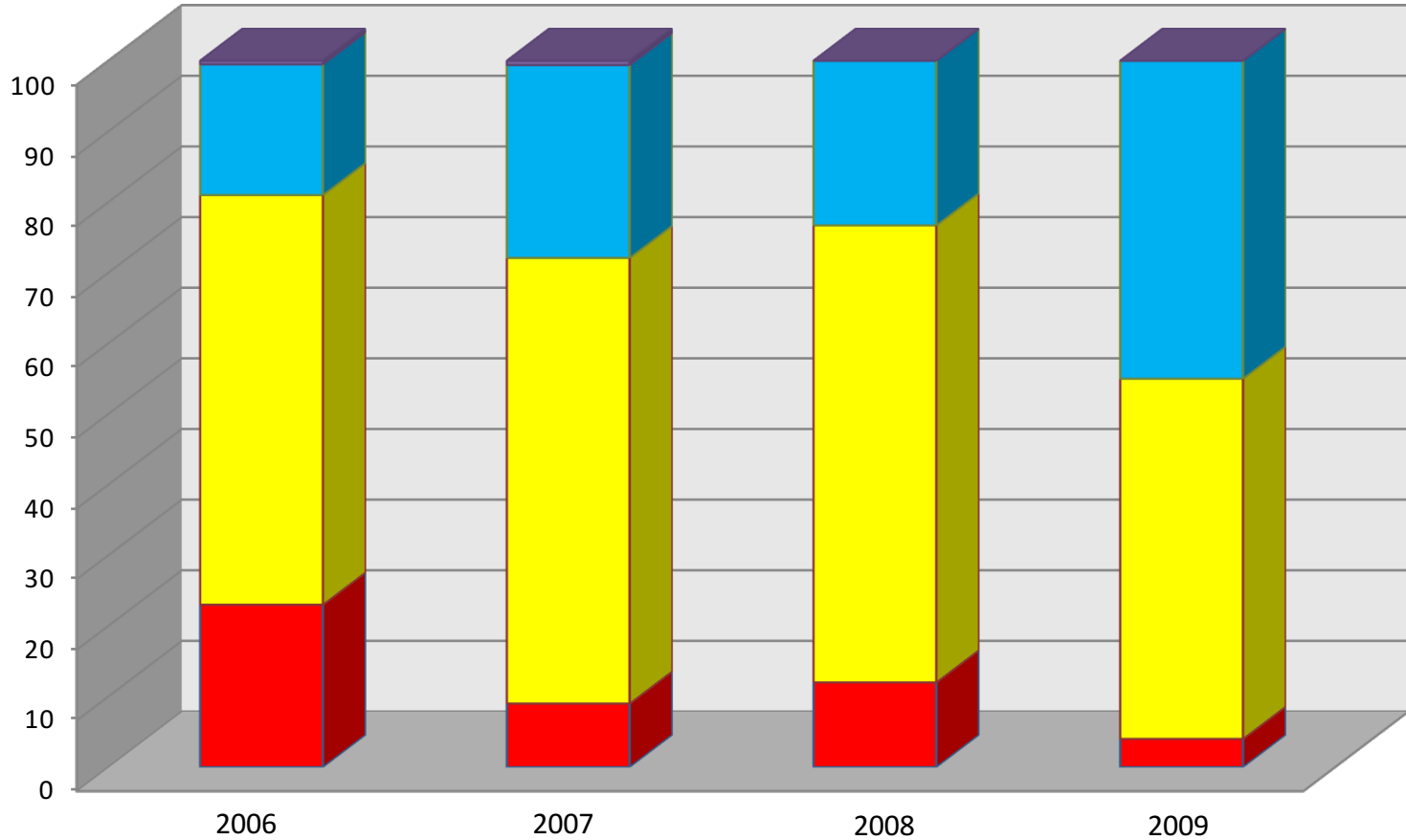


Weems Elementary School of Manassas was recognized at the Virginia governor's mansion Oct. 26 after receiving the governor's award for excellence and innovation in education.

Dominic Cipollone, Principal
 Middle School 219
 Bronx, New York

**MS 219 ENGLISH LANGUAGE ARTS RESULTS COMPARED ALL STUDENTS
 2006 THROUGH 2009**

**Test results
 since the
 implementation
 Of the Renzulli
 Learning
 System in 2006**

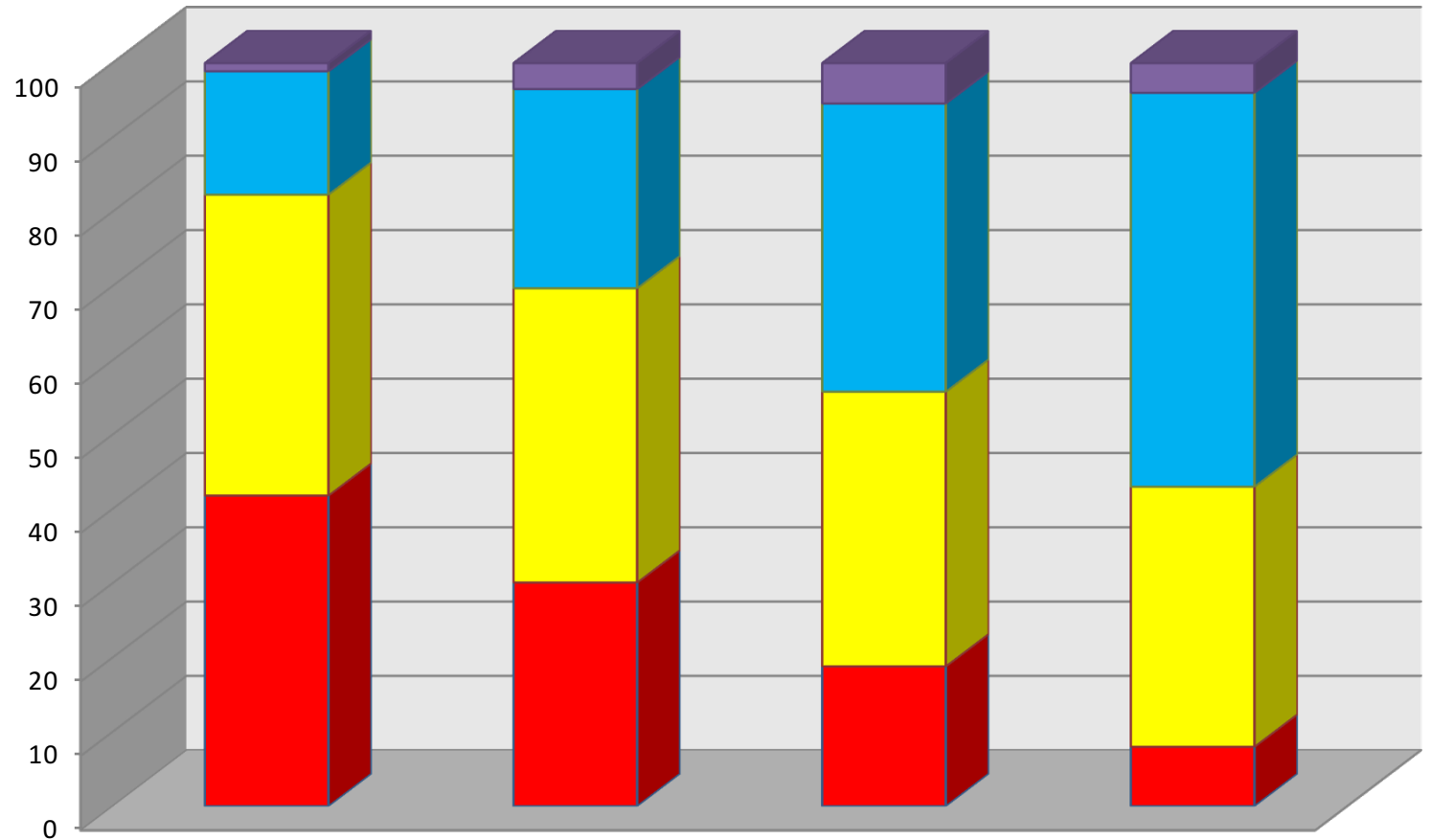


Level 4	0.5	0.6	0	0
Level 3	18.5	27.3	23.3	45
Level 2	58	63.1	64.7	51
Level 1	23	9	12	4

Dominic Cipollone, Principal
 Middle School 219
 Bronx, New York

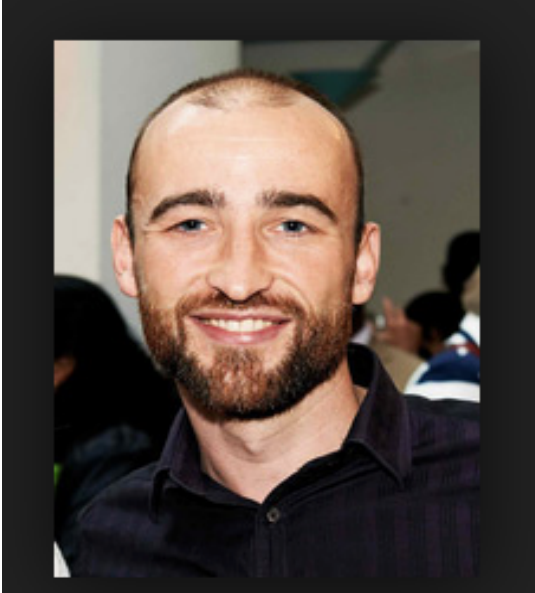
MS 219 MATH RESULTS COMPARED ALL STUDENTS 2001 THROUGH 2009

Test results since the implementation Of the Renzulli Learning sysrem in 2006



	2006	2007	2008	2009
Level 4	1.2	3.5	5.44	4
Level 3	16.6	26.8	38.78	53
Level 2	40.5	39.6	36.96	35
Level 1	41.8	30.1	18.82	8

Recent research from the
perspective
of economic growth...



Adam Booij

http://gifted.uconn.edu/wp-content/uploads/sites/961/2016/05/Economic_Discussion_Paper_on_SEM_in_Netherlands.pdf



Ferry Haan

Three 
Economists
From Holland



Eric Plug

Research Note

Enriching Students Pays Off: Evidence from an Individualized Gifted and Talented Program in Secondary Education (2016)

Adam Booij

University of Amsterdam and Tinbergen Institute

Ferry Haan

University of Amsterdam

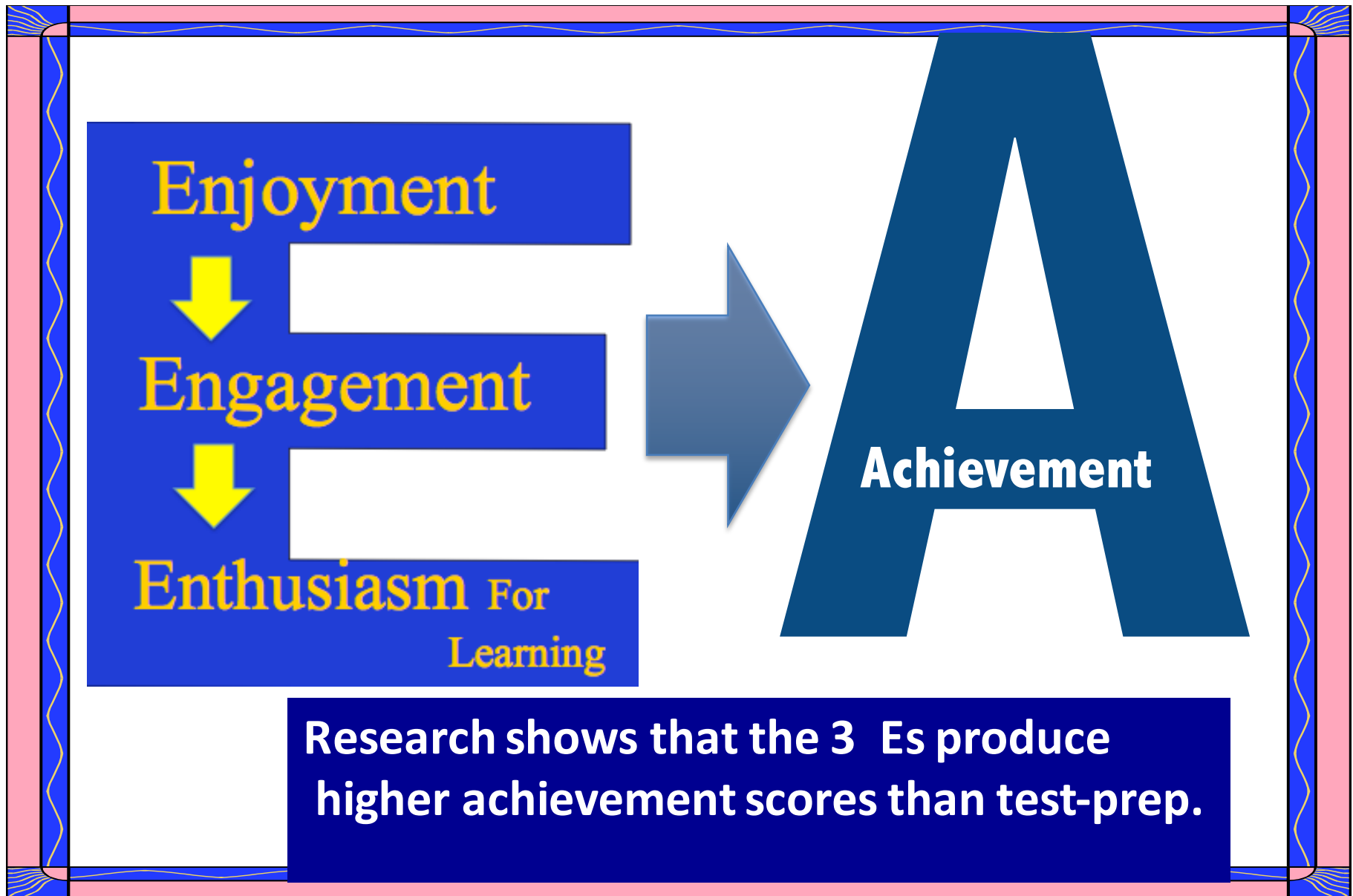
Erik Plug

University of Amsterdam, Tinbergen Institute, IZA and UCLS

Twenty-five year follow-up of
students who attended a SEM
School in Holland

We find that students obtain higher grades, follow a more science intensive curriculum (most notably for girls), and report stronger beliefs about their academic abilities. We also find that these positive effects persist in university, where students choose more challenging fields of study with, on average, higher returns. Together, these findings are consistent with a human capital interpretation of GT education. GT education increased the average starting salary ... Our most conservative calculations suggest that the labor market benefits of GT education are far greater than its costs.

Why Are The 3 Es Important?



(Renzulli, 2004)

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The Big Ideas Underlying the SEM

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- **Maintenance of Specially trained Personnel Existing Programs and Services**
- **Practice Driven, Theory Based, Research Supported**
- **Common Goals/Unique Means**

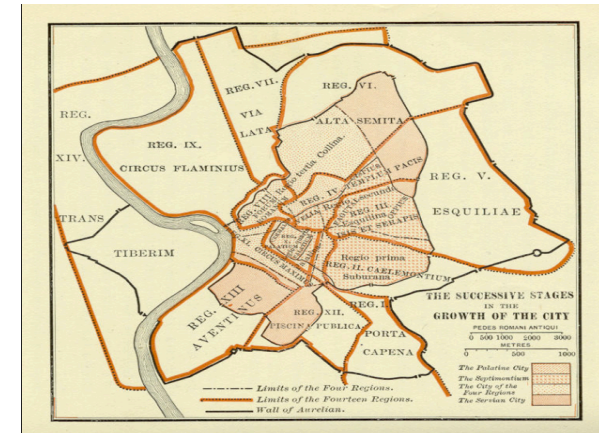


Common Goals – Unique Means

All roads lead to Rome...

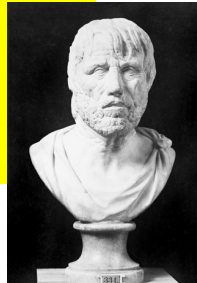


But there are many ways
to get to Rome...



Most innovations fail
because we know more
about what we're against
than what we stand for.

**"If one does not know to which
port one is sailing, no wind is
favorable." Seneca**





The Big Ideas Underlying the SEM

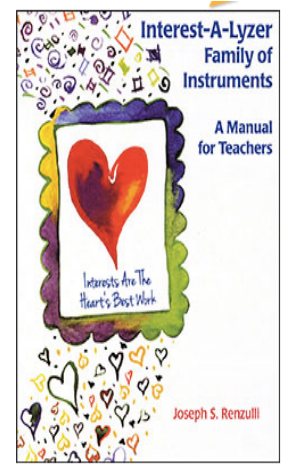
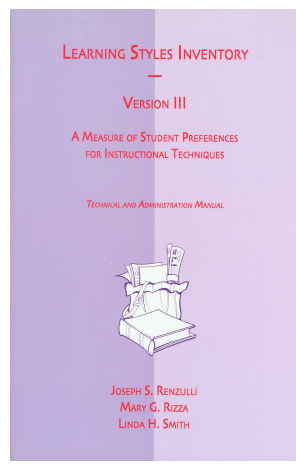
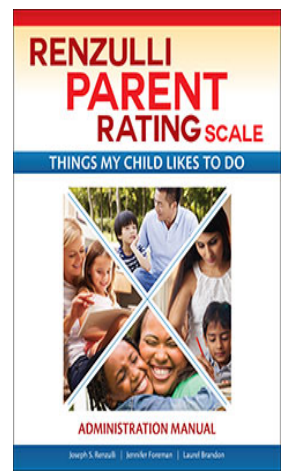
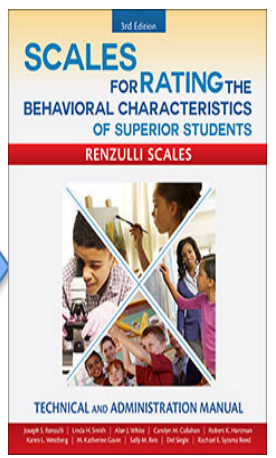
- Focus On Creative Productivity And An Investigative Mindset
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- Common Goals/Unique Means
- Abundant Resources And Teacher Training



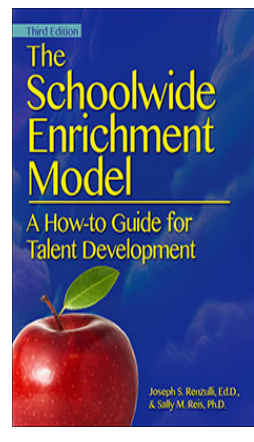
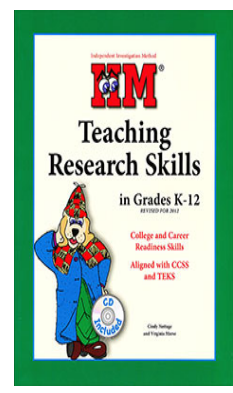
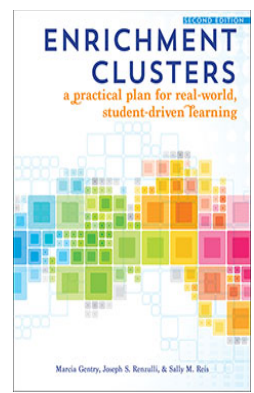
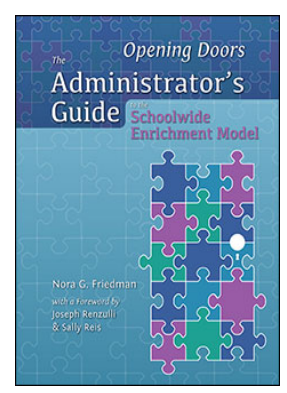
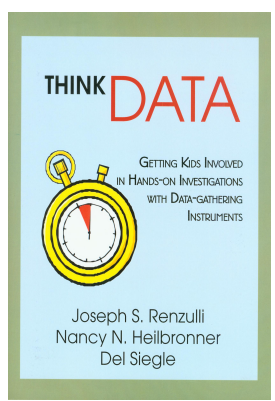
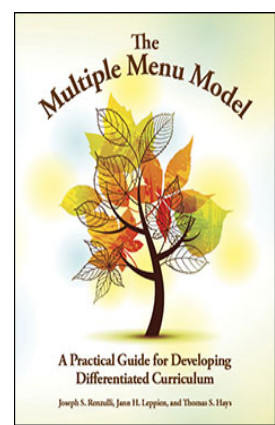
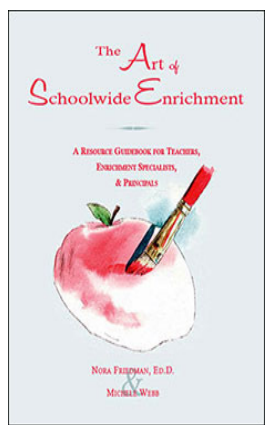
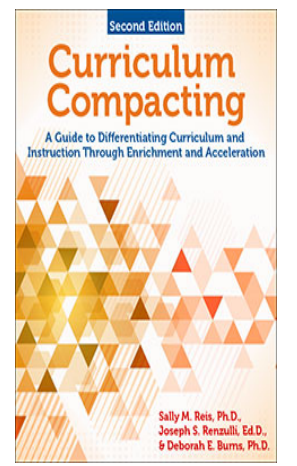
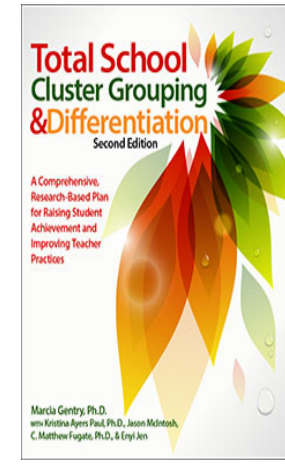
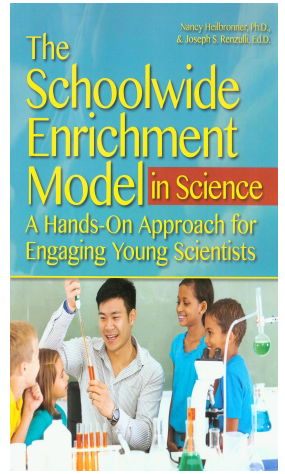
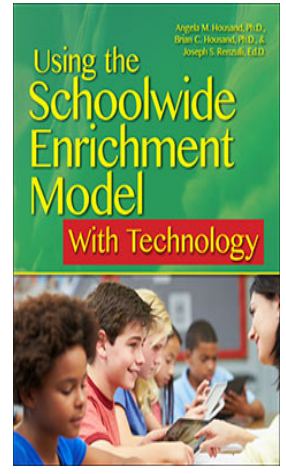
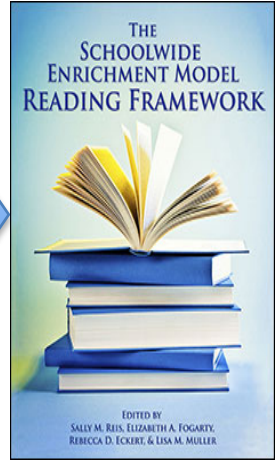
Practical Resources For The Two Main Theories



The Three Conception of Giftedness



The Enrichment Triad Model





University of Connecticut

CONFRATUTE

CONFerence and instiTUTE with FRATernity in between.

www.confratute.uconn.edu

July 8-13, 2018



Join us for
our **41st** year of
professional
development in
enrichment, talent
development, &
differentiation!

The Schoolwide Enrichment Model (SEM) is the foundation of Confratute, where teachers and administrators learn how to make schools places for talent development using innovative ideas, creative applications, and networking with others who have implemented the model.

Confratute offers:

IN-DEPTH TRAINING in The Schoolwide Enrichment Model

- Differentiation & Curriculum Compacting
- Underachievement
- Enrichment Infusion Into the Regular Curriculum
- Cluster Grouping
- Enrichment Clusters
- Innovative Technology Applications

A VARIETY OF STRANDS that are intensive, week-long mini courses.

MINI-KEYNOTES about relevant research and trends in regular and gifted education.

INVITED SPEAKERS who are authors and researchers such as Joseph Renzulli, Sally Reis, Susan Baum, Marcia Gentry, Sandra Kaplan, Jann Leppien, Rachel McAnallen, and Del Siegle.

SPECIAL TOPIC SESSIONS on a variety of topics such as creativity, thinking skills, underachievement, and more.

EVENING FORUM SESSIONS to help you develop individual action plans for talent development and differentiation.

SEM LEADERS FORUM strands on curriculum development and more, designed for principals and administrators.

Renzulli Center for Creativity, Gifted Education, and Talent Development



Renzulli Learning

is now available in multiple languages

Renzulli[®]Learning
Proven Differentiation™

Renzulli[®]Aprendizaje
Diferenciación comprobada™

Renzulli[®]学习法
个性化学习™

Renzulli[®] للتعليم
تعليم شخصي™

English - Spanish - Chinese - Arabic
More languages coming soon!

The Big Ideas Underlying the SEM

- Focus On Creative Productivity, An Investigative Mindset, And Co-Cognitive Characteristics
- General Enrichment For All Students and Targeted Enrichment and Acceleration For Students Who Demonstrate Advanced Potential
- Maintenance of Specially trained Personnel Existing Programs and Services
- Practice Driven, Theory Based, Research Supported
- Common Goals/Unique Means
- Abundant Resources And Teacher Training
- Making Schools A Happy Place For All Students

“Example is the best school of mankind and they will learn at no other.”

Philosopher, Edmund Burks



Hi Sally,

My pleasure! We are always happy to assist. BELL Academy has become increasingly diverse over the years. Ensuring all levels of students are experiencing quality SEM learning experiences has become a critical focus for us. Our admissions policy (lottery) is designed to include all levels of learners, including those with special needs. We are up to 25% of students with IEPs. The fact that we have demonstrated a positive trajectory in ELA and Math proficiency over the years is one way hard data supports the impact of SEM on diverse learning communities. **Soft data would include how happy our kids are, via their smiles! 😊**

We look forward to hosting the visit for Nancy and her team on December 14th!

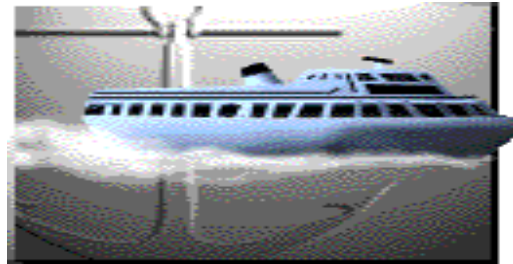
Wishing you and Joe all the best during the holiday season, and we hope to see you soon.

Sincerely,
David

David M. Abbott
Principal
BELL Academy

Theme of The Schoolwide Enrichment Model:

A Rising Tide Lifts All Ships



Not every child has an equal talent or an equal ability or equal motivation; but all children have the equal right to develop their talent, ability, and motivation to the fullest.

John F. Kennedy



2

The Why & The Who Questions

In the modern global economy, industrial, educational, and political leaders are increasingly looking for personnel with skills in imagination, creativity, and innovation. Educational leaders in all nations are beginning to realize an emphasis on creativity is the key to maximizing economic and cultural growth and social progress for all their citizens.

Rationale For Teaching Thinking Skills, Creativity And Innovation To All Students

There is an economic imperative behind teaching creativity thinking skills, and innovation as much as there is a philosophical and humanitarian one. Nations are as reliant on the ability of their citizens to create new forms of value as businesses are on the creative skills of their employees. This is something the Chinese government and governments around the world have realized...



Madden, R. (2017), *Creativity in Business*. In Jonathan A. Plucker (Ed.). *Creativity And Innovation: Theory, Research, and Practice*. Austin, TX: Prufrock Press, 235 – 246.

Millar, G. W. (1995). *E. Paul Torrance—The creativity man: An authorized biography*. Norwood, NJ: Ablex, Publishing.

Plucker, J. A. (1999). Is the proof in the pudding? Reanalyses of Torrance's (1958 to present) longitudinal study data. *Creativity Research Journal*, 12, 103-114.

Why do we need to reexamine the mission of gifted education?

They' re Stealing our Thunder! Its Time for Us To Strike Back

Traditional Goals of gifted Education:

- Creative Thinking
- Critical Thinking
- Problem Solving
- Decision Making
- Higher Level Thinking Skills
- Analysis
- Synthesis
- Evaluation
- Problem Based Learning

From The report: [“21st Century Skills, Education & Competitiveness”](#)

[Public education has traditionally thought of higher level thinking as the purview of talented and gifted programs,](#) while the teaching of basic skills was geared

toward those on a trade track in high schools. **Now, the focus must be on making sure all students have a broad array of these skills** in addition to strong grounding in core subjects.

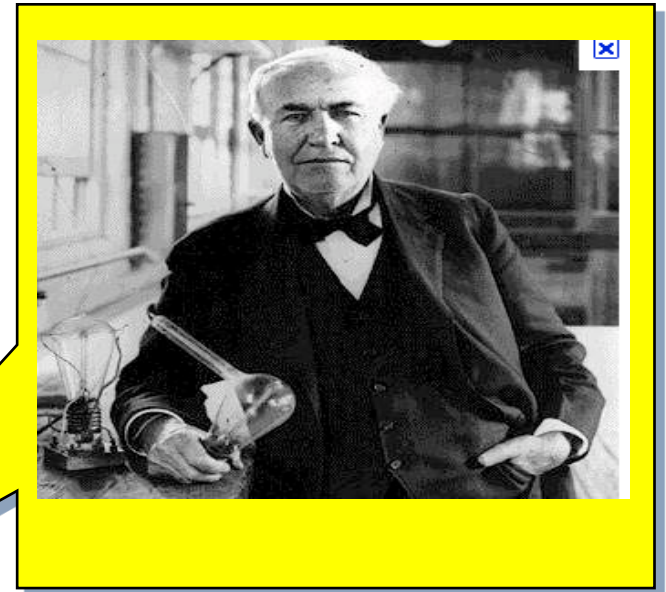
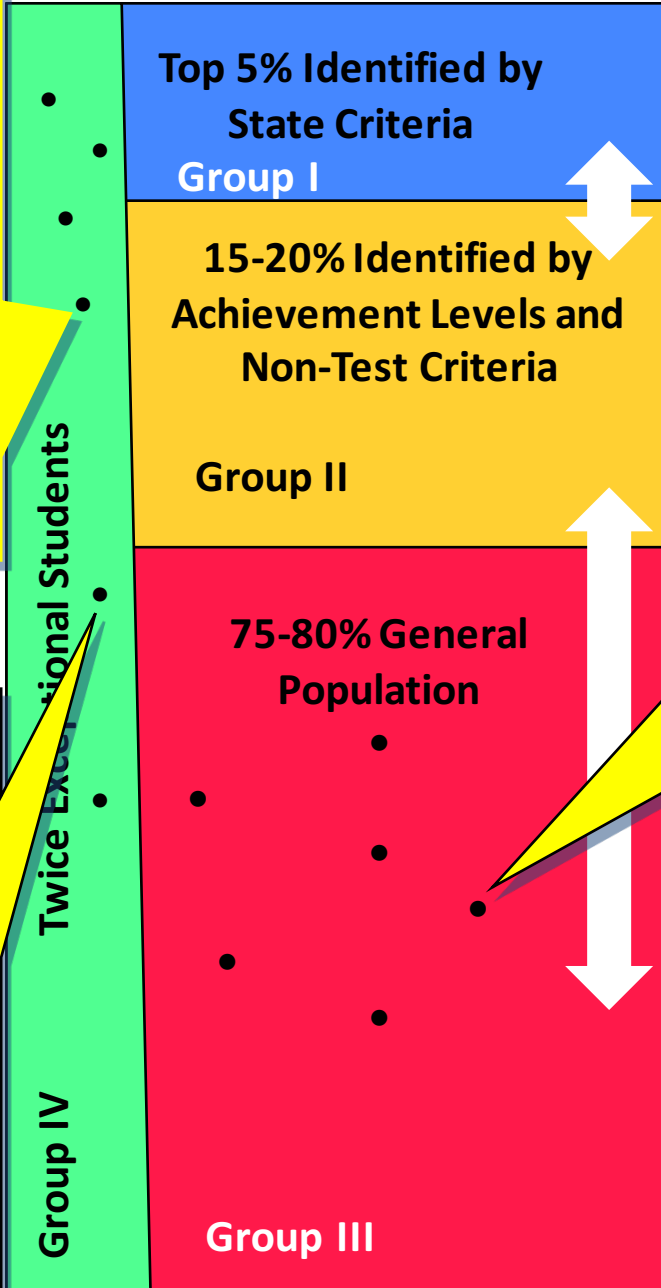
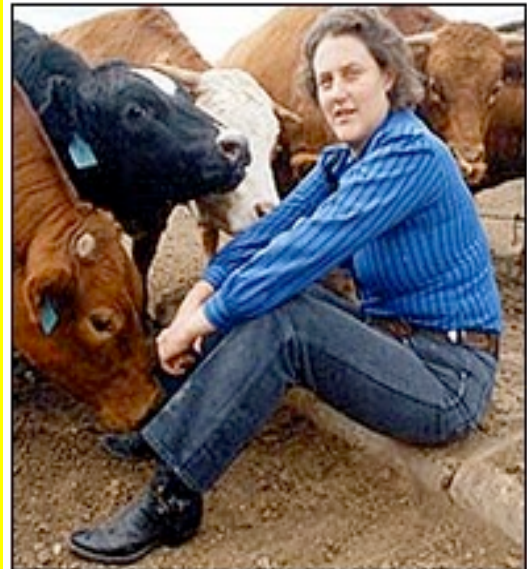
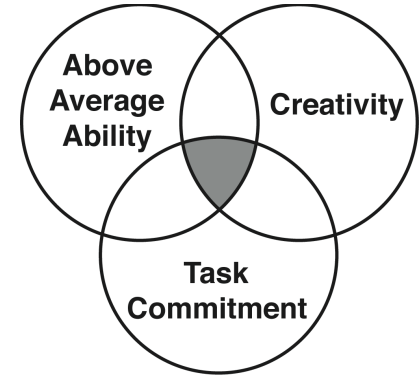
Our understanding that everyone needs to critically think and problem-solve has been heightened when you look at what success will require in the global economy.

The latest round of international standardized test results showed American students are lagging behind the rest of the developed world not just in math, science, and reading, but in problem solving as well. The 2016 Program for International Student Assessment (PISA) test examined 44 countries' students' problem-solving abilities.

American students landed just above the average, but they still scored below many other developed countries, including Britain, Singapore, Korea, Japan, China, and Canada.

(<http://www.nytimes.com/2014/04/02/us/us-students-strong-at-problem-solving-but-trail-other-nations.html?r=0>)

Target Populations



Another reason why we need to examine the ways in which we look at identification and programming practices...



Sir John Gurdon
Winner of the Nobel Prize In Medicine for
his pioneering work in cloning and stem cells

As a 15-year-old schoolboy John Gurdon was told that a career in science was “ridiculous.” The following is a report by one of his teachers that he keeps over his desk to this day.

SCIENCE REPORT

Summer HALF, 1944.

NAME GURDON

Division D22

Subject Biology.

Place $\frac{16}{18}$ $\frac{17}{18}$ $\frac{18}{18}$ Marks $\frac{231}{550}$

It has been a disastrous half. His work has been far from satisfactory. His prepared stuff has been badly learnt, and several of his test pieces have been torn over; one of such pieces of prepared work scored 2 marks out of a possible 50. His other work has been equally bad, and several times he has been in trouble, because he will not listen, but will insist on doing his work in his own way. I believe he has ideas about becoming a Scientist; on his present showing this is quite ridiculous, if he can't learn simple Biological facts he would have no chance of doing the work of a Specialist, and it would be sheer waste of time, both on his part, and of those who have to teach him.

P. J. 207.

His work has been far from satisfactory. His prepared study has been badly learnt and several of his test pieces have been torn over. One such piece of prepared work scored 2 marks out of a possible 50. His other work has been equally bad, and several times he has been in trouble, because he will not listen, but will insist on doing his work in his own way. On his present showing this is quite ridiculous. If he can't learn simple Biological facts he would have no chance of doing the work of a scientist, and it would be sheer waste of time, both on his part, and those who would have to teach him. I believe he has ideas about becoming a scientist: on his present showing this is quite ridiculous.



Other Persons Who Were Considered School Failures



Percey Bysshe Shelley



Salvador Dali



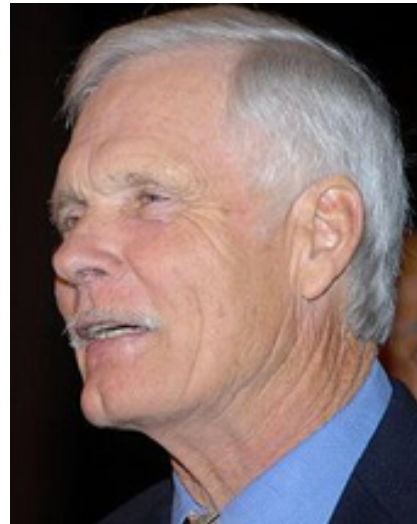
Robert Frost



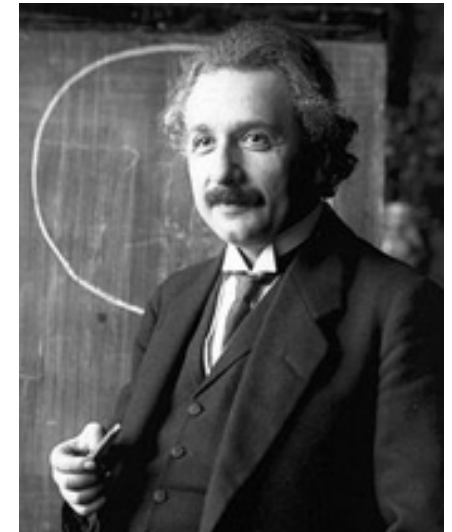
Wm. Randolph Hearst



Humphrey Bogart



Ted Turner

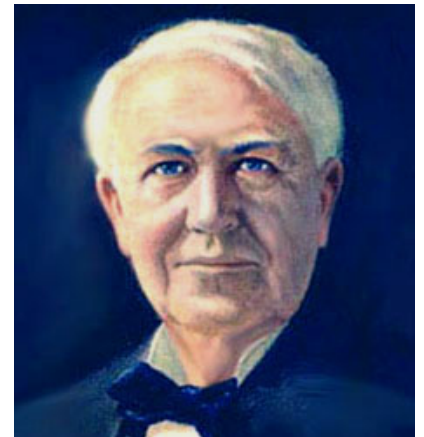


Albert Einstein



Walt Disney was fired by a newspaper editor because “he had no good ideas.” He went on to create Mickey Mouse, Donald Duck, the Disney Studios, Disneyland; his greatest dream, EPCOT Center opened in 1982.

Thomas Edison’s teachers called him “too stupid to learn.” He made 3,000 mistakes on his way to inventing the light bulb. Eventually he held 1,093 patents.



Louisa May Alcott was told by an editor that she would never write anything popular. More than a century later, her novels are still being read, and the Children's Literature Association (an international group of librarians, teachers, authors, and publishers) considers *Little Women* on the the best American children's books of the past 200 years.



CHAPTER I

PLAYING PILGRIMS

"CHRISTMAS won't be Christmas without any presents," grumbled Jo, lying on the rug.

"It's so dreadful to be poor!" sighed Meg, looking down at her old dress.

"I don't think it's fair for some girls to have plenty of pretty things, and other girls nothing at all," added little Amy, with an injured sniff.

"We've got father and mother and each other," said Beth contentedly, from her corner.

The four young faces on which the firelight shone brightened at the cheerful words, but darkened again as Jo said sadly,—

"We haven't got father, and shall not have him for a long time." She didn't say "perhaps never," but each silently added it, thinking of father far away, where the fighting was.

Nobody spoke for a minute; then Meg said in an altered tone,—

"You know the reason mother proposed not having any presents this Christmas was because it is going to be a hard winter for every one; and she thinks we ought not to spend money for pleasure, when our men are suffering so in the army. We can't do much, but we can make our little sacrifices, and ought to do it gladly. But I am afraid I don't." And Meg shook her head, as she thought regretfully of all the pretty things she wanted.

"But I don't think the little we should spend would do any good. We've each got a dollar, and the army wouldn't be much helped by our giving that. I agree not to expect anything from mother or you, but I do want to buy Undine and Sintram for myself; I've wanted it *so* long," said Jo, who was a bookworm.

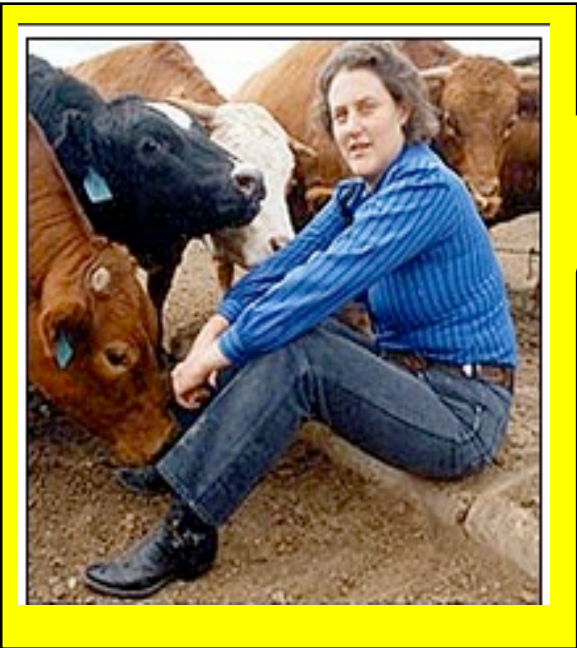
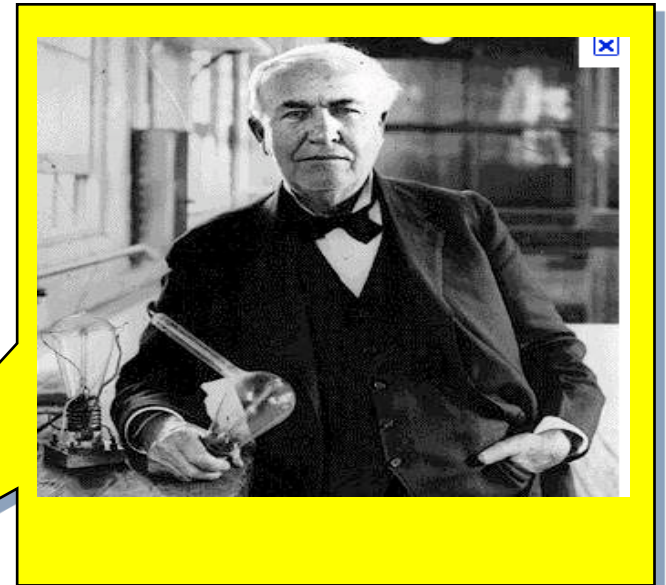
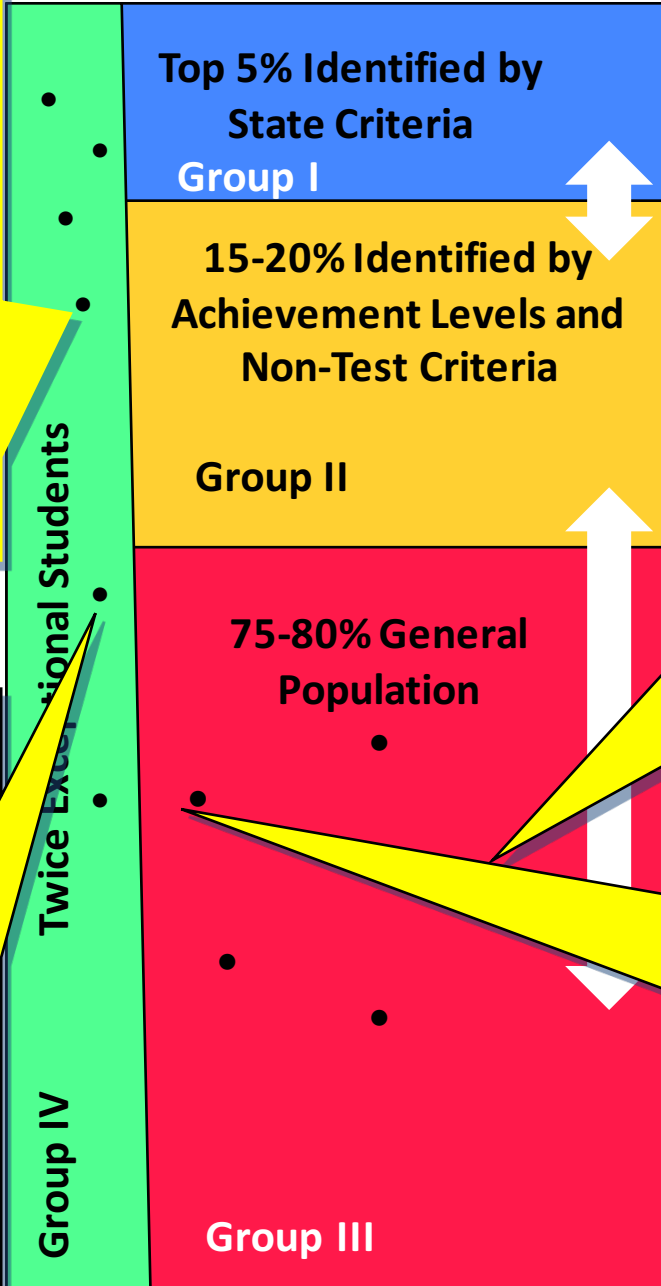
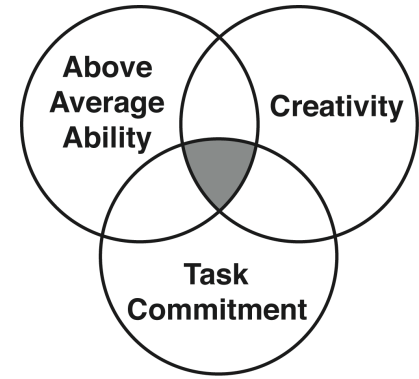
Practically every day someone at the restaurant asks its 66-year-old owner if she always knew her son was a genius. “when he was growing up,” Leah replies, I didn’t know what the hell he was. I’m really ashamed, but I didn’t recognize the symptoms of his talent. For one thing – and he’ll probably take away my charge account for saying this – he was never a good student. Once, his teacher told me I should put him in a special education class and he was turned down every time he applied to USC’s cinema school.

“He wasn’t exactly cuddly,” Leah adds. “He was scary. When he woke up from a nap I shook all over.” He was a master at creating terror. He practiced on his three sisters. “He used to stand outside their windows at night, howling, “I am the moon! I am the moon!” says Leah. “They’re still scared of the moon to this day. And he cut off the head of his sister Nancy’s doll and served it to her on a bed of lettuce.”

**“His room was such a mess, you could grow mushrooms on the floor.”
“Once his lizard got out of it’s cage, and we found it – living – three years later. He had a parakeet he refused to keep in a cage. It was disgusting. Once a week, I would stick my head in his room, grab his dirty laundry and slam the door.”**

If I had known better, I would have listened to his teachers and taken him to a psychiatrist, and there probably never would have been an *E.T.*”

Target Populations



What is Creative/Productive Giftedness and Why Is It Important?

3

A Few Examples...



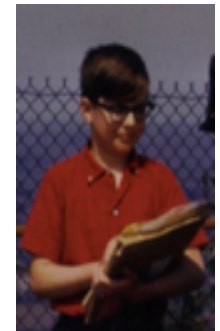
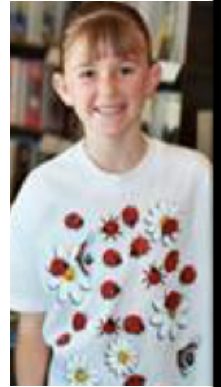
Two Types of Giftedness



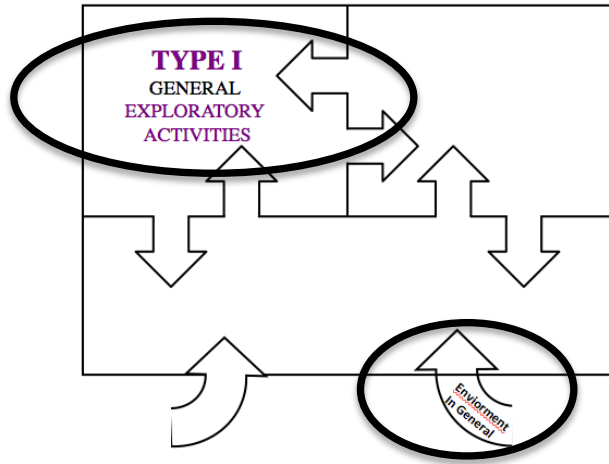
**High
Achieving
Giftedness**



ness



**Creative/
Productive
Giftedness**

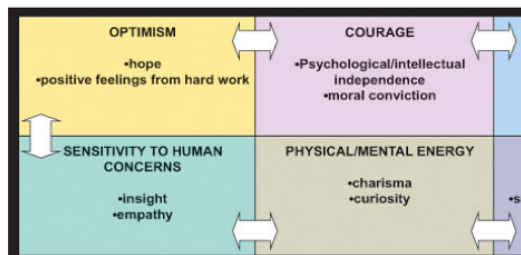
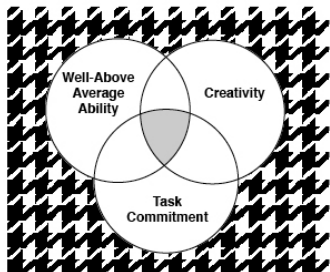


An Example That Illustrates All Four of the Sub-Theories In Action

My name is Brooks McConnell. I am in the fifth grade at Norfeldt Elementary School in West Hartford, CT. Last fall I was watching The Katie Couric Show with my mom and noticed you and your son, Sam. I recall that Sam wanted to ride roller coasters but he couldn't because of his disease, **progeria**. I wondered if there would ever be a way for kids like him to ride roller coasters? Well, I think I've figured a way out.



Sam



[Action Orientation](#)

[Social Interactions](#)

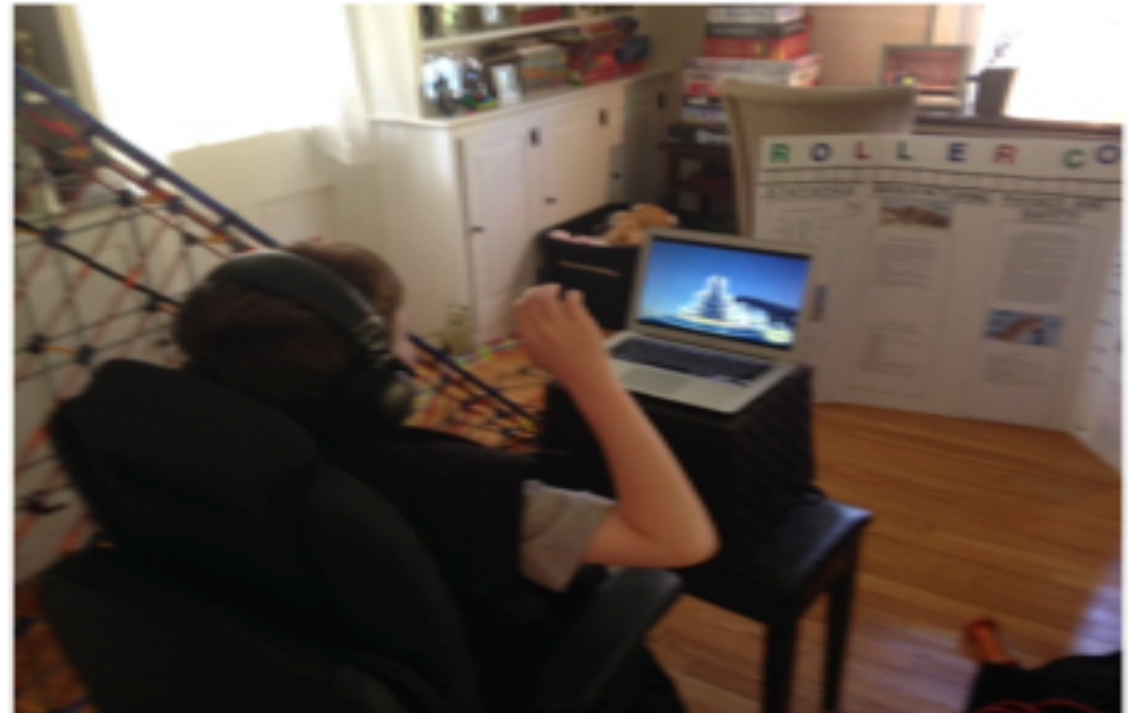
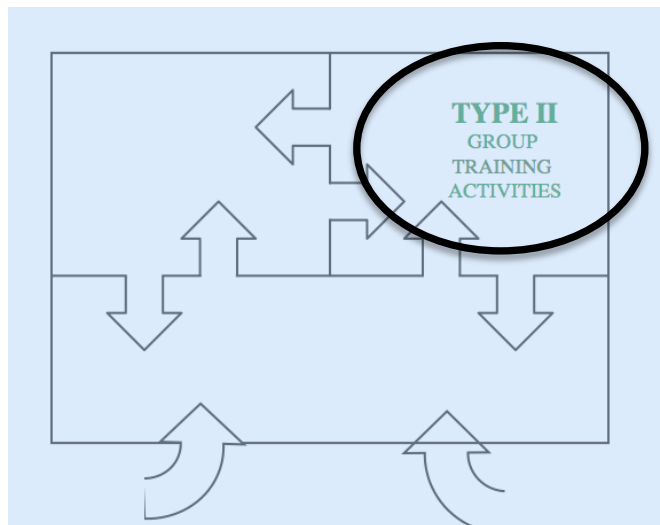
[Leadership](#)

[Realistic Self-Assessment](#)

[Awareness of Needs of Others](#)

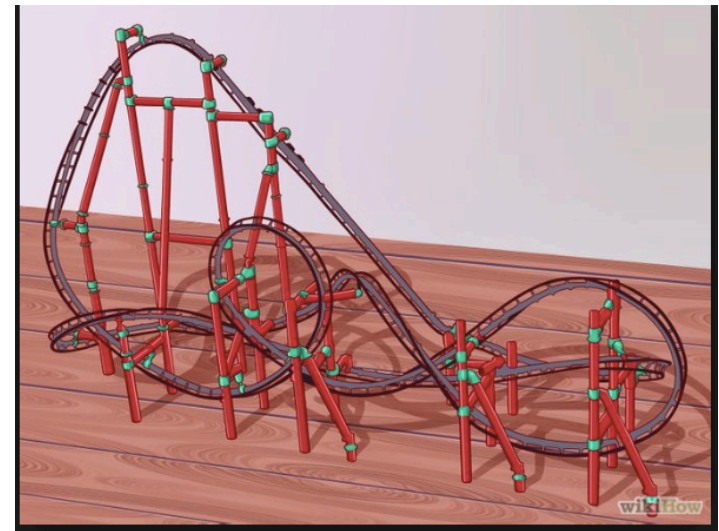
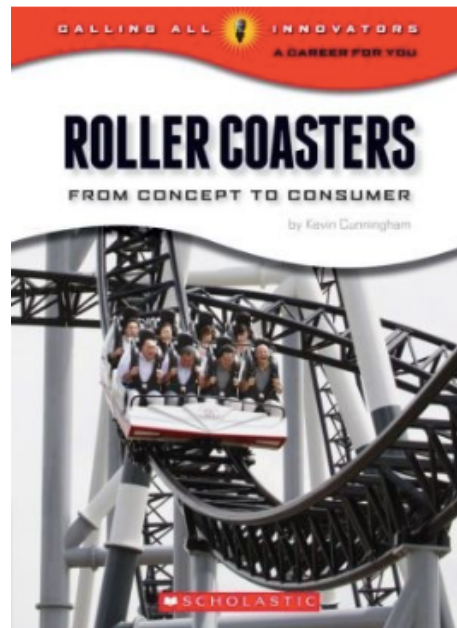


For a year long school project, my topic was roller coasters. When I saw Sam, I thought that a roller coaster simulator would be a nice addition to theme parks around the world. So, I constructed a simulator using objects from around the house. My simulator is a chair that has a back massager that vibrates your back. The rider would then put on a vest with weights in the pockets. The weights in the pockets would then simulate the weight transfers throughout a ride, meaning that the weights would come in and out during the ride. This is a way people like Sam can experience the ride because the regulated force is on the outside of the body, not the inside. The physical experiences would all go on in front of a visual roller coaster video. The sounds of the ride would be pre-recorded and played into headphones. The simulator would be located next to an amusement park's most popular roller coaster.



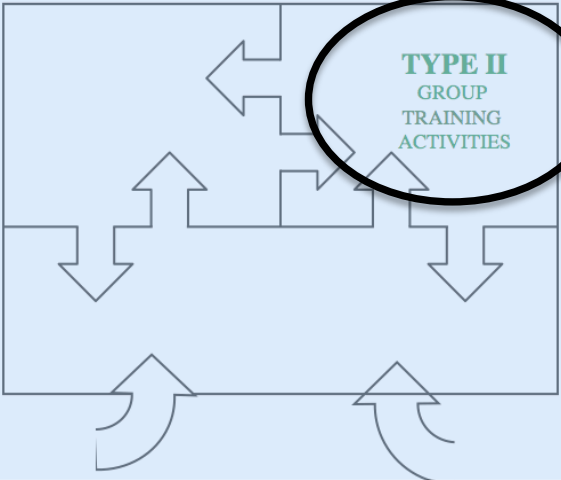


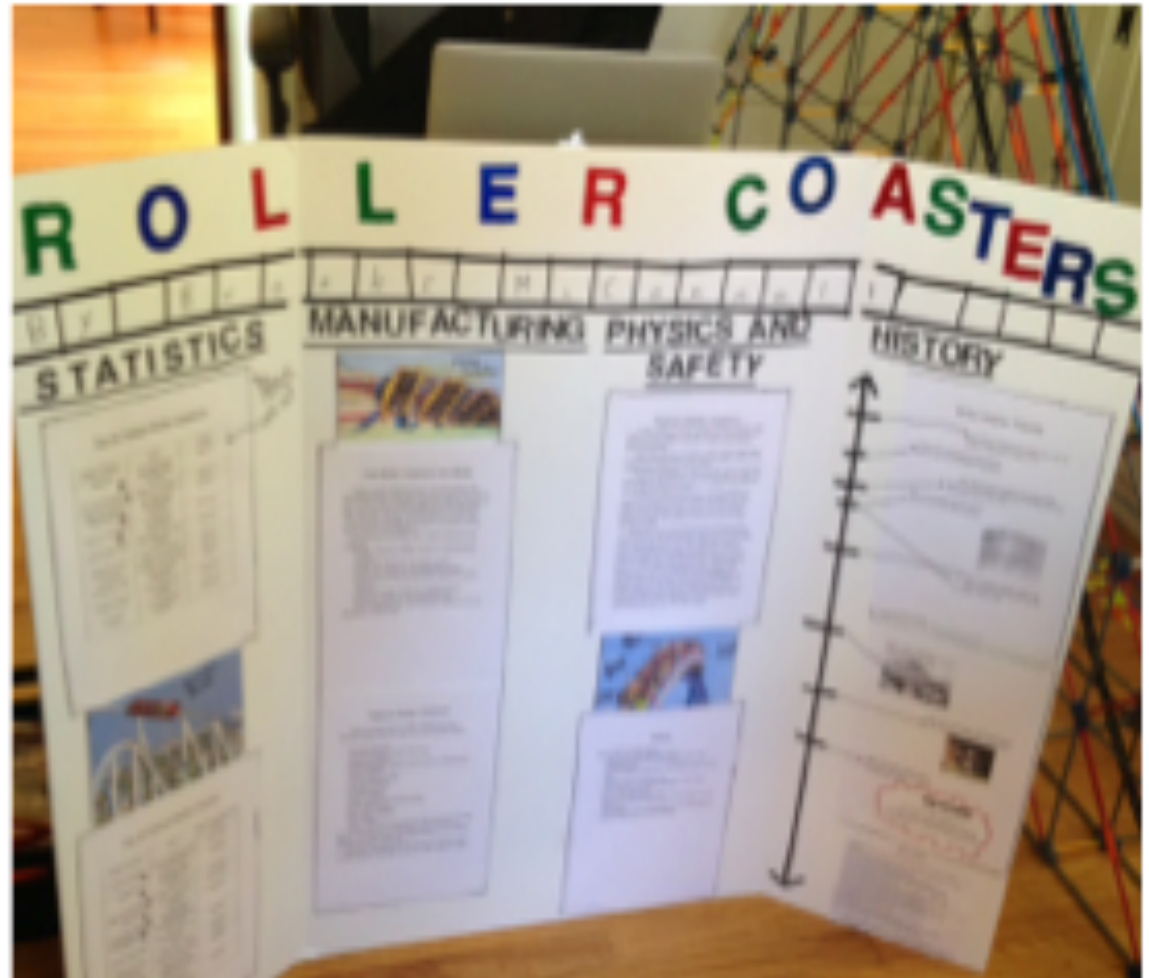
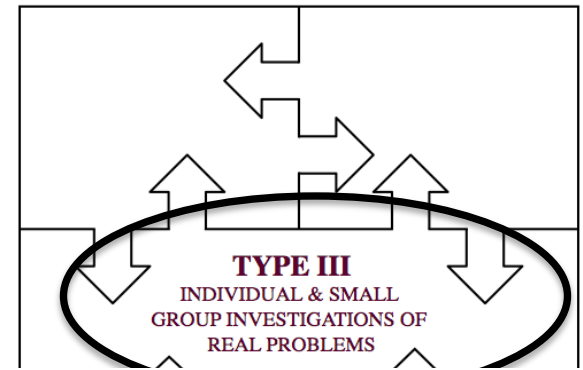
Type II Enrichment





TYPE II
GROUP
TRAINING
ACTIVITIES





I have already sent the idea to three major roller coaster companies hoping they can expand on the idea. When I was searching the internet for your address so I could write to you, I heard about Sam's passing. My mom and I were so sorry to read that. I would like to thank you, and him, for being such an inspiration to me and the world. Even though my simulator can't be ridden by Sam, I am hopeful that other kids around the world with progeria or any other diseases that might prevent them from enjoying the thrill of the ride will get a chance to in the future.

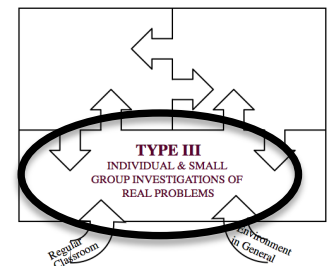
Dear Bolliger & Mabillard,

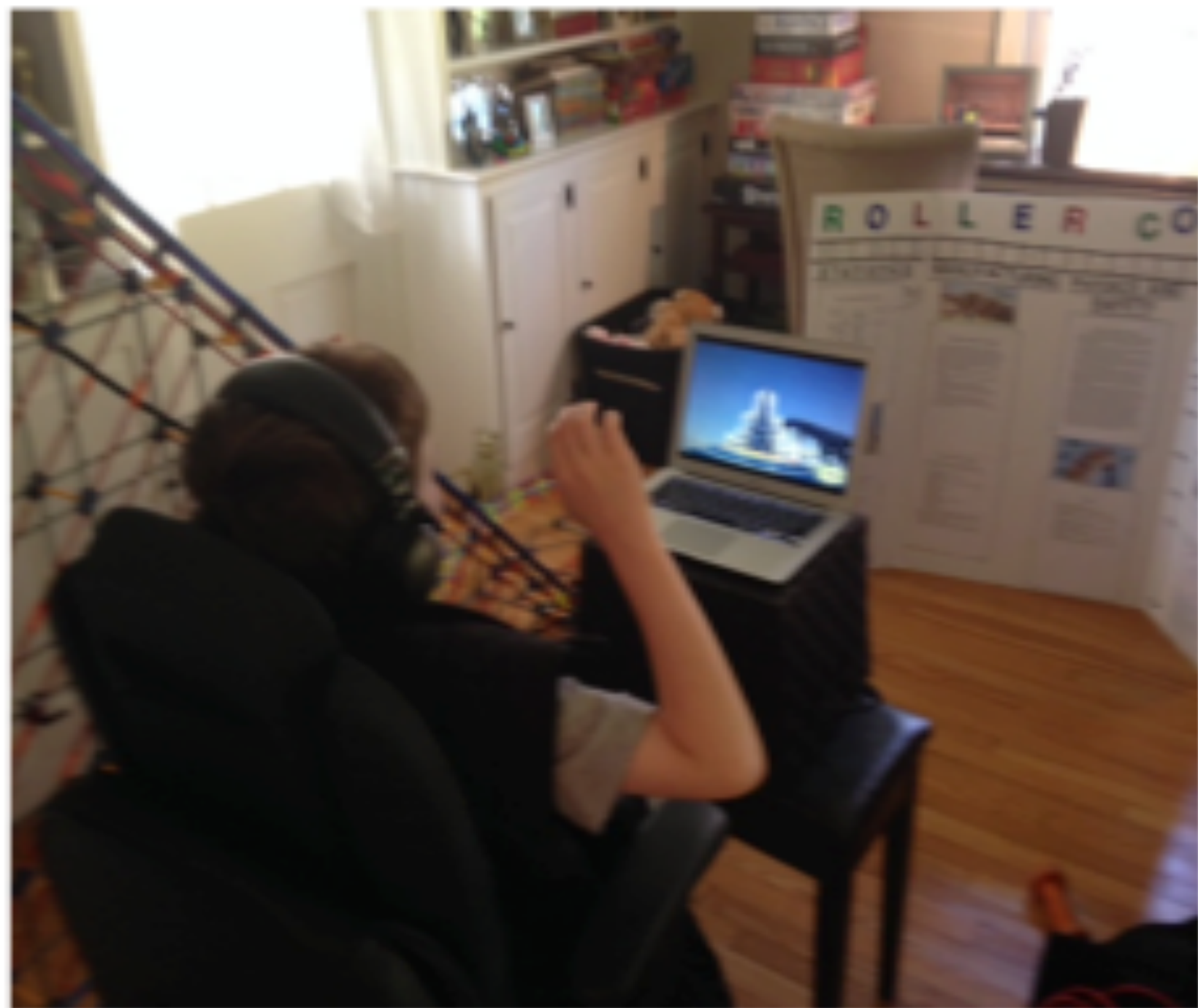
The simulator that I created includes a video that is filmed the front seat of a roller coaster. The rider's seat vibrates in order to simulate a rough chain lift. With my simulator, the rider wears a vest with weights in each pocket. Throughout the experience an operator adds and removes the weights in order to create the experience of different G-forces on the rider's body. This concept of adding and subtracting weights on the outside of the body instead of the inside is meant to recreate the G-force experience.

Enclosed are photos of the roller coaster simulator that I created along with a model that I built. I hope you like this idea as much as I do. Thank you for your consideration.

Sincerely,

Brooks McConnell





The Essential Role of Interests

Eric Fossum

Two Major Interests as a teenager:

Photography

Computer Electronics



Student in a Connecticut SEM Program

Interested in computers and photography

Attended Trinity College in Hartford

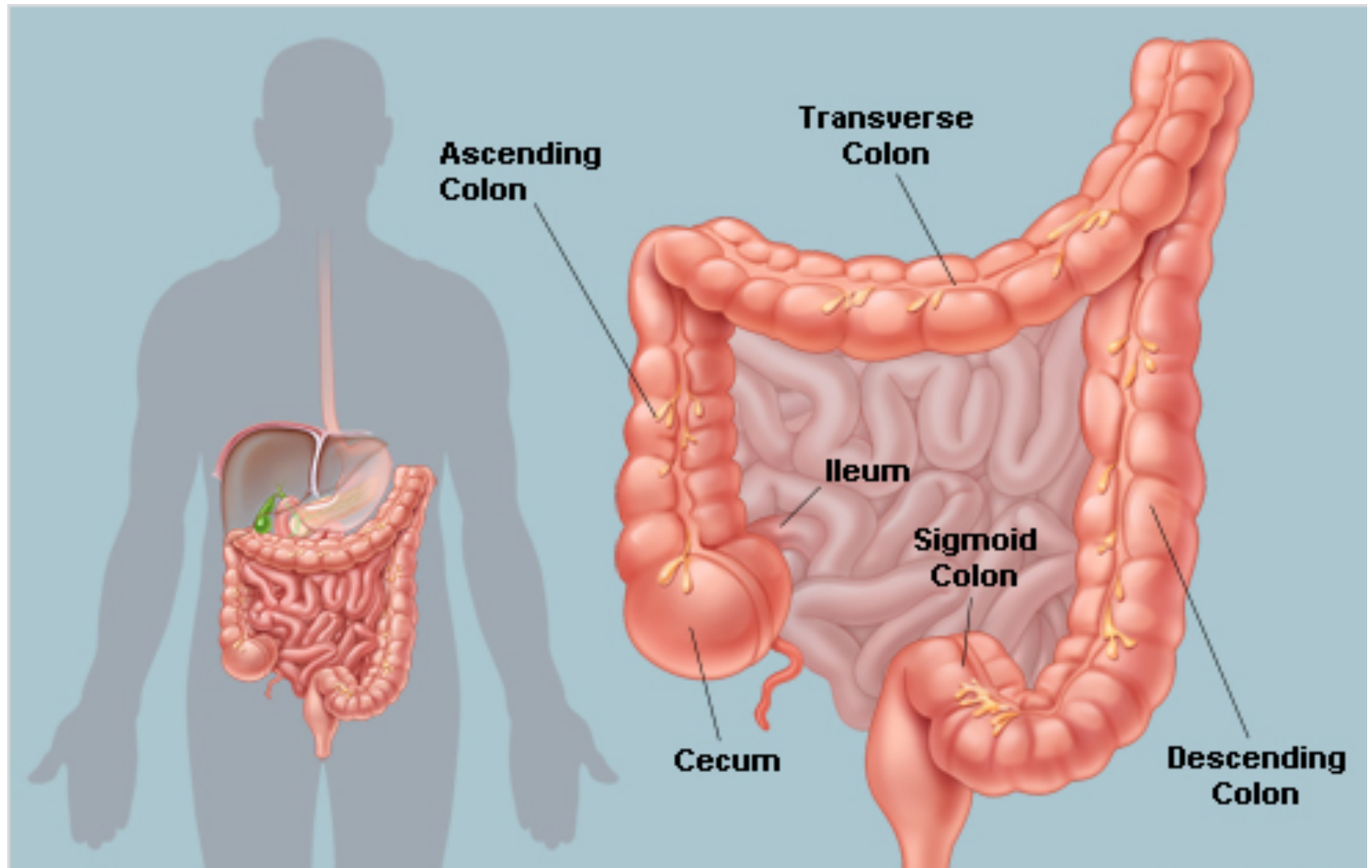
Yale for graduate school

Worked at NASA's jet propulsion lab where he used
computer chips for photography

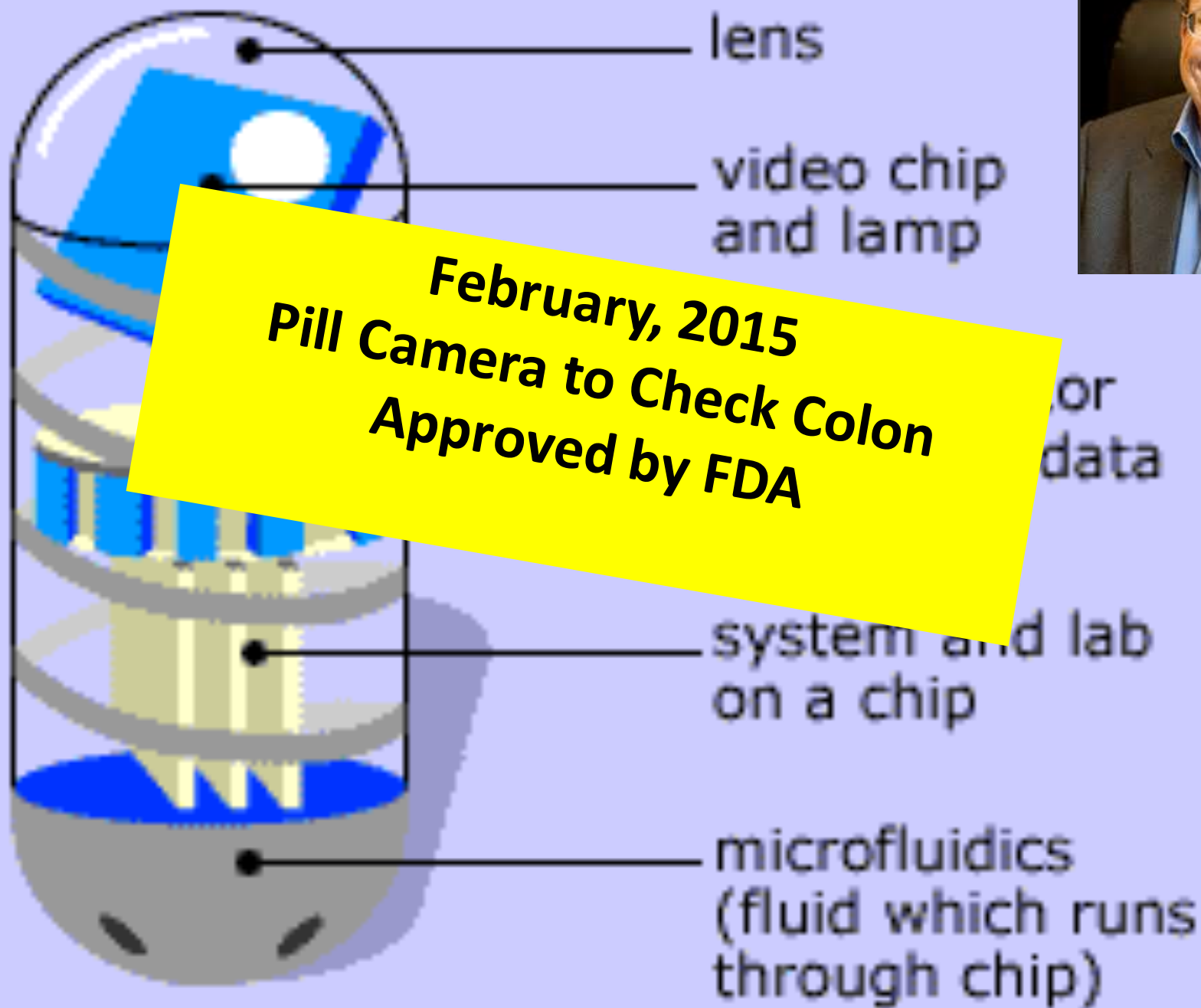
Started work on an invention just approved by the
FDA (and that will make you very happy!)

Example Of
Creative/Productive
Giftedness

Changing the way the world fights cancer.



PILL CAMERA OF THE FUTURE



**February, 2015
Pill Camera to Check Colon
Approved by FDA**

Eric Fossum today



Another enrichment program
graduate from Connecticut
Interested in computers and
photography
Attended Trinity College in Hartford and
Yale for graduate school
Worked at NASA's jet propulsion lab
where he used computer
chips for photography.

Fossum is one of four engineers awarded the £1 million Queen Elizabeth Prize his invention.



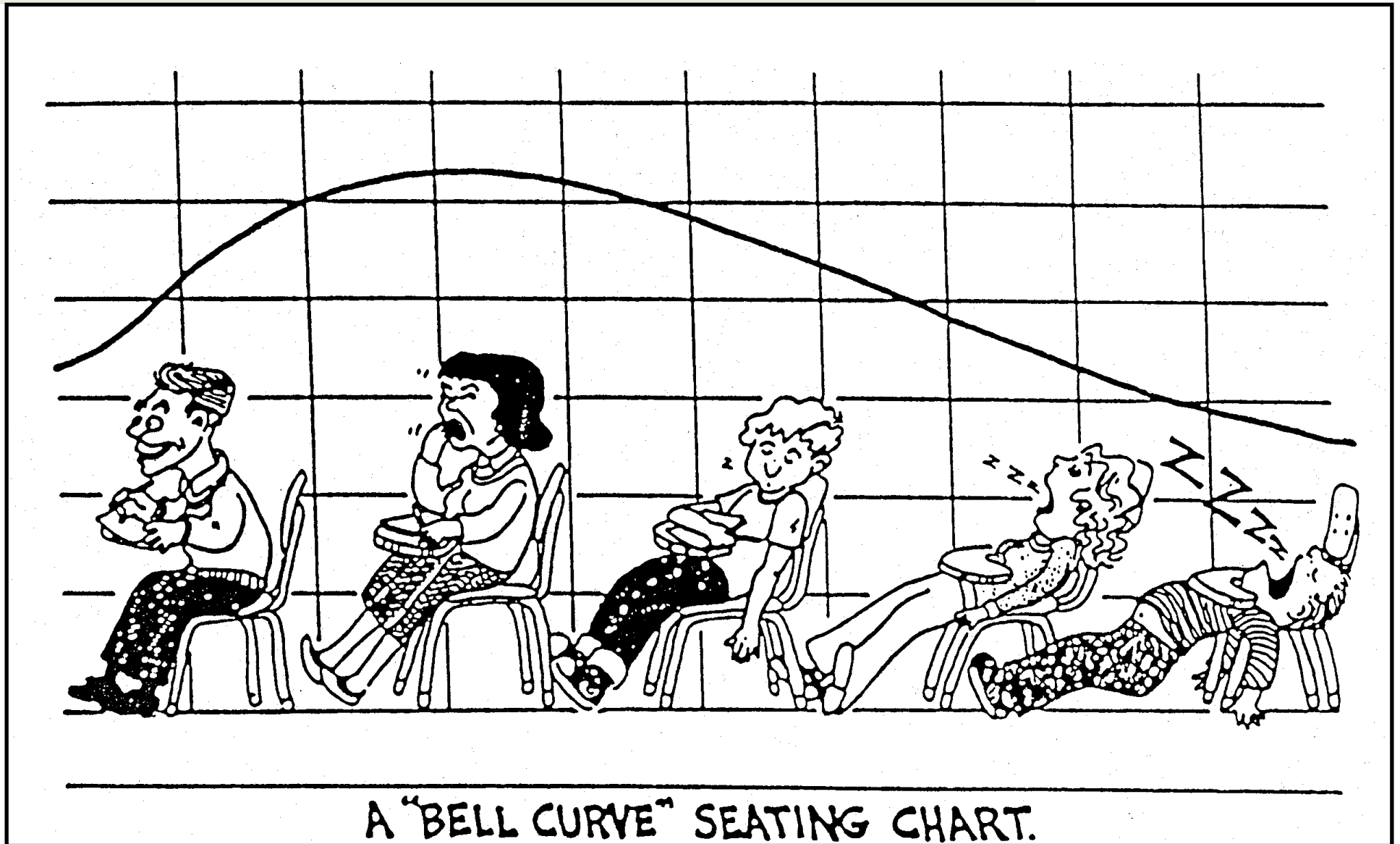
4

Curriculum Compacting

**Curriculum
Modification
Procedure
For High
Achieving
Students**



Modifying The Regular Curriculum For High Achieving Students



From *Get Off My Brain*, by Randy McCutcheon, illustrated by Pete Wagner

Susan, please
put away **Moby Dick**.
It's time for your
silent "e" review
sheet.



Curriculum Modification For High Achieving Students

Individual Educational Programming Guide The Compactor			Prepared by Joseph S. Renzulli Linda M. Smith			
Name: _____		Age: _____	Teacher(s): _____		Individual Conference Dates and Persons Participating in Planning of IEP	
School: _____		Grade: _____	Parent(s): _____		_____	_____
<p style="text-align: center;">Curriculum Areas to Be Considered for Compacting</p> <p style="font-size: x-small;">Provide a brief description of basic material to be covered during this marking period and the assessment information or evidence that suggests the need for compacting.</p>	<p style="text-align: center;">Procedures for Compacting Basic Material</p> <p style="font-size: x-small;">Describe activities that will be used to guarantee proficiency in basic curricular areas.</p>	<p style="text-align: center;">Acceleration and/or Enrichment Activities</p> <p style="font-size: x-small;">Describe activities that will be used to provide advanced-level learning experiences in each area of the regular curriculum.</p>				
Name It	Prove It	Change It				
<input type="checkbox"/> Check here if additional information is recorded on the reverse side.						

INDIVIDUAL EDUCATIONAL PROGRAMMING GUIDE

The Compactor

Prepared by: Joseph S. Renzulli
Linda M. Smith

NAME Alison AGE 6 TEACHER(S) _____ Individual Conference Dates And Persons Participating in Planning Of IEP _____

SCHOOL _____ GRADE 1 PARENT(S) _____

<u>CURRICULUM AREAS TO BE CONSIDERED FOR COMPACTING</u> Provide a brief description of basic material to be covered during this marking period and the assessment information or evidence that suggests the need for compacting.	<u>PROCEDURES FOR COMPACTING BASIC MATERIAL</u> Describe activities that will be used to guarantee proficiency in basic curricular areas.	<u>ACCELERATION AND/OR ENRICHMENT ACTIVITIES</u> Describe activities that will be used to provide advanced level learning experiences in each area of the regular curriculum.
<u>Holt Basic Reading Series</u> - Levels 3-6, as determined by Holt level tests. Alison has mastered most of the comprehension and phonetic objectives introduced in these levels.	<u>Capital letters and periods.</u> - Teacher made worksheets Continental Press. Alison will participate in classroom activities dealing with these skills. Check proficiency by Holt level 6 test. Capital letters and periods - pg 27.	<u>Classroom</u> Alison's classroom teacher will use the language experience approach. Various reading and writing programs on the Apple computer will be used with Alison. Scholastic Individual Reading Kit will provide
<u>Individualized Spelling Program by Economy</u> - Alison has mastered Levels 1-4. She will be placed in Level 5.	<u>Contractions</u> - Level 7 Teacher's Manual pages 81, 119, 175, 216, 217, and 255-256. Check proficiency by Holt Level 7 test (Contractions).	Alison with the opportunity to read independently and use instructional games and records. Alison will be provided time to work in her classroom on a Type III activity (independent study).
<u>Math</u> - As determined by the first grade Math placement test, Alison has mastered most of this curriculum. She will begin her Math program in the 2nd grade classroom.	<u>Change y to i and add es/and other plural forms:</u> Level 9 Teacher's Manual pages 202 and 293-294. Level 8 Teacher's Manual pages 222-223, 246, 311. Check proficiency by Holt Level 9 test and reading consultant-made test for these plural forms not covered in the Level 9 test.	<u>Talcott Mt. Science Center</u> Alison will participate in Science programs presented in school—Crystals, weather, forest life, aerial photos and mountains, snow, planets and constellations.
	<u>Compound Words</u> - Level 9 Teacher's Manual pages 77, 267. Check for proficiency - Level 9 test page 9 (compound words).	<u>TAC Resource Room</u> Critical thinking skills, creative thinking skills, creative problem solving, critical problem solving, Type III independent study.
	<u>Pronouns</u> - Level 9 Teacher's Manual page 325. Check for proficiency - Level 9 test (language skills) page 9.	

Check here if additional information is recorded on the reverse side.

**A Multiple
Criteria
Strength Based
Identification
System**

5



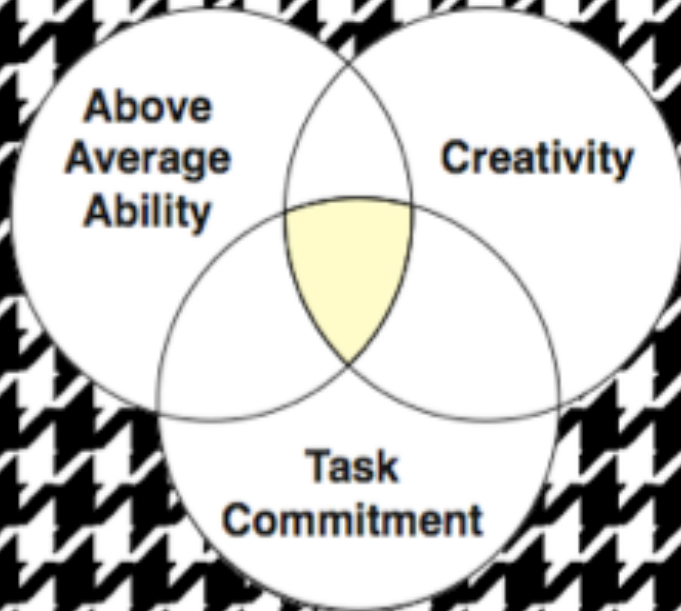
**High
Achieving
Giftedness**



**Creative/
Productive
Giftedness**

The Three Ring Conception of Giftedness

Comprehensive Strength Assessment



- Academic Strength Assessment (Achievement Tests + SRBCSS)
- Interest Assessment (I-A-L)
- Learning Styles Assessment (LSI)
- Expression Styles Assessment (My Way)
- Assessment of Co-cognitive Functions (Leadership & Executive Functions)

The Big Five



Two Types of Identification Information

1. Status Information -- Anything you can measure and put down on paper beforehand that tells you something about the student.

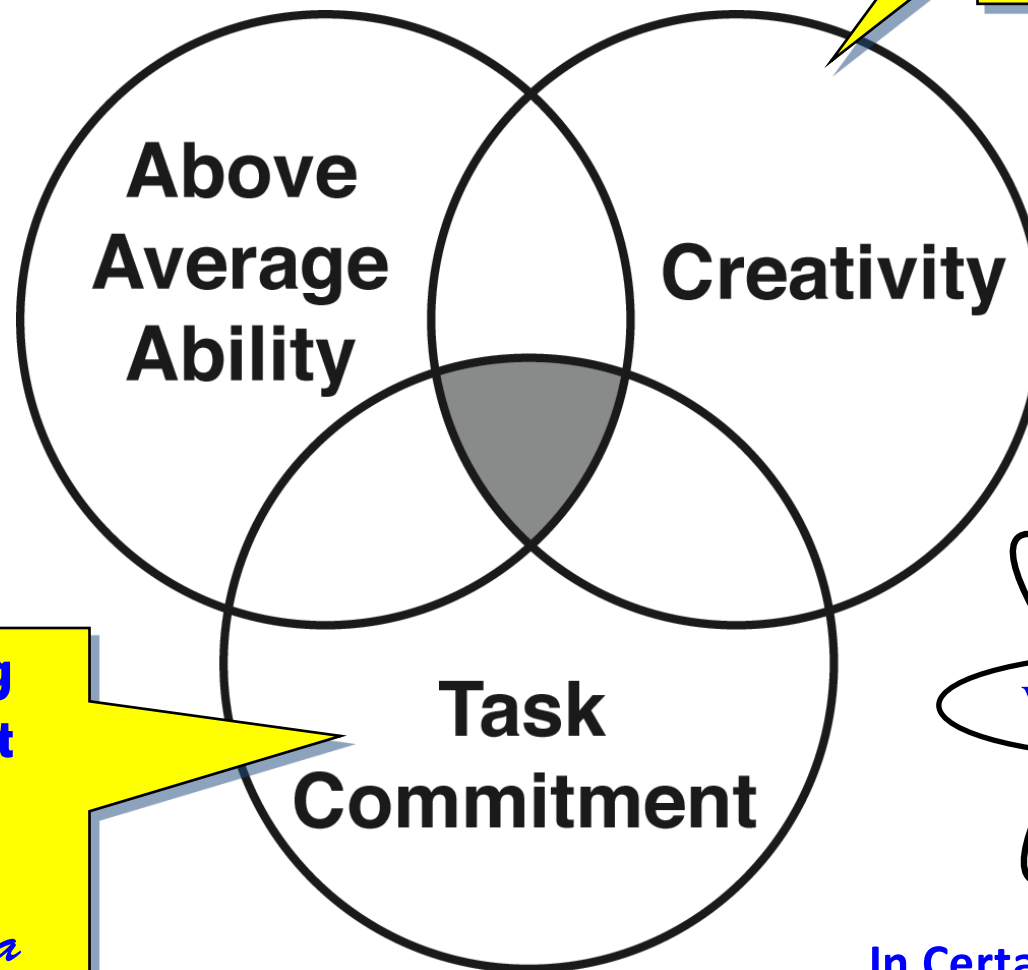


2. Action Information -- Student performance that you can only document when an activity is taking place or after it has happened.



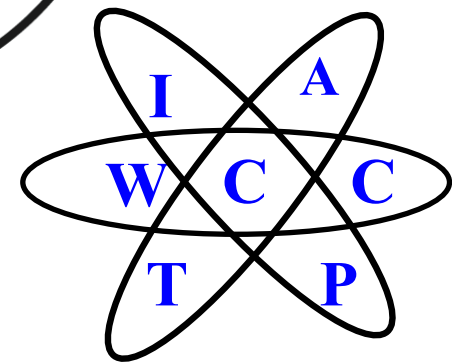
2A. Underlying Theory of Human Potential – Comprehensive Student Strength Assessment

Imagination is more important than knowledge.
Albert Einstein



The artist is nothing without the gift, but the gift is nothing without the work.

Emile Zola



**In Certain People
At Certain Times
Within Certain Circumstances**

Sample Identification Instruments and Identification System Based On The Three Ring Conception



Interest-A-Lyzer(s) Sample Items

6. Image you have the opportunity to travel to a new and exciting city. You can select three places to visit. Mark your first, second, and third choice by placing a 1, 2, and 3 in the spaces below.

- | | |
|--------------------------------------|----------------------------|
| ___ Art Gallery | ___ Science Center |
| ___ Professional Sport Training Camp | ___ Ballet or Modern Dance |
| ___ Historical Sites | ___ Musical Concert |
| ___ Stock Market | ___ State Senate Meeting |
| ___ Television Studio | ___ Computer Center |
| ___ Planetarium | ___ Court Room |
| ___ Telecommunications Center | ___ Zoo |
| ___ Symphony Orchestra | ___ Stage Play |
| ___ 3-Dimensional Multi-Media Film | ___ Newspaper Office |

Interests

Learning Styles Inventory: Sample Items

	Really Like	Like	Not Sure	Dislike	Really Dislike
1. Going to the library with a committee to look up information.	4	3	2	1	0
2. Studying on your own to learn new information.	4	3	2	1	0
3. Having the teacher ask the class questions on work that was assigned to be studied.	4	3	2	1	0
4. Having a class discussion on a topic suggested by the teacher.	4	3	2	1	0
5. Having other students who are experts on a topic present their ideas to the class.	4	3	2	1	0

Learning Styles

My Way . . . An Expression Style Inventory

Products provide students and professionals with a way to express what they have learned to an audience. This survey will help determine the kinds of products YOU are interested in creating.

Instructions:
Read each statement and circle the number that shows to what extent YOU are interested in creating that type of product. (Do not worry if you are unsure of how to make the product.)

	Not At All Interested	Of Little Interest	Moderately Interested	Very Interested
Example: writing song lyrics	1	2	3	4
1. writing stories	1	2	3	4
2. discussing what I have learned	1	2	3	4
3. painting a picture	1	2	3	4
4. designing a computer software project	1	2	3	4
5. filming & editing a video	1	2	3	4

Expression Styles

Operation Houndstooth Co-Cognitive Factor Scale

R.E. Sytma, J.S. Renzulli, and K.B. Berman
© University of Connecticut, 2002

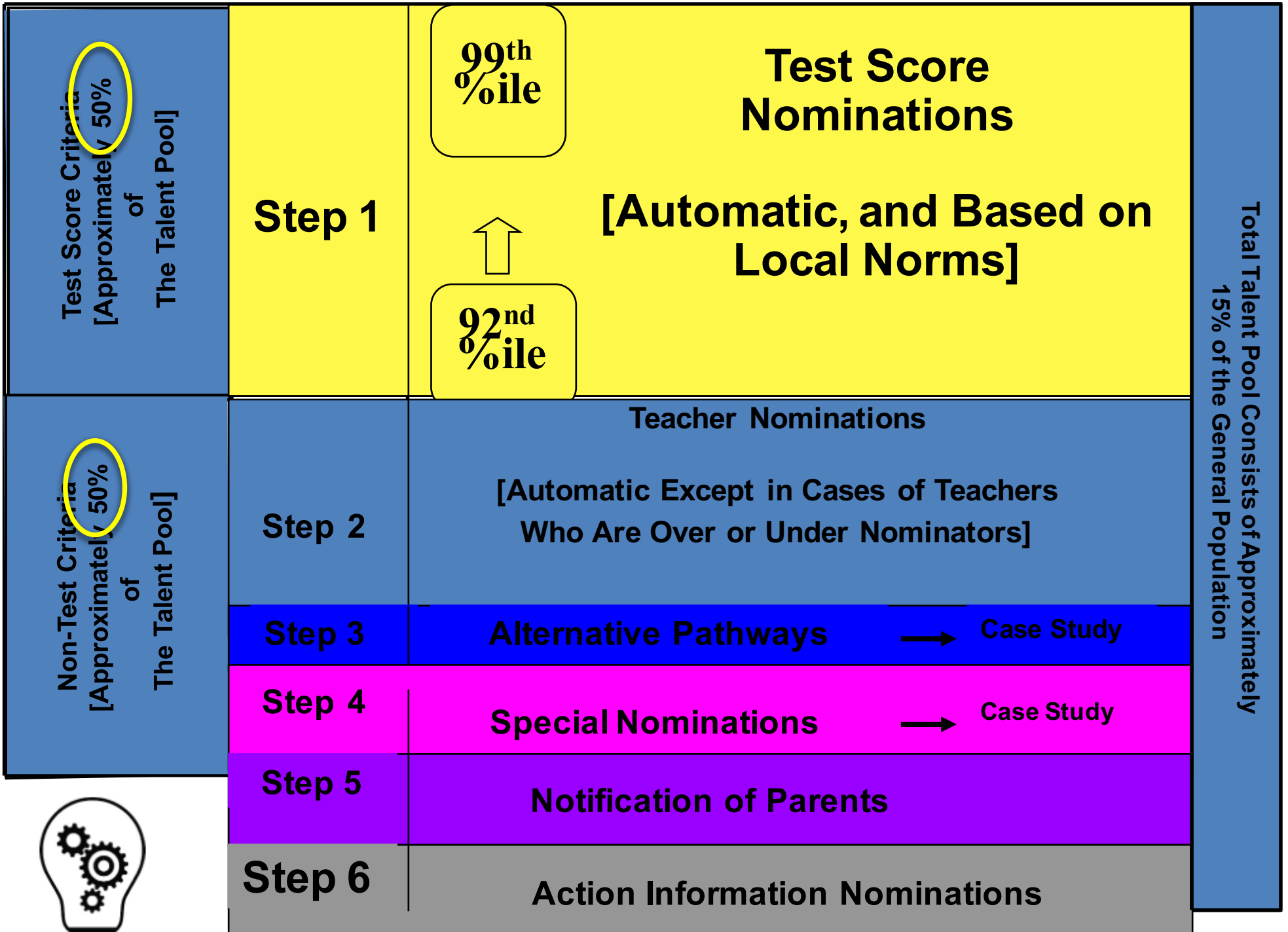
Directions:
It is important that you check one response for every item.
There are no "right" or "wrong" answers.
Your first response is often the best reflection of how you feel about each item.

	Strongly Agree	Agree	Neutral/Undecided	Disagree	Strongly Disagree
1. I am motivated to improve the quality of life for other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I have a strong sense about what I am meant to do in my life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I have always had a vision of what kind of person I want to be.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I would volunteer to help those in need.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I consider myself sensitive to the well-being of people I don't personally know.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I expect good things to happen for me in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I support unpopular viewpoints when I believe they are correct.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I am hopeful about my future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Co-Cognitive Factors

Characteristic	1	2
Goal Oriented		
Decision Maker		
Able to Plan Ahead		
Possesses Good Etiquette		
Ethical		
Able to Follow Through with Tasks		
Copes Well with Set Backs		
Persistent		
Creative		
Generates Ideas		
Defers Gratification		

Executive Functions



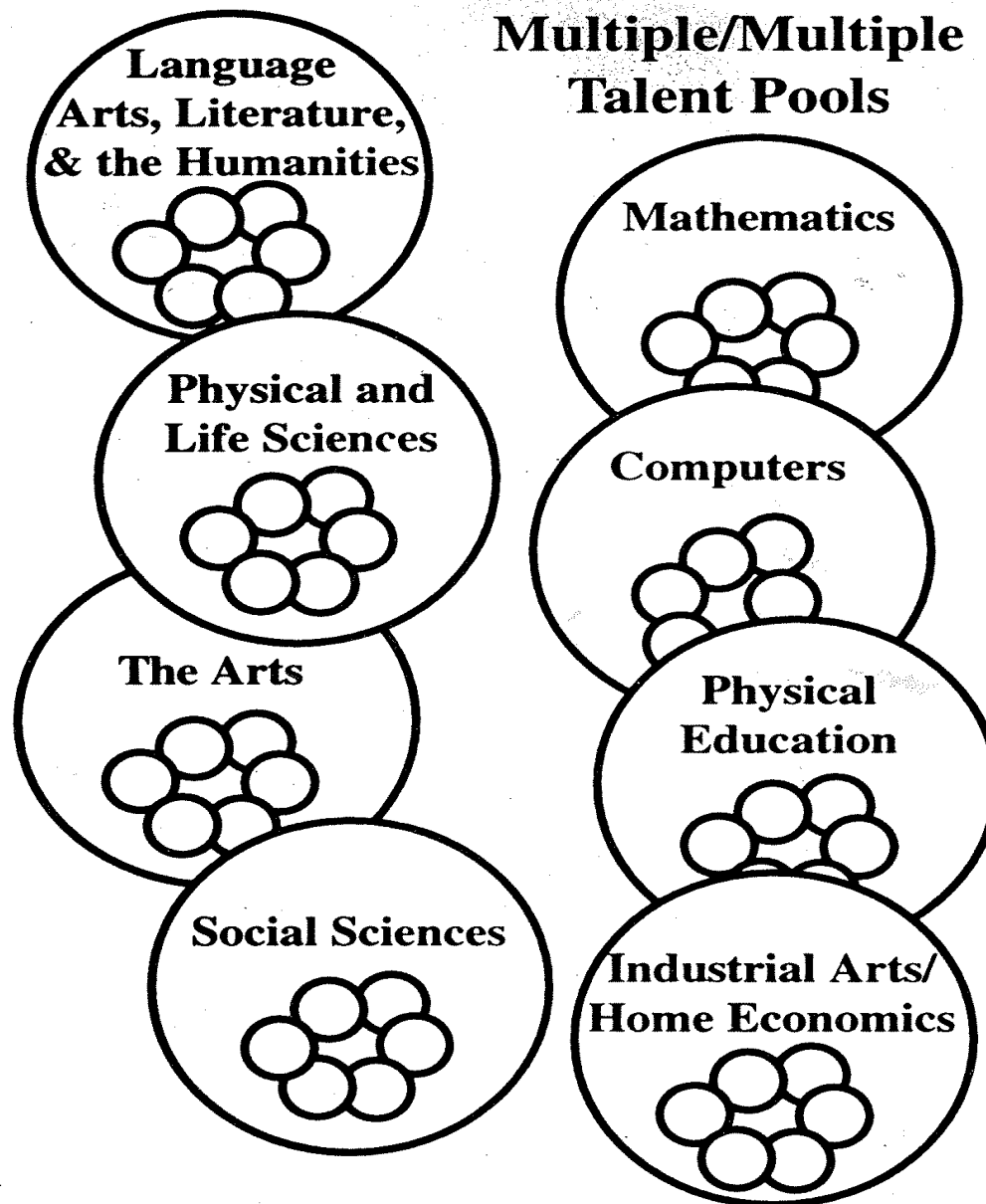
Renzulli Identification System

Test Score Criteria [Approximately 50% of The Talent Pool]	Step 1	99 th %ile	Test Score Nominations [Automatic, and Based on Local Norms]	Total Talent Pool Consists of Approximately 1.5% of the General Population
		97 th %ile		
Non-Test Criteria [Approximately 50% of The Talent Pool]	Step 2	Teacher Nominations [Automatic Except in Cases of Teachers Who Are Over or Under Nominators]		
	Step 3	Alternative Pathways	→ Case Study	
	Step 4	Special Nominations	→ Case Study	
	Step 5	Notification of Parents		
	Step 6	Action Information Nominations		

Renzulli Identification System

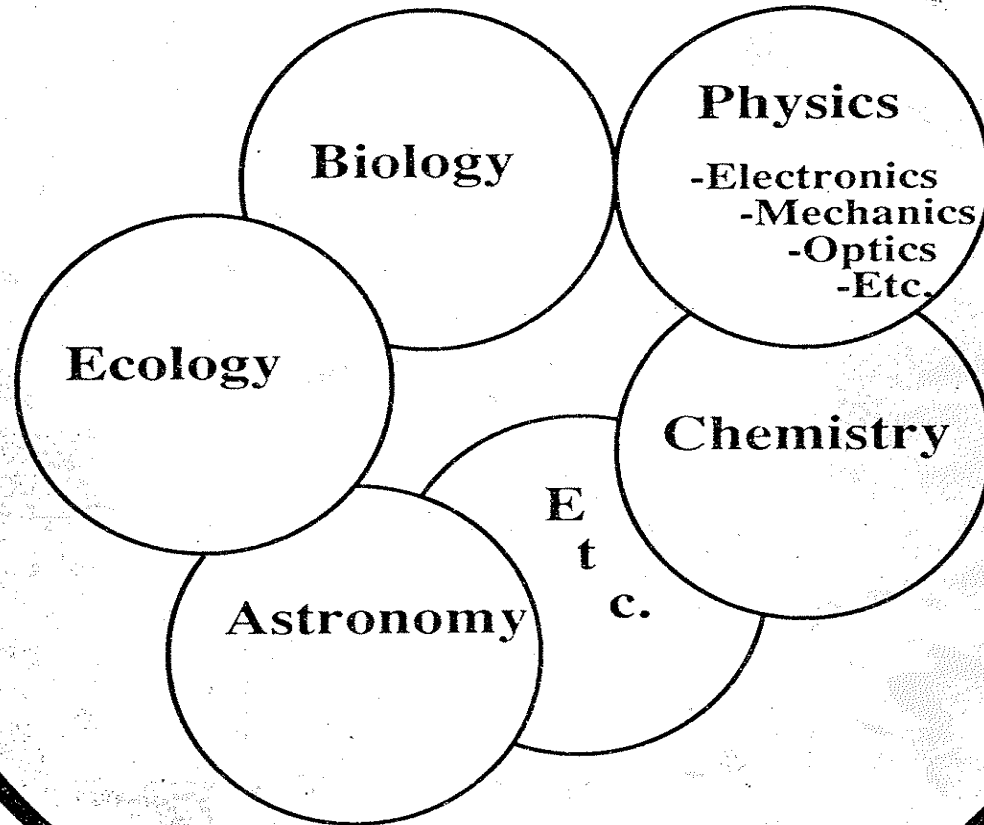


Multiple/Multiple Talent Pools

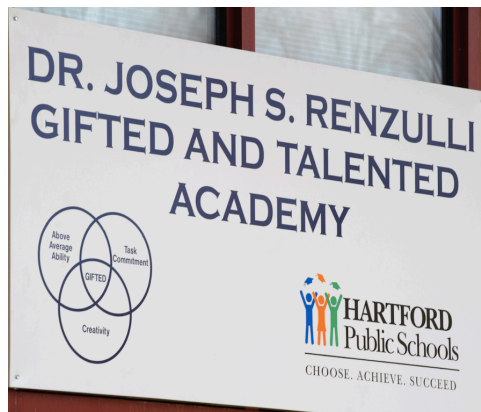
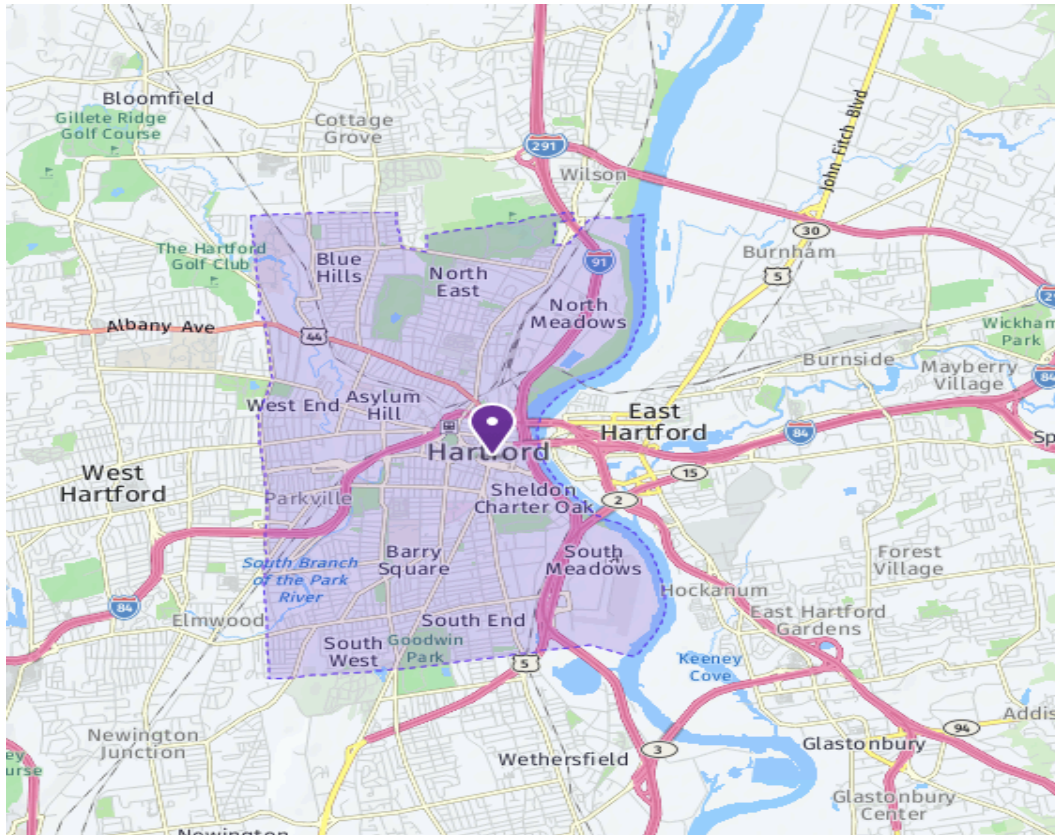


By Areas, Across Grade Level Bands, Using Multiple Criteria That Include Interests and Learning Styles *as well as* Abilities

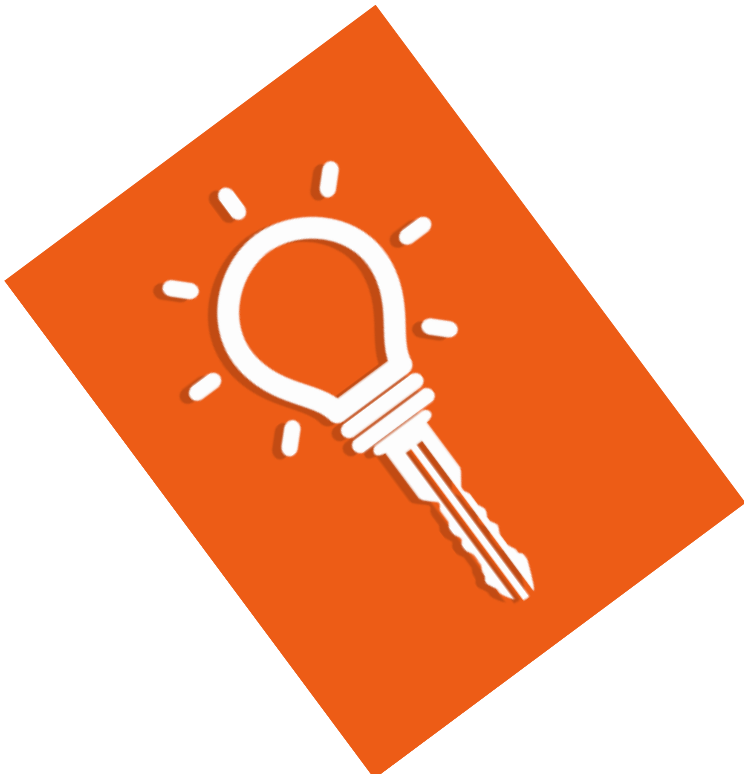
The Sciences



The Impacted Urban Issue...



**Underlying
Theories of
Knowledge and
Differentiation**



Short Quiz

1. What are the “raw materials” for baking bread?



2. What are the “raw materials” for learning?

Knowledge

Experience

Doing things!





KING ARTHUR FLOUR
est. 1790 | the baking education center

certificate of completion

presented to Joe Renzulli for successfully
completing a course in *Artisan Baking at Home*
held July 18 through July 21, 2011.



Susan Miller
School Director, King Arthur Flour



Underlying Theory of Blended Knowledge

Two Sources of Knowledge:

- To-Be-Presented Knowledge
- Just-In-Time Knowledge



**Received Knowledge
(Content)**

(Lectures, Textbooks,
Worksheets, Internet,
TV, & Other
Media)



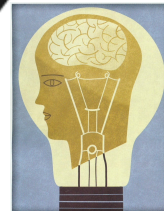
**Analyzed Knowledge
(Process)**

(Labs, Debates &
Discussions, Open-
ended Problems,
Creativity Training &
Critical Thinking
Exercises)

Blended
Knowledge

**Applied &
Created
Knowledge
(Application)**

(Research Projects,
Investigative
Learning Activities,
Product &
Performance
Creations)



Applied To:

- Standard Comprehension & Achievement Test Scores
- Thinking & Creative Problem Solving, and Digital Literacy Skills
- Visual, Oral, Written, & Constructed Projects, Performances and Presentations

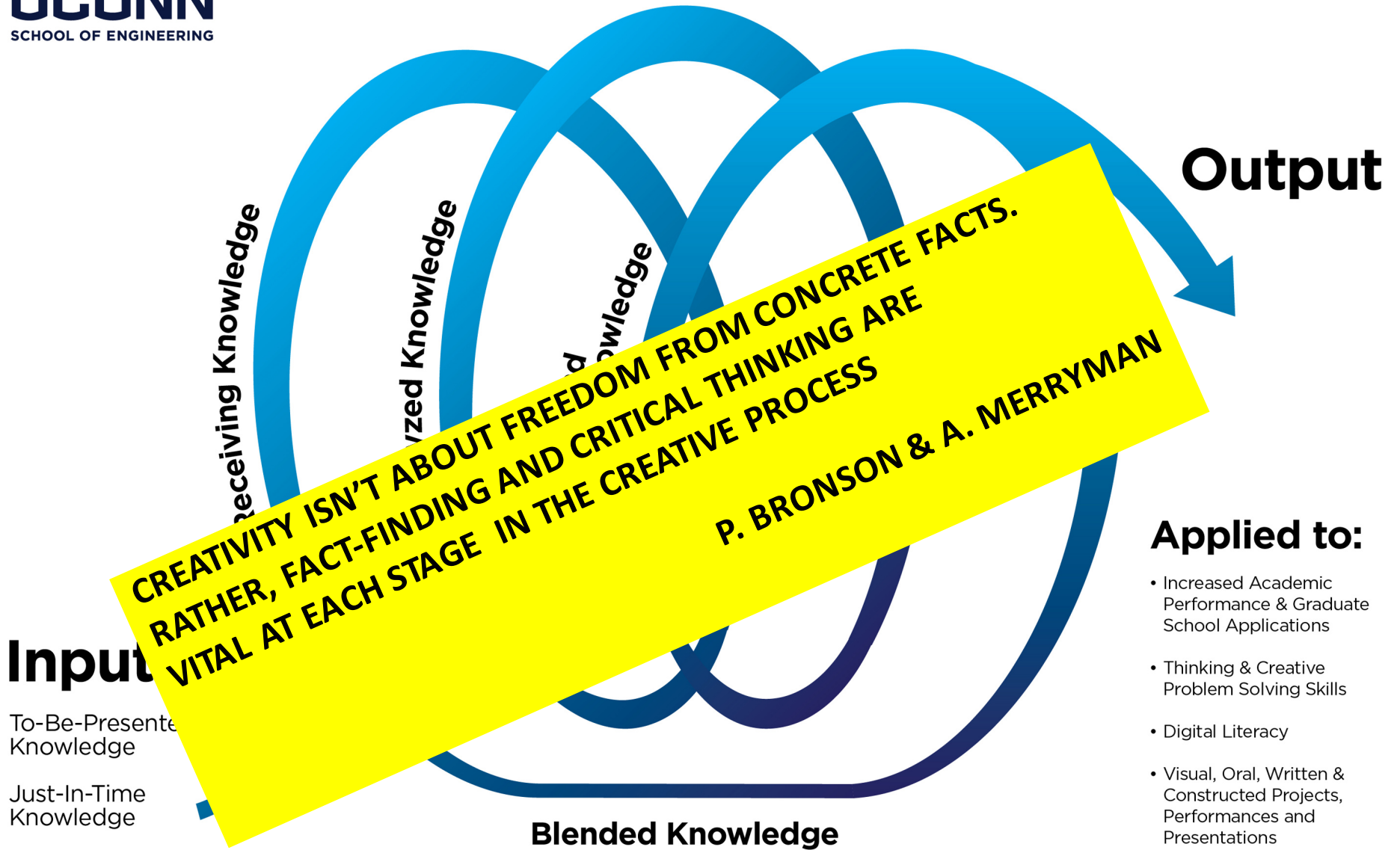
Three Types of Knowledge

Three Uses of Knowledge

The Big Mistake When Using Bloom's Taxonomy

That's not the
way the
Brain works!

1. **Knowledge:** remembering or recalling appropriate, previously learned information to draw out factual (usually right or wrong) answers. Use words and phrases such as: how many, when, where, list, define, tell, describe, identify, etc., to draw out factual answers, testing students' recall and recognition.
2. **Comprehension:** grasping or understanding the meaning of informational materials. Use words such as: describe, explain, estimate, predict, identify, differentiate, etc., to encourage students to translate, interpret, and extrapolate.
3. **Application:** applying previously learned information (or knowledge) to new and unfamiliar situations. Use words such as: demonstrate, apply, illustrate, show, solve, examine, classify, experiment, etc., to encourage students to apply knowledge to situations that are new and unfamiliar.
4. **Analysis:** breaking down information into parts, or examining (and trying to understand the organizational structure of) information. Use words and phrases such as: what are the differences, analyze, explain, compare, separate, classify, arrange, etc., to encourage students to break information down into parts.
5. **Synthesis:** applying prior knowledge and skills to combine elements into a pattern not clearly there before. Use words and phrases such as: combine, rearrange, substitute, create, design, invent, what if, etc., to encourage students to combine elements into a pattern that's new.
6. **Evaluation:** judging or deciding according to some set of criteria, without real right or wrong answers. Use words such as: assess, decide, measure, select, explain, conclude, compare, summarize, etc., to encourage students to make judgements according to a set of criteria.



Content Modifications

- More Material
 - More Drill & Practice
 - Easier Material
 - Greater Depth & Complexity
 - Student or Teacher Selected
- Enrichment Opportunities Related To A Topic or Unit of Study

Classroom Organization:

Forum, Cinema, Laboratory, Café, Conference, Boardroom, Lecture Hall, Circle, Hot Seat, Study Carrels, Science/Media Labs, Computer Lab, Interest Centers, "Coffee House"

Grouping by:

Interests, Skill Levels, Ability, Within & Across-Grade Cluster Grouping, Common Tasks/Projects, Complimentary Talents, Cooperative Learning

On-line Courses
Blogs, Wikis, Podcasts
RSS Feeders, Screencasts

Flickr, Twitter
Social Networking Sites
[Renzulli Learning System](#)

Technology

Learning/Teaching Styles:

Lecture, Discussion, Peer Tutoring, Simulations
Socratic Inquiry, CAI, Dramatization, Problem Based Learning, Guided & Unguided Independent Study

Expression Styles:

Oral, Visual, Graphic, Manipulative, Artistic, Written, Multi-Media, Service, Combinations of the Above

The Role of The Teacher

KNOWLEDGE

Curriculum Content

Classroom Organization

MANAGEMENT

PEDAGOGY

Instructional Strategies

Student Products

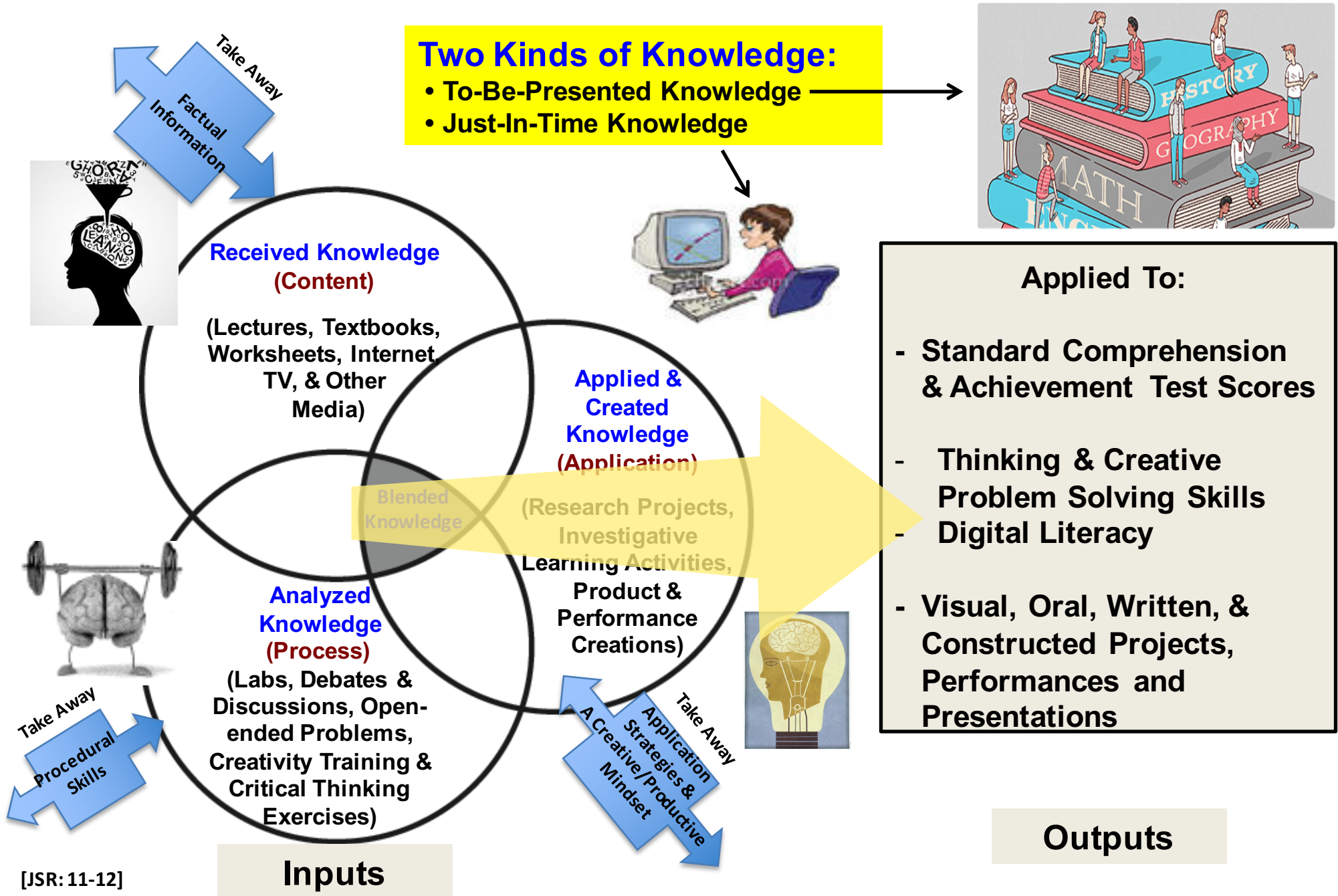
EXPRESSION STYLES

Technology

Theory of Personalized Learning
Five Dimensions of Differentiation

(JSR: 1996)

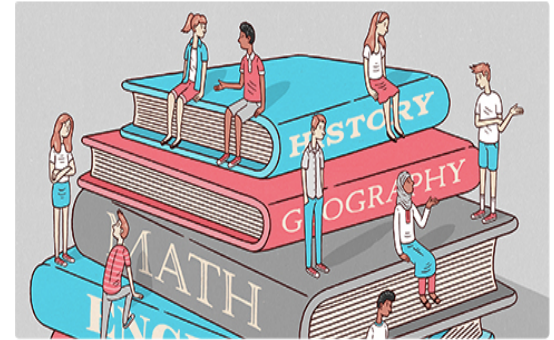
Blending Levels of Knowledge



Blending Levels of Knowledge

Two Kinds of Knowledge:

- To-Be-Presented Knowledge
- Just-In-Time Knowledge



Received Knowledge (Content)

(Lectures, Textbooks, Worksheets, Internet, TV, & Other Media)

Applied & Created Knowledge (Application)

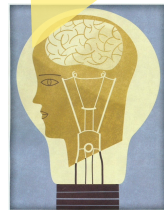
(Research Projects, Investigative Learning Activities, Product & Performance Creations)

Analyzed Knowledge (Process)

(Labs, Debates & Discussions, Open-ended Problems, Creativity Training & Critical Thinking Exercises)

Blended Knowledge

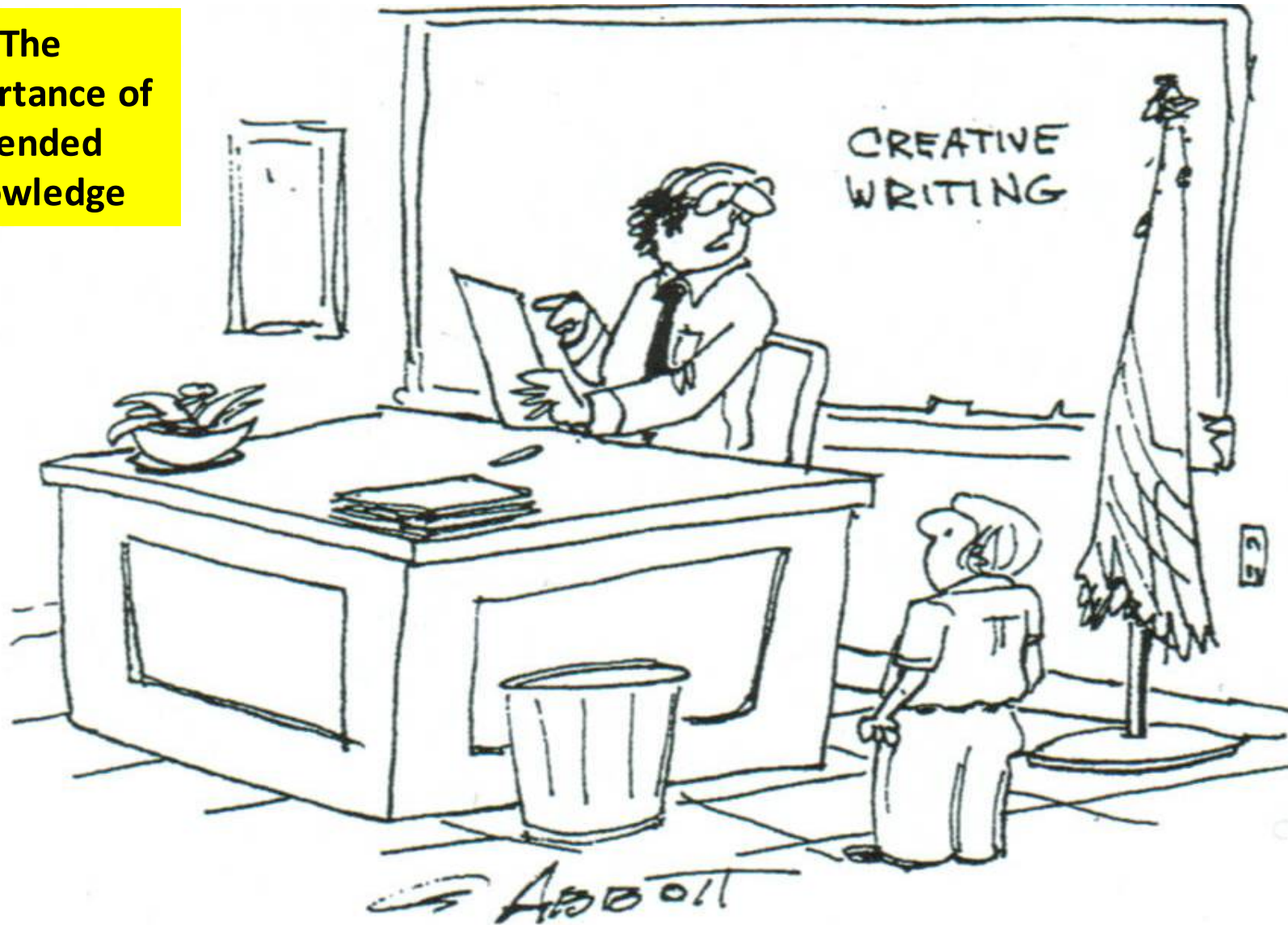
A Creative / Productive Mindset



- Applied To:**
- Standard Comprehension & Achievement Test Scores
 - Thinking & Creative Problem Solving Skills
 - Digital Literacy
 - Visual, Oral, Written, & Constructed Projects, Performances and Presentations

Outputs

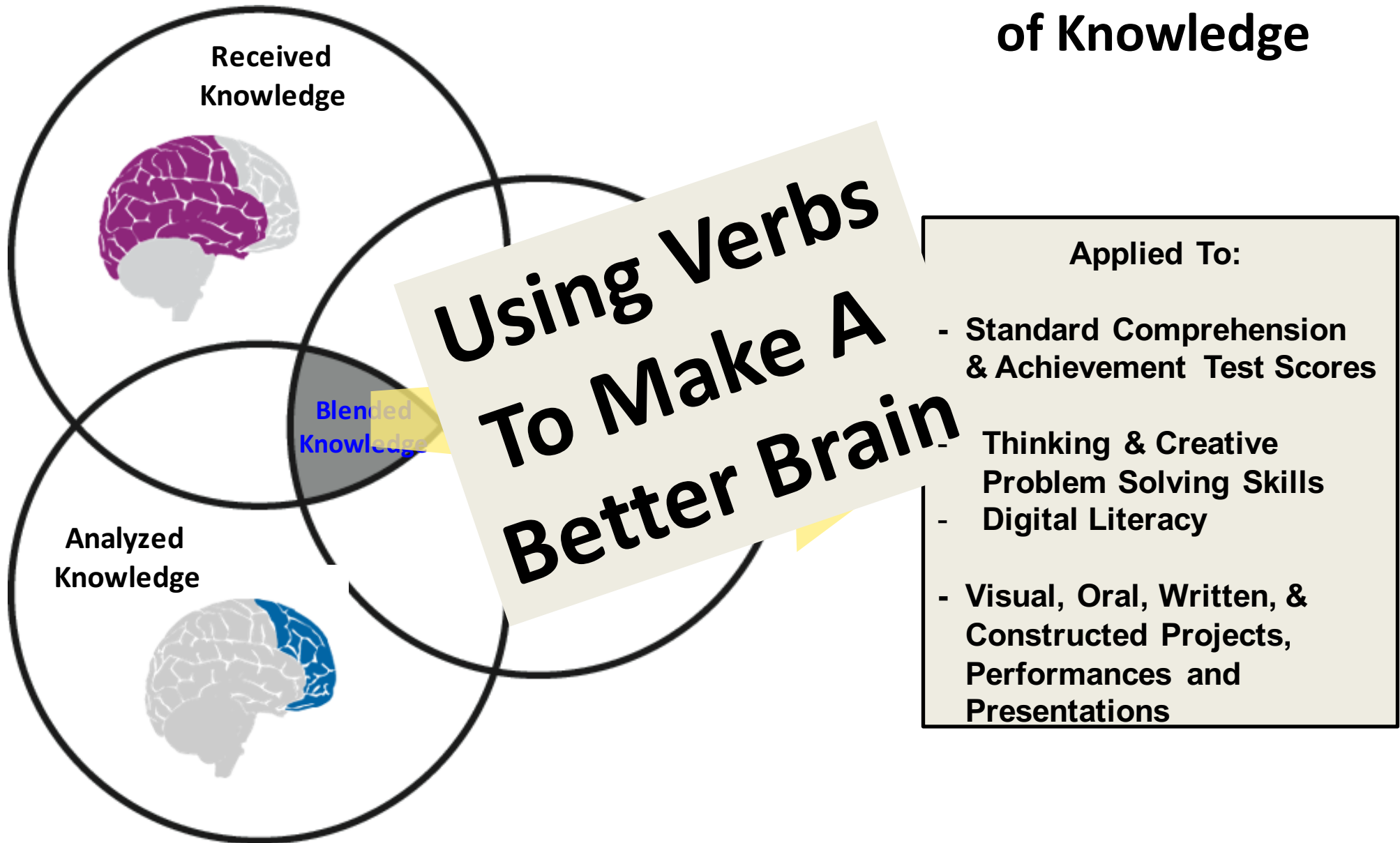
The
Importance of
Blended
Knowledge



**“IN WORDS YOU’LL UNDERSTAND, YOU’RE NOT
DOWNLOADING ENOUGH CONTENT TO
PLAY AT THE NEXT LEVEL.”**




Malleable minds: Translating insights from psychology and neuroscience to gifted education. National Research Center on the Gifted and Talented, 2012.

How The Brain Deals With Different Levels of Knowledge



Theory into practice...

Typical Verbs Used for Raising Questions About Three Kinds of Knowledge

Words Uses to Prompt Received Knowledge Learning	Words Uses to Prompt Analyzed Knowledge Learning	Words Uses to Prompt Created Knowledge Learning
<p>State Describe Identify Label List Match Outline Memorize Point to Recall Select Name Label Arrange Report Give examples Calculate Repeat Tell Recite Recognize</p> <div data-bbox="310 1008 569 1179" style="text-align: center;">  </div> <p style="text-align: center;">Learn</p>	<p>Explain Interpret Demonstrate Conclude Compare Contrast Categorize Design Speculate Interpret Relate Predict Estimate Extrapolate Reconstruct Hypothesize Design Critique Distinguish between</p> <div data-bbox="890 1390 1098 1529" style="text-align: center;">  </div> <p style="text-align: center;">Think</p>	<p>Point out Defend Differentiate Reconstruct Reorganize Construct Devise Illustrate Infer Compose Construct Infer Paraphrase Translate Evaluate Defend Justify Organize Formulate</p> <p>Set Goals Plan Project (e.g., time lines, needed resources, action steps, intended outcomes, products, audiences) Write (e.g., story, essay, proposal, musical score) Interview Investigate Design Formulate Construct Gather Data Organize Produce Schedule Prioritize Supervise Organize Negotiate Monitor Publicize Communicate Budget</p> <div data-bbox="1612 1008 1965 1240" style="text-align: center;">  </div> <p style="text-align: center;">Apply</p>

General Questions That Promote *Applied* Investigative And Creative Thinking

What can you build?

What can you design?

What can you develop?

What can you plan?

What can you produce?

How could you modify?

What could you invent?

What kind of study could conduct to influence others?

What kind of original text, video, graphic, display could you produce?

How could you get people to buy, use, promote or sell this?

How can you change people's minds?

How can you present, teach, display?



Theory Into Practice

7

The Enrichment Triad In Action



TYPE I ENRICHMENT

General Exploratory Activities

- Learn about new topics and interest through
- Guest Speakers
- Internet, Facebook, Twitter
- Visitations & Virtual Field Trips
- DVDs & Videos
- Computer Programs
- Interviews
- Casual Conversations
- Books, Magazines, Television
- Dynamic Curriculum Experiences
- Letter Writing
- Observation of The World Around Us

TYPE I GENERAL EXPLORATORY ACTIVITIES

TYPE II ENRICHMENT

How-To Training Activities

- Creativity & Critical Skill Training
- Training in Research Skills, Independent and Self-directed Learning Skills, Affective Skills, Communication Skills, Time Management and Executive Function Skills, and Methodology Skills in Various Topics and Disciplines.

TYPE II GROUP TRAINING ACTIVITIES

TYPE III ENRICHMENT

Individual & Small Group

Investigation of Real Problems

Students become "experts" through hands-on activities that use creativity and research skills to solve real-world problems. Creative products are shared with appropriate audiences.

INDIVIDUAL & SMALL GROUP INVESTIGATION OF REAL PROBLEMS

"The young person thinking, feeling, and doing like the practicing professional, even if at a more junior level."

REGULAR CLASSROOM

ENVIRONMENT

Theory Into Practice

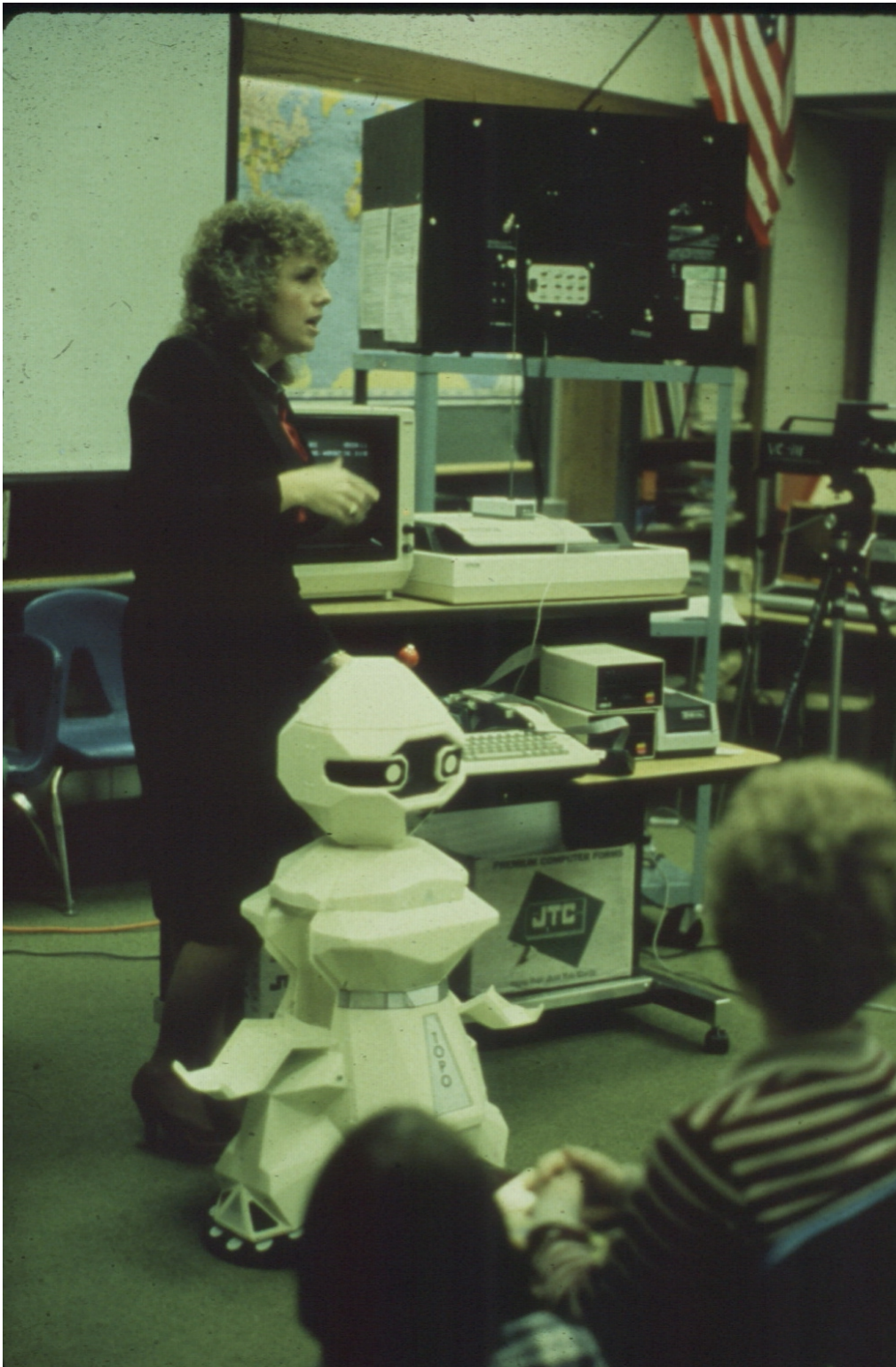
Type I
Enrichment



Type I
Enrichment



Type I
Enrichment



Type I
Enrichment



INVENTIONS

INVENTIONS



INVENTIONS



Inventions =
Solutions to
real problems.



Important point about Type I Enrichment

Type I: Debriefing

What did you find interesting about the presentation?

Did this presentation raise any questions in your mind?



What else would you like to know?

Where could we find more information about this topic?

Are there any careers that this presentation makes you think of?

What good ideas can you share about projects, research studies, creative writing, etc. that might be used to learn more about this topic?

Would anyone like to meet with me individually to explore possible follow ups to this Type I?

Type I
Enrichment
All Students



Type I
Enrichment
Follow-up
Interested Students



**Type II
Enrichment**

TAXONOMY OF COGNITIVE & AFFECTIVE PROCESSES

(The "Type II Matrix" JSR: 2001)

A. Creative Thinking Skills
B. Analytic, Problem-Solving & Decision-Making Skills
C. Critical and Logical Thinking Skills

III. Learning How-To Learn Skills
A. Listening, Observing, & Perceiving
B. Reading, Notetaking, & Outlining
C. Interviewing & Surveying
D. Analyzing & Organizing Data

V. Written, Oral, and Visual Communication Skills
A. Written Communication Skills
B. Oral Communication Skills
C. Visual Communication Skills

II. Character Development and Affective Process Skills
A. Character Development
B. Interpersonal Skills
C. Intrapersonal Skills

IV. Using Advanced Research Skills & Reference Materials
A. Preparing for Research & Investigative Projects
B. Library & Electronic Reference
C. Finding & Using Community Resources

VI. Meta-Cognitive Technology Skills
<ul style="list-style-type: none">• The ability to identify trustworthy and useful information• The ability to selectively manage overabundant information• The ability to organize, classify, and evaluate information• The ability to conduct self-assessments of web-based information• The ability to use relevant information to advance the quality of one's work• The ability to communicate information effectively

Planning Matrix for Organizing and Teaching Type II Skills With Commercial Enrichment Materials

I. Cognitive Training

	K-3	4-8	9-12
A. Creative Thinking Skills	Be An Inventor * Brainstorming: The Book of Topics Creativity 1, 2, 3 New Directions in Creativity: A New Directions in Creativity: B On The Nose Steven Caney's Kids' America Steven Caney's Play Book Steven Caney's Toy Book Think About It! Wondering	Be An Inventor Brainstorming: The Book of Topics Challenge Boxes Creativity 1, 2, 3 Imagining New Directions in Creativity: Mark 1 New Directions in Creativity: Mark 2 New Directions in Creativity: Mark 3 On The Nose Steve Caney's Invention Book Steven Caney's Kids' America Steven Caney's Play Book Steven Caney's Toy Book Think About It! Untrapping Your Inventiveness	Brainstorming: The Book of Topics Challenge Boxes On The Nose Steve Caney's Invention Book Steven Caney's Kids' America Steven Caney's Play Book Untrapping Your Inventiveness
B. Creative Problem Solving and Decision Making	Be An Inventor Creativity 1, 2, 3 On The Nose Think About It! Wondering	Be An Inventor Challenge Boxes Creativity 1, 2, 3 Gee, Whiz! Imagining On the Nose Steven Caney's Invention Book Think About It! Untrapping Your Inventiveness	Challenge Boxes Gee, Whiz! Steven Caney's Invention Book Untrapping Your Inventiveness

* All the books listed in Figure 60 are available from Creative Learning Press, Inc., P.O. Box 320, Mansfield Center, CT 06250.

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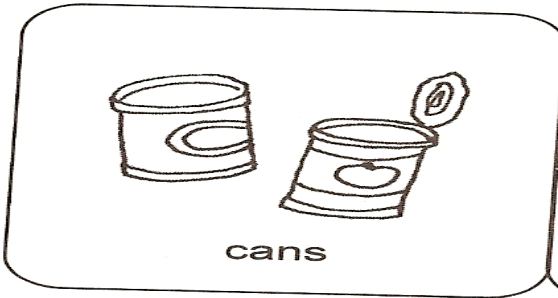
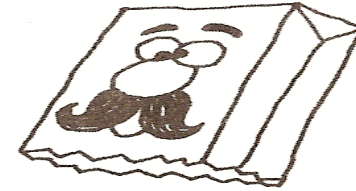
Planning matrix for organizing and teaching type II skills with commercial enrichment materials.

Name _____ Date _____

**Type II
Enrichment**

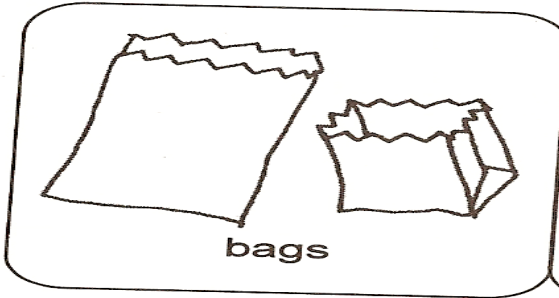
17 Recycling (b)

What could you make out of these items?



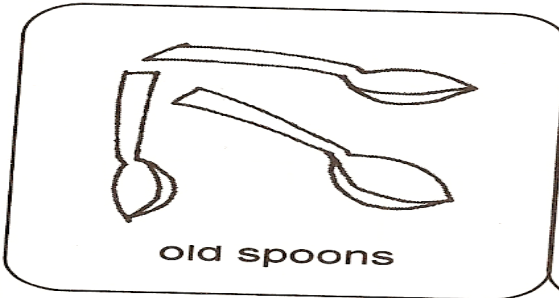
cans

Blank space for writing ideas for recycling cans.



bags

Blank space for writing ideas for recycling bags.



old spoons

Blank space for writing ideas for recycling old spoons.

Primary

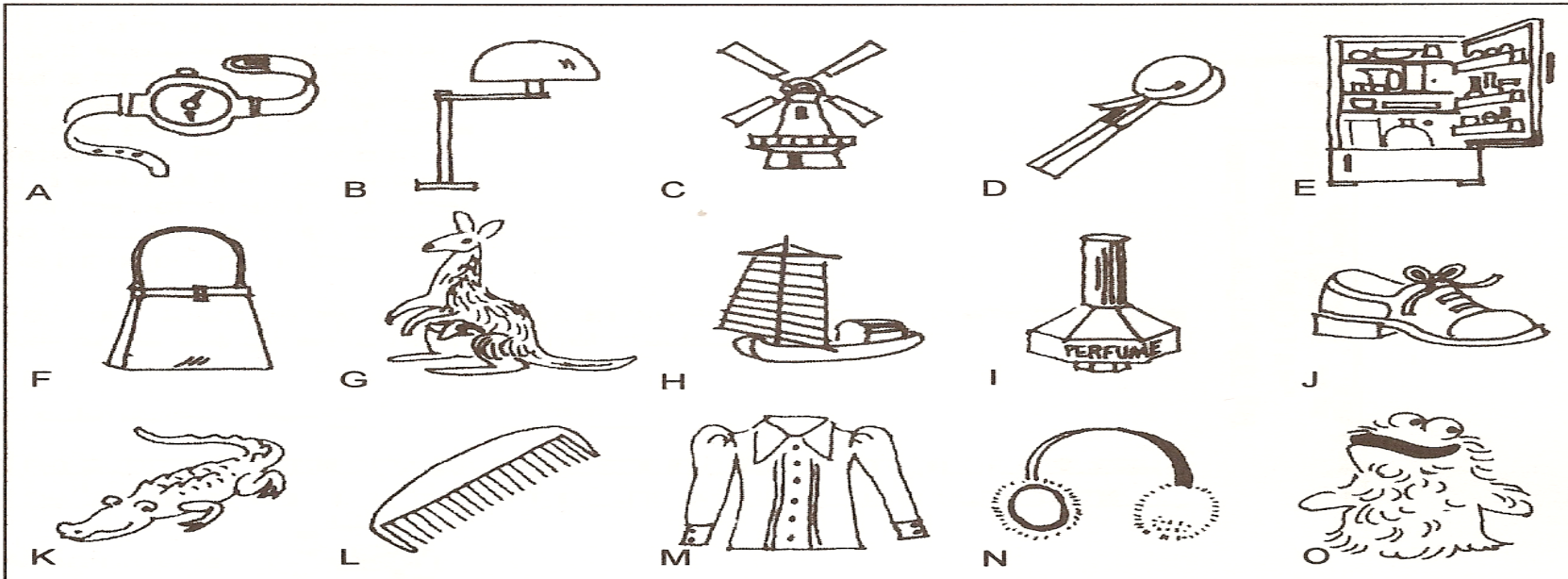
Name _____

Date _____

**Type II
Enrichment**

12 Figure Families (b)

Study the figures below and see if you can group them together according to characteristics they have in common. You can use each figure as many times as you wish. An example is given below.



Common characteristics

furry things

Figures

G, N, O

Name _____

Date _____

Type II
Enrichment

5 Another Point of View (a)

Do you remember the story about the three little pigs? In that story, the wolf is depicted as a mean and evil character, but few people have ever told the story from the wolf's point of view. Imagine that you are the wolf in this story. Retell your story in a way that will let the reader to understand how it feels to be the big bad wolf. A few lines are written to help you get started. Use the back of this page if you need more space.



The Three Little Pigs
by
I. M. A. Wolf

It's not easy being a big bad wolf. I don't have very many friends, and everybody runs away when they see me coming.

Middle Grade/High School

Type II Enrichment

TAXONOMY OF COGNITIVE & AFFECTIVE PROCESSES

(The "Type II Matrix" JSR: 2001)

I. Cognitive Thinking Skills

B. Analytic, Problem-Solving & Decision-Making Skills

III. Learning How-To Learn Skills

A. Listening, Observing, & Perceiving

B. Reading, Notetaking, & Outlining

C. Interviewing & Surveying

D. Analyzing & Organizing Data

V. Written, Oral, and Visual Communication Skills

A. Written Communication Skills

B. Oral Communication Skills

C. Visual Communication Skills

II. Character Development and Affective Process Skills

A. Character Development

B. Interpersonal Skills

C. Intrapersonal Skills

IV. Using Advanced Research Skills & Reference Materials

A. Preparing for Research & Investigative Projects

B. Library & Electronic Reference

C. Finding & Using Community Resources

VI. Meta-Cognitive Technology Skills

- The ability to identify trustworthy and useful information
- The ability to selectively manage overabundant information
- The ability to organize, classify, and evaluate information
- The ability to conduct self-assessments of web-based information
- The ability to use relevant information to advance the quality of one's work
- The ability to communicate information effectively



**Its All About
Asking The Right
Questions**

Now
That's
a GOOD
QUESTION!

How to Promote
COGNITIVE RIGOR
Through Classroom
Questioning

ERIK M. FRANCIS

Figure 4.4 Good Analytical Questions: The Declaration of Independence

<p>ANALYTICAL</p>	<p>How does the Declaration of Independence express the grievances of the colonists?*</p> <ul style="list-style-type: none">• What is the intent of the Declaration of Independence?• What are the meaning and message of the Declaration of Independence?• What does the Declaration of Independence represent?• How does the Declaration of Independence address the following themes: freedom, independence, tyranny, democracy, unalienable rights?• How is the style and tone of the Declaration of Independence idealistic, legalistic, and practical?• How does the crafting and structure of the Declaration of Independence strengthen its message and purpose?• How does the Declaration of Independence incorporate different conventions of craft, structure, writing, and language to convey its intent and purpose?• How did the colonists emphasize their concerns in the Declaration of Independence?• How and why is the Declaration of Independence written like a formal legal document?• What can be inferred from the opening "The Unanimous Declaration of the thirteen United States of America"?• What does this statement mean or infer? <i>"We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable rights, that among these are life, liberty and the pursuit of happiness."</i>• What does the Declaration of Independence infer by calling rights "unalienable"?• Why does the Declaration of Independence refer directly to the "present King of Great Britain" and begin every one of their complaints by referring to what "he" has done instead of referring to the nation of Great Britain and its people?• Why has this document continued to remain relevant and timeless historically and presently? <p>* May also be used as a topical essential question.</p>
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Type III Enrichment: Individual and Small Group Investigations of Real Problems



What Makes A Problem Real

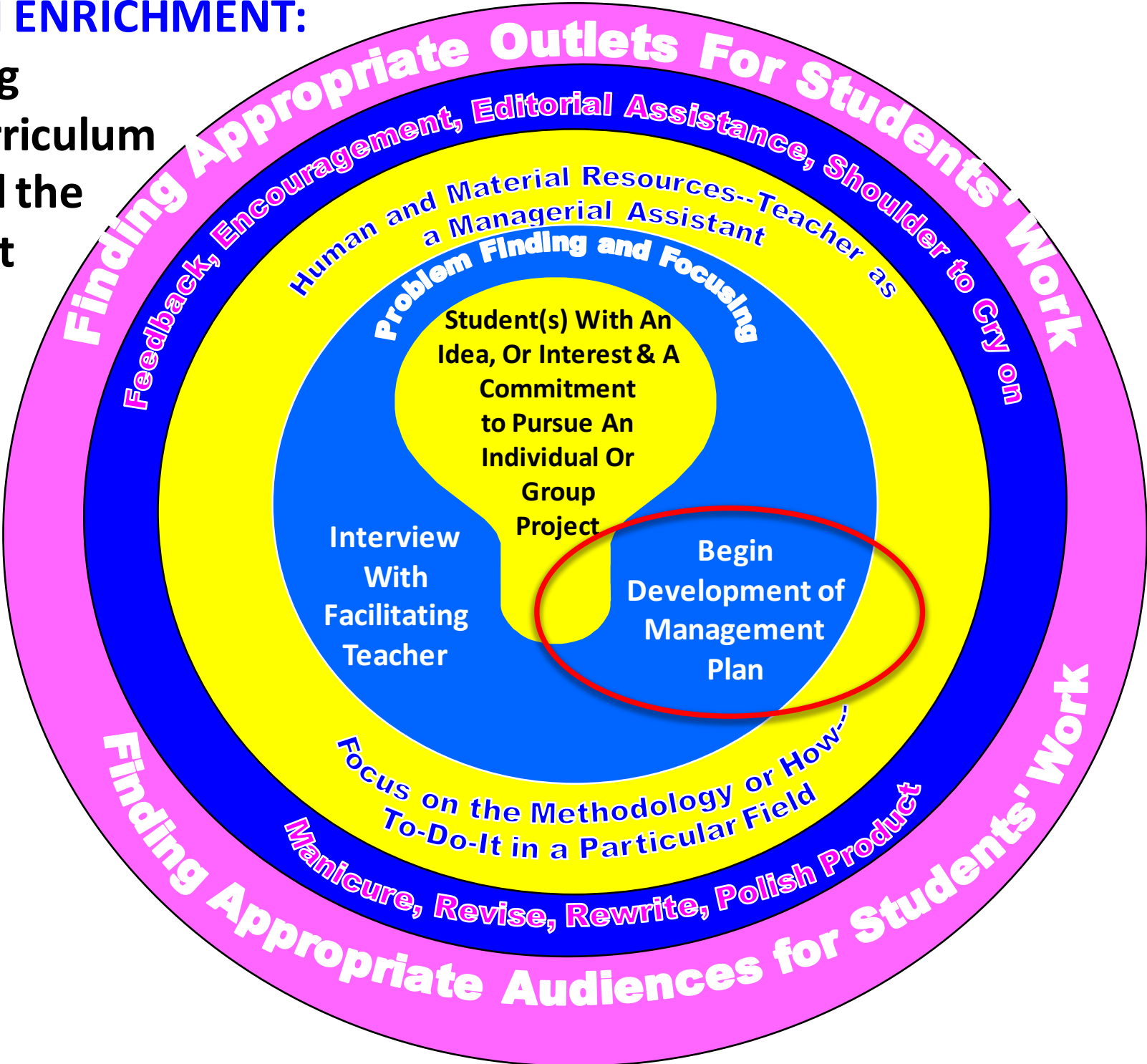
What Makes a Problem Real?

- 1. Personalization of Interest**
- 2. Use of Authentic Methodology**
- 3. No Existing Solution or “Right” Answer**
- 4. Designed to Have an Impact on an Audience Other Than or in Addition to the Teacher**

“...the young person thinking, feeling, and doing like the practicing professional, even if at a more junior level than adult professionals.”

TYPE III ENRICHMENT:

Building
the Curriculum
Around the
Student



MANAGEMENT PLAN FOR INDIVIDUAL AND SMALL GROUP INVESTIGATIONS

NAME <u>small group</u>	GRADE <u>4-6</u>	Beginning Date _____	Estimated Ending Date _____
TEACHER <u>Judith M. Johnson</u>	SCHOOL <u>Ellenville Central School</u>	Progress Reports Due On Following Dates _____	

(A) GENERAL AREA(S) OF STUDY (Check all that apply)

Language Arts/Humanities Science Personal and Social Development

Social Studies Music Other (Specify) History

Mathematics Art Other (Specify) Architecture

Archaeology Photography

(B) INTENDED AUDIENCES
Which individuals or groups would be most interested in the findings? List the organized groups (clubs, societies, teams) at the local, regional, state, and national levels. What are the names and addresses of contact persons in these groups? When and where do they meet?

- Ellenville Public Library and Museum
- Town historian - Katherine Terwilliger
- Ulster County Historical Society
- Victorian Society in America
- National Trust for Historic Preservation

(C) INTENDED PRODUCT(S) AND OUTLETS
What form(s) will the final product take? How, when, and where will you communicate the results of your investigation to an appropriate audience(s)? What outlet vehicles (journals, conferences, art shows, etc.) are typically used by professionals in this field?

- Survey of existing Victorian structures in Ellenville. Present to Ellenville Public Museum for their records. Publish results in local newspapers.
- Presentation to Village Board of Trustees (Maps - Photo Port folio - List of Renovation Possibilities)
- Display photos at Ellenville Art in the Square in August.
- Design and build a model of a Victorian living room, using only furniture and objects discovered in Ellenville homes. Display at Ellenville Public Library.

(E) SPECIFIC AREA OF STUDY Write a brief description of the problem that you plan to investigate. What are the objectives of your investigation? What do you hope to find out?

1. What was Ellenville like in Victorian times and what happened to it?
2. What effects on individuals are evident when local architecture from the past is destroyed or altered?
3. What can be done to preserve Victorian structures still in existence?

(F) METHODOLOGICAL RESOURCES AND ACTIVITIES List the names & addresses of persons who might provide assistance in attacking this problem. List the how-to-do-it books that are available in this area of study. List other resources (films, collections, exhibits, etc.) and special equipment (e.g., camera, transit, tape recorder, questionnaire, etc.). Keep a continuous record of all activities that are a part of this investigation.

- Persons - Katherine Terwilliger
- Patricia Clinton, Laurel Terrace, Ellenville, N.Y. 12428
- Marion Dumand, Ellenville Public Library
- How-to-Do-It books
- Wrenn & Mulloy. America's Forgotten Architecture. New York: Pantheon Books, 1976.
- Bullock, Orin M. The Restoration Manual. Norwalk, Conn.: Silvermine Publishers, Inc., 1966.
- Hammond, Philip C. Archaeological Techniques for Amateurs. Princeton, N.J.: D. Van Nostrand Co., 1963.
- Hale, Richard W. Methods of Research for the Amateur Historian. Nashville, Tenn.: American Association for State and Local History, 1969.
- Other resources - periodicals - Petersen's Magazine, Godey's Ladies Book, Antiques, APT Bulletin, Historic Preservation, Journal of the Society of Architectural Historians, The Old House Journal, Preservation News.
Collections - private and public
Antique Shops and flea markets.
Old letters, Postcards
Books such as Victorian Glass
Examples of old houses - Roosevelt Home at Hyde Park, N.Y., Vanderbilt Mansion
- Special equipment
- 35 mm. camera, tripod, telephoto lens
- black-and-white film (Plus-X and Tri-X)
- darkroom facilities and equipment
- telescope and binoculars
- tape recorder

(D) GETTING STARTED What are the first steps you should take to begin this investigation? What types of information or data will be needed to solve the problem? If "raw data," how can it be gathered, classified, and presented? If you plan to use already categorized information or data, where is it located and how can you obtain what you need?

- Letters to Preservation Information Sources, Preservation Funding Sources, each of the intended audiences (Outline our objectives, ask for assistance)
- Obtain maps from Village Clerk's Office, Town Clerk's Office, U.S. Geological Survey (get recent maps, and any available old maps dating from 1830 - to present)
- Locate existing Victorian structures - Map them on a recent map. Key this map to a chart listing current addresses, present owners, condition. Locate and Map Victorian structures existing 100 years ago. Indicate on map those structures still in existence.
- Visit town historian with a tape recorder. Ask about previous surveys which may have been done and location of material. Ask for personal recollections. Ask about persons to interview.

Enrichment Clusters The “Growth Stock” Of The SEM



- 1. Specially Designated Time Blocks Each Week**
- 2. Trained General Faculty Teachers**
- 3. Student Selection of Creative and Investigative Projects**
- 4. Using the Methodology of the Practicing Professional**

Enrichment Clusters

Are nongraded groups of students who share common interests and come together during specially designated time blocks to pursue these interests.

Note:

Best way to start an enrichment program...

Super Hint Number 5 for getting more authentic Type IIIs in your Enrichment Clusters...

Write an action-oriented description that will emphasize hands-on activity... AND avoid the use of the word, “learn!”

A very creative activity **for you!**

Sample Cluster Descriptions

➤ *The Poets' Workshop*

What is it like to be a poet? Explore the poetry of some of America's greatest poets, including Robert Frost, Langston Hughes, Emily Dickinson and others. **Write, illustrate, and perform** original poems or interpret others' work. **Identify** outlets for our work.

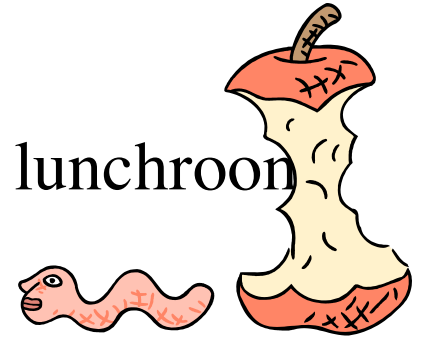
➤ *Invention Convention*

Are you an inventive thinker? Would you like to be? Come to this cluster to **brainstorm** a problem, try to **identify** many solutions, and **design** an invention to solve the problem. **Create** your invention individually or with a partner under the guidance of Bob Erickson and his colleagues. You may share your final product and the **Young Inventor's Fair**, a statewide, day-long celebration of creativity.



Save Our Planet

- Would you like to become a “Dumpsite Detective” and uncover ways to reuse our trash?
- Would you like to see worms at work reducing our lunchroom garbage?



Join **The Recyclers** and become an expert in converting trash into *treasures!*

Be a Mother Earth Super Hero and Save the World.

Crime Scene Detectives



Would you like to be a detective?
Investigate crimes?

Have you ever
wondered what it
takes to solve a
crime?



**If investigating a crime, gathering
evidence, and solving mysteries strike
your curiosity then this is the cluster for
you! Join The Crime Scene Detectives**

Six Key Questions

[For Facilitating an Enrichment Cluster of Type III Investigations]

3. Decide on a topic or two that has special interest to you and answer the six key questions by:

1. What do people with an interest in this area do?
2. What products do they create and/or what services do they provide?
3. What methods do they use to carry out their work?
4. What resources and materials need to produce high quality products and services?
5. How, and with whom, do they communicate the results of their work?
6. What steps need to be taken to have an impact on intended audiences?

- **Obtaining one or more how-To Books on the topic by checking the How-To Data Base in Renzulli Learning.**
- **Talking to an expert who works in this area (A.S.P.I. R.S.).**
- **Going on line and do a little background reading about the topic.**
- **Finding a few examples of creative products, especially if they were done by young people and plan to talk about them with your students. Use the key questions as a guide for an opening discussion.**
- **Checking the Contests and Competitions Data Base in Renzulli Learning to get some ideas about possible audiences [Great for motivation].**

Super Hint for getting more authentic Type IIIs in your Enrichment Clusters...

**Look for contests and competitions
where students can submit their
work.**

Very motivating!

Strength-based Differentiation Engine™

Matching Resources to Individual Learning Profiles

MY ENRICHMENT ACTIVITIES:

 virtual field trips 48 Activities	 real field trips 759 Activities	 creativity training 73 Activities	 critical thinking 47 Activities	 projects & independent stud 188 Activities	 contests & competitions 243 Activities	 websites 243 Activities
 fiction (books & e-books) 4 Activities	 non-fiction (books & e-books) 200 Activities	 how-to (books & e-books) 26 Activities	 summer programs 32 Activities	 on-line activities & classes 245 Activities	 research sites 54 Activities	 videos & dvds 96 Activities

Super Hint for getting more authentic Type IIIs in your Enrichment Clusters...

Plan a Type III Fair where students can display their products, make presentations, and share their work with students from other schools.

An evening session should be planned for parents, school, and city officials. Invite print and media journalists.

***“Audience”* creates motivation to improve one’s work, pride in accomplishment, and serves as a vehicle for motivating for other students to get involved.**

