## Reexamining the Conceptual Foundations of Gifted Education For The 21<sup>st</sup> Century: A Theory-Into-Practice Approach Using The Schoolwide Enrichment Model

Joseph S. Renzulli and Sally Reis
The National Research Center on the Gifted and Talented
University of Connecticut





#### Countries We Are Currently Working With

**Brazil** 

Chile

Peru

**Spain** 

China

India

Dubai

Germany

Austria

**Switzerland** 

Italy

Korea

Mexico

**Portugal** 

**Turkey** 

Hungary

Holland

Lebanon

Japan

Croatia



# Research And Development On The Schoolwide Enrichment Model

https://gifted.uconn.edu/schoolwide-enrichment-model/semart/

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#### **Previously Sent Articles**

Renzulli, J. S., & Reis, S. M. (2010). The Schoolwide Enrichment Model: A focus on student strengths and interests. *Gifted Education International*, *26*, 140-156.

Renzulli, J. S. (2012). Reexamining the role of gifted education and talent development for the 21st Century: A four-part theoretical approach. *Gifted Child Quarterly, 56 (3),* 150 – 159.

Renzulli, J. S. (2007). The Renzulli Learning System: A technology based application of the Schoolwide Enrichment Model. *News and Science*, 16, 1-19.

Renzulli, J. S. (2016). The Role of Blended Knowledge in the Development of Creative Productive Giftedness. *International Journal For Talent Development And Creativity. 4 (1 & 2).* 

Renzulli, J. S. & Brandon, L. E. (2017). Common sense about the underrepresentation issue: A school-wide approach to increase participation of diverse students in programs that develop talents and gifted behaviours in young people. *International Journal For Talent Development and Creativity*, 5(2), 71-94.

#### **Outline**

- 1. General Background
- 2. What Is Creative Productive Giftedness?
- 3. Comprehensive Strength Assessment
- **4. Curriculum Compacting**
- **5. Practical Suggestions For Developing Creative/Productive Giftedness**
- **6. Using Technology To Find Resources For Differentiation**
- 7. Enrichment Clusters
- **8. Summary And Conclusions**

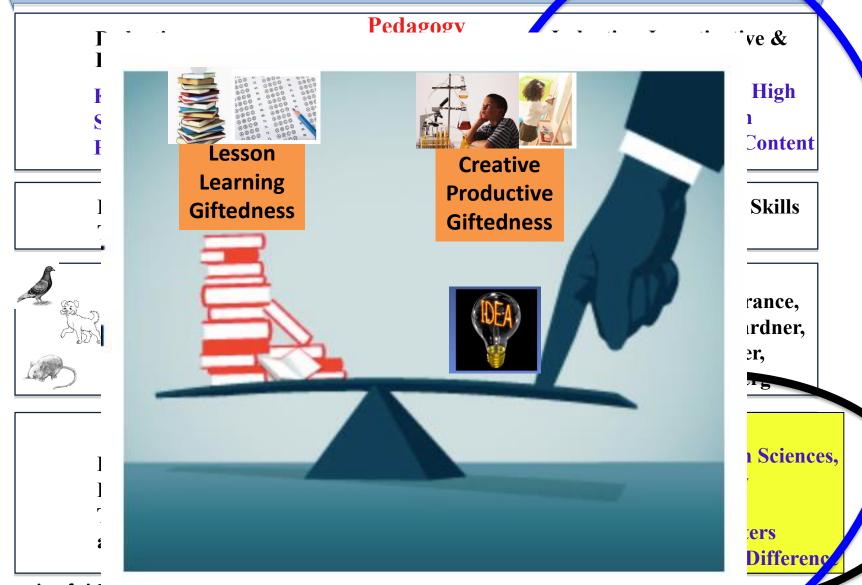
# General Background

Teachers are the unacknowledged legislators of the world.

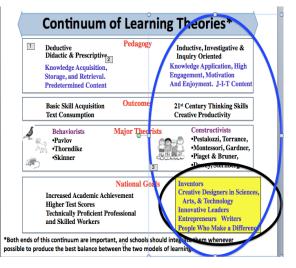
Ashley Montagu



#### Continuum of Learning Theories\*



<sup>\*</sup>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



## Rationale For Focusing On Creative And Productive Giftedness

There is an economic imperative

behind teaching creativity and inductive and investigative skills. Nations are as reliant on the ability of their citizens to create new ideas as businesses are on the creative skills of their employees. This is why governments and industry are now being encouraged to embrace the teaching of creativity, thinking skills, and an investigative mindset. So much so that creative education is a key pillar of China's 10-year educational plan.

The main focus of our work has been to apply the pedagogy of gifted education to total school improvement.

#### A rising tide lifts all ships...



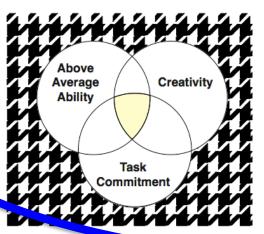


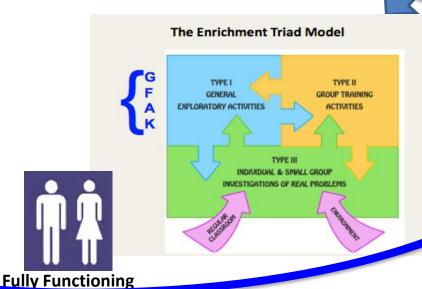
**Theme** 

Schools should be places for talent development.

#### Cocus on Creative Productivity

The Three-Ring Conception of Giftedness





Develop

nent

Social

**Executive Functions** 

Leadership For a **Changing World** 

**Action Orientation** 

**Social Interactions** 

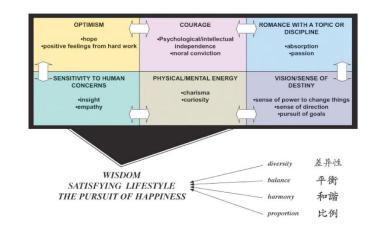
Altruistic Leadership

Realistic Self-Assessment

Awareness of Needs of Others



#### **Operation Houndstooth**





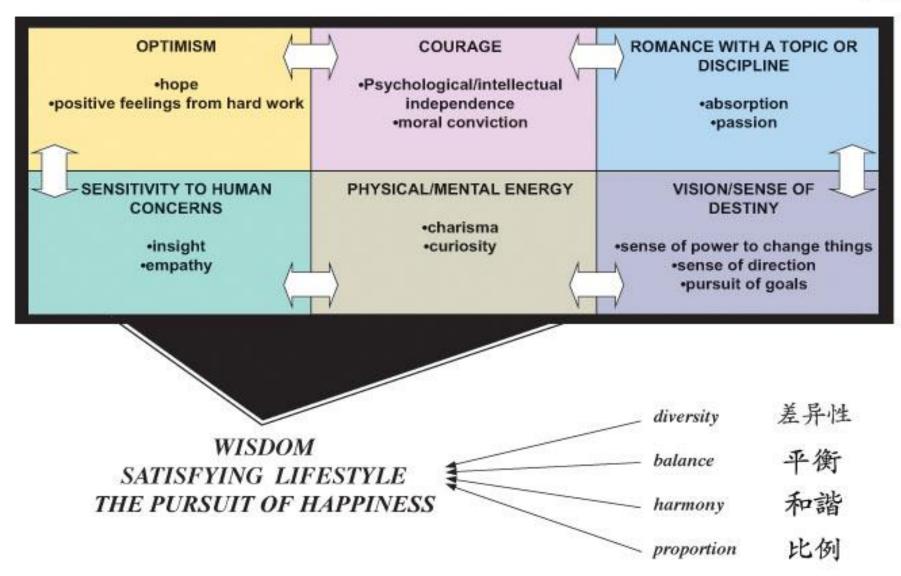
Leadership in a Changing World

Self-Actualized

Individual

#### OPERATION HOUNDSTOOTH





© Operation Houndstooth
The National Research Center on the Gifted and Talented
University of Connecticut
Joseph S. Renzulli, Rachel E. Sytsma, & Kristin B. Berman

#### **Instrument Development**

### Scale for Rating the Executive Functions of Young People

Joseph S. Renzulli Melissa S. Mitchell

**Action Orientation** 

**/** 

**Social Interactions** 

**Leadership** 

V

**Realistic Self-Assessment** 

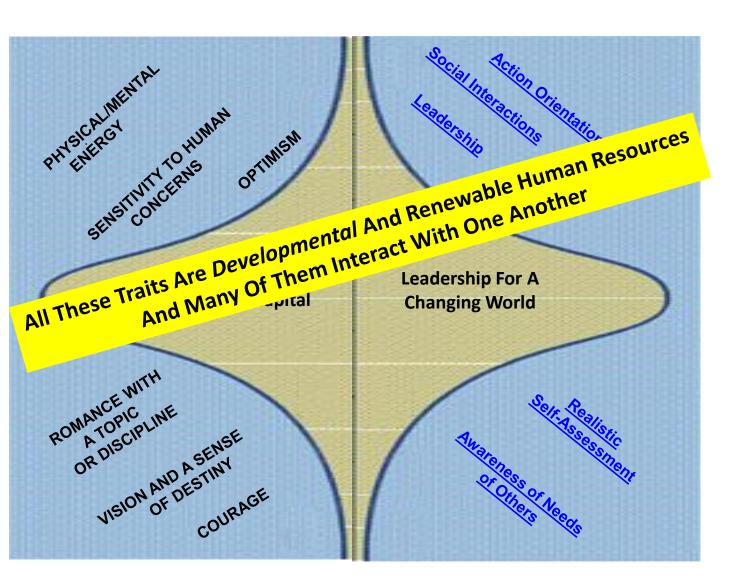
**V** 

**Awareness of Needs of Others** 





#### INTELLIGENCES OUTSIDE THE NORMAL CURVE





A good head and a good heart are always a formidable combination.

**Nelson Mandela** 



Michael participated in an **Enrichment Cluster entitled** Young Social Entrepreneurs, one of the components of the **Schoolwide Enrichment Program.** He negotiated a loan from the school principal to buy this machine. His goal was to buy hats and gloves for poor children.



What We
Ourlm
Our Locati
Doi
Start a NFTE Prog
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NFTE's mission is to provide

entrepreneurship education programs to

Our vision is that every young person

will find a pathway to prosperity.

young people from low-income communities.

Help NFTE

#### SPOTLIGHT ON...

NFTE School Profile: The Cultural Academy for the Arts and Sciences



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#### LATEST NEWS

OppenheimerFunds/NFTE National Youth Entrepreneurship Challenge 2009

NFTE Meets Arne Duncan at Aspen Ideas Festival

An inspiring story about the power of youth entrepreneurship education

NFTE Founder Co-Authors World Economic Forum Report on Entrepreneurship

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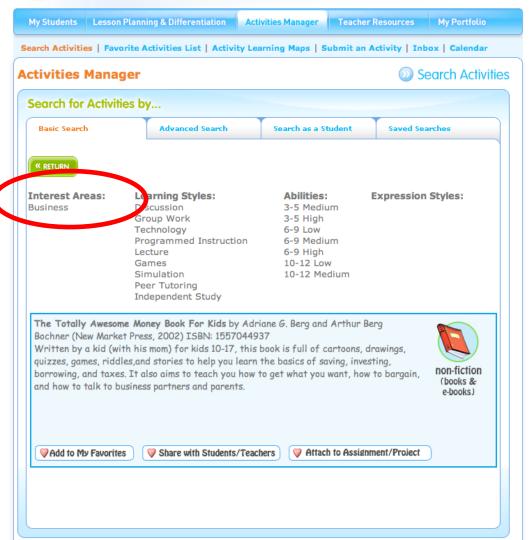
Empower young people to change their lives.

You can help!

Donate now....

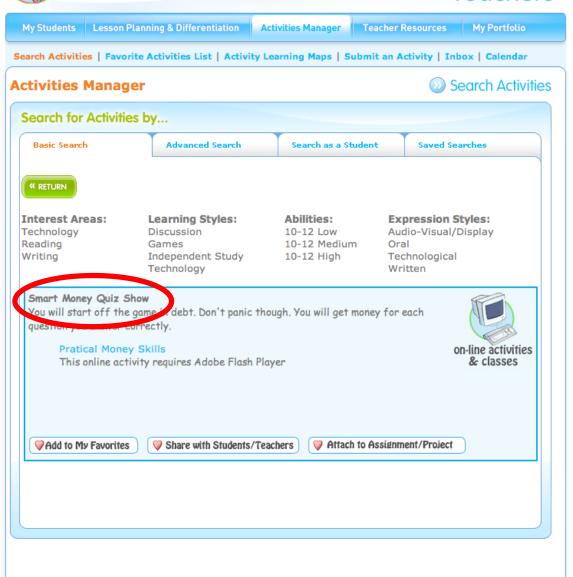


#### **Teachers**



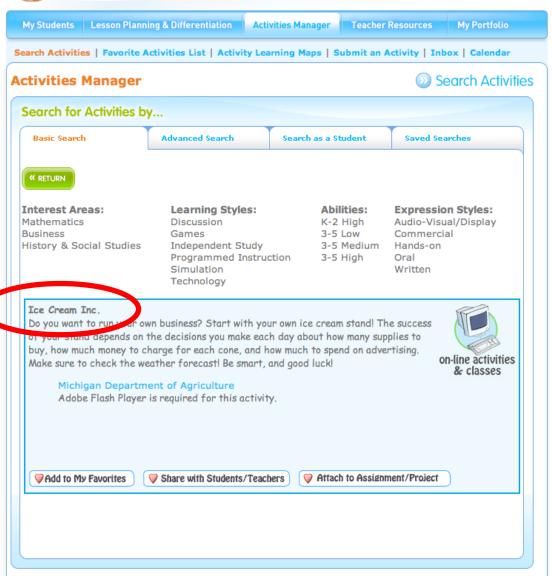


#### **Teachers**

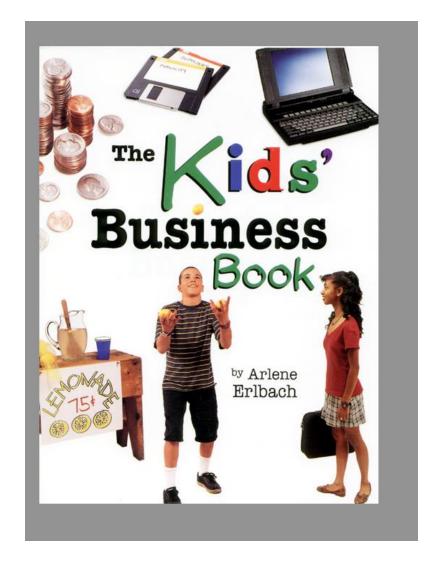


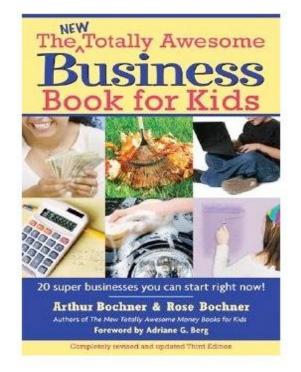


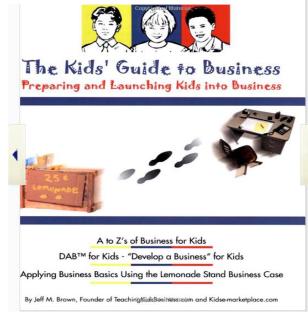
#### **Teachers**



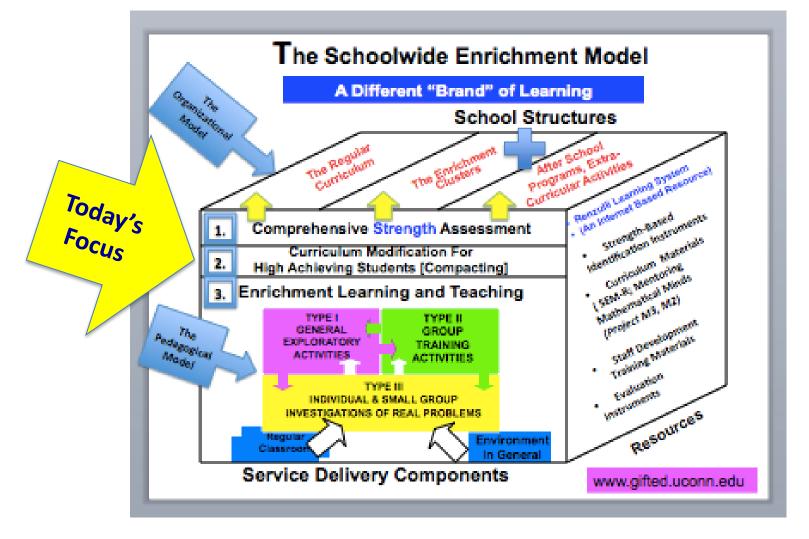
#### From the How-To Books Data Base at www.renzullilearning.com



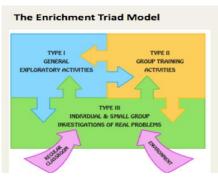




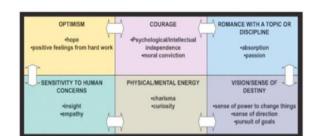








#### **Operation Houndstooth**



#### Leadership For a Changing World

**Action Orientation** 

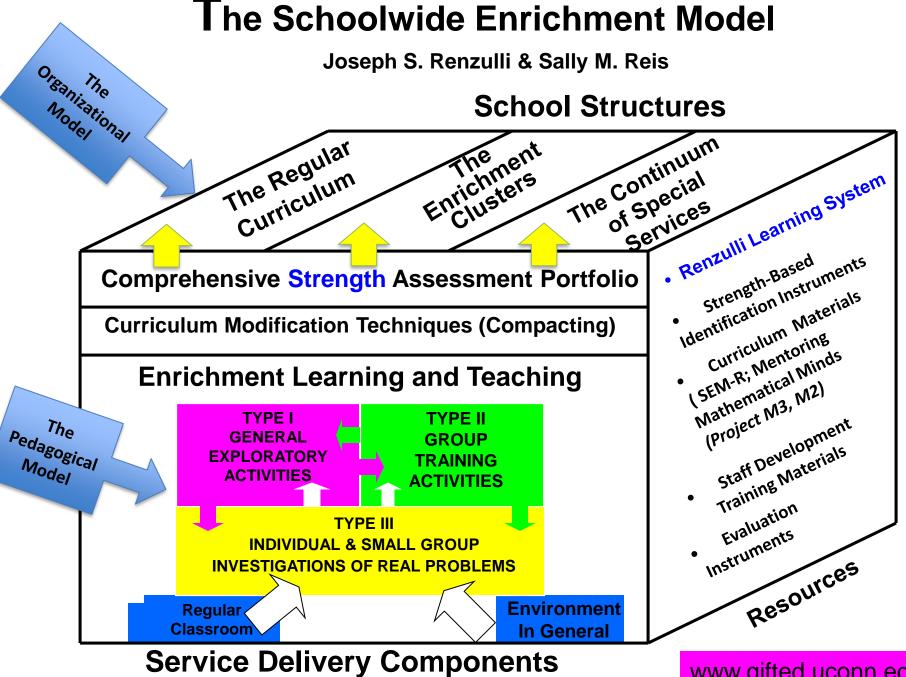
Social Interactions

Altruistic Leadership

Realistic Self-Assessment

Awareness of Needs of Others





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## How Does The Schoolwide Enrichment Model Differ From Other Approaches To Total Talent Development?

#### **Enrichment Oriented Learning Environments and Opportunities**

General
Enrichment
for All
Students



TYPE (I GROUP TRAINING ACTIVITIES Enrichment Clusters For All Students



#### For All Students and Special Interest Learning Groups

For Follow-Up

RECHARGON

EMIROMENT.

#### The Enrichment Triad Mo

INVESTIGATIONS OF REAL PROBLEMS

Advanced level opportunities for high ability and highly motivated students.

Curriculum Compacting For All High
Achieving Students
In Their Domain Specific Strength Area(s)

## Enjoyment



### Engagement



Enthusiasm For Learning

#### Why Are The 3 Es Important?





## What Do We Mean By Creative Productive Giftedness

**Examples of Type III Enrichment** 



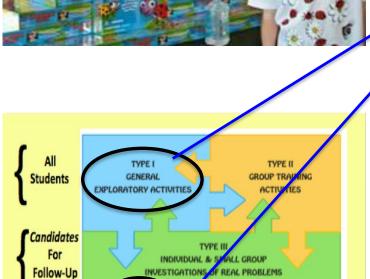
## What Is Creative/ Productive Giftedness?

#### Meet Brook and Kyle







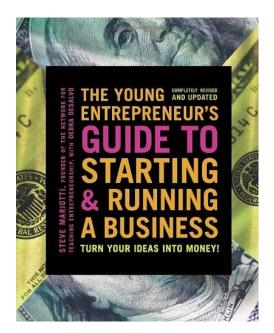


Kylie Copenhagen invented a board game about ladybugs for a school science project. Kyle's Profiler indicated that a favorite activity is playing board games with her family and friends.

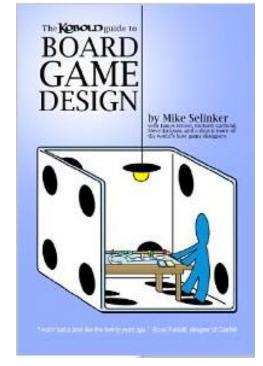
Kylie fell in love with ladybugs during a school science project. "In Mrs. Ditto's class I learned that ladybugs are the coolest thing around," says Kylie. "Since my friends liked them too, I invented a game about them. It's fun for me to know that other kids love my game too." Kylie receives an annual royalty payment for each game sold, and is well on her way to covering her college tuition.

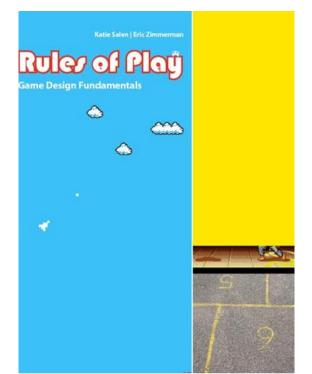
**Example of Type III Enrichment** 

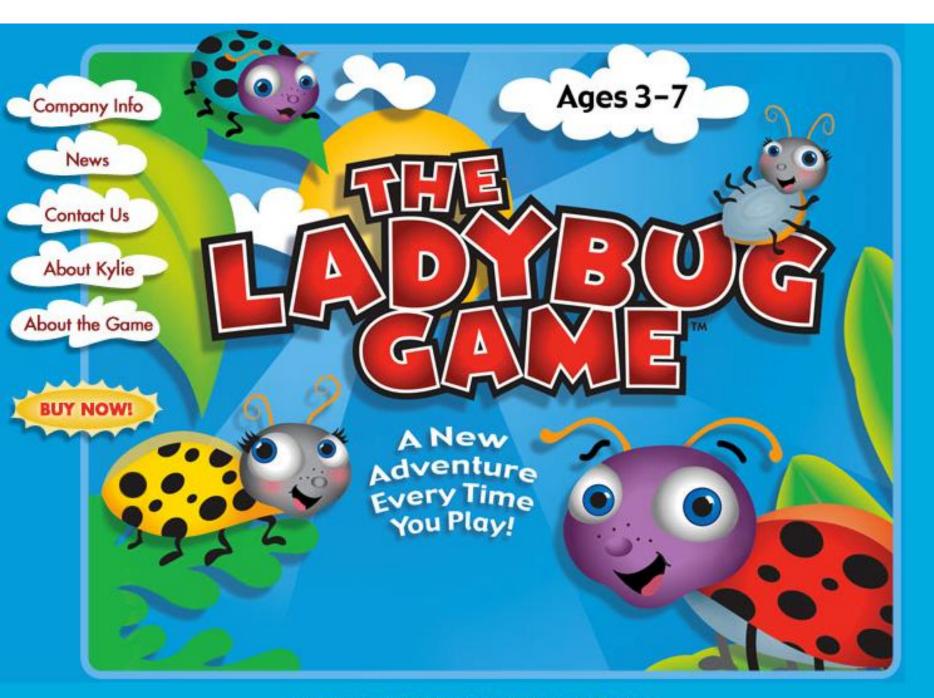
# Table Games: How to Make and Play Them Marran, Ray J.



## Type II: How-To Books

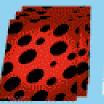




















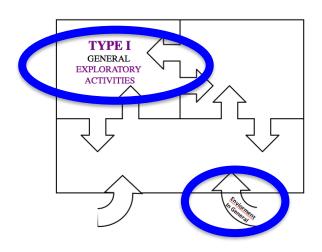
#### CONTENTS

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





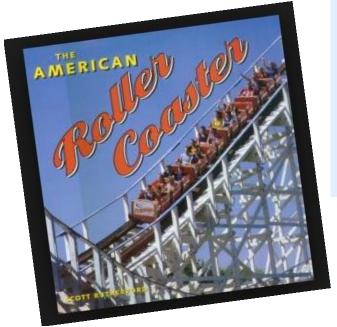
#### **Example of Type III Enrichment**

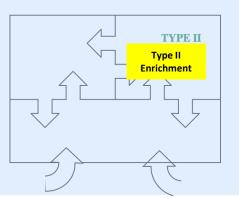
### An Example That Illustrates All Four of the Sub-Theories In Action

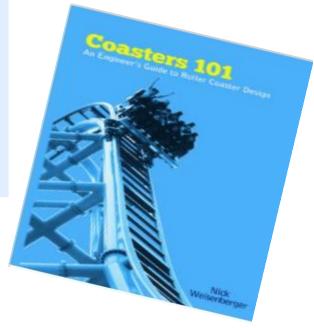
My name is Brooks McConnell. I am in the fifth grade at Norfeldt Elementary School in West Hartford, CT. Last fall I was watching The Katie Couric Show with my mom and noticed you and your son, Sam. I recall that Sam wanted to ride roller coasters but he couldn't because of his diseate, progeria. I condered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

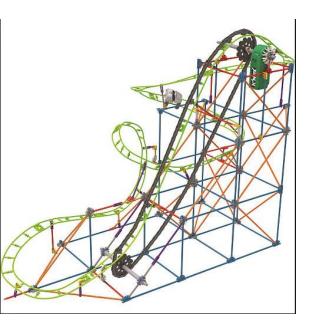


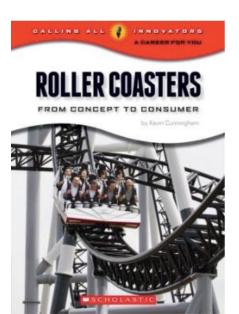
Sam



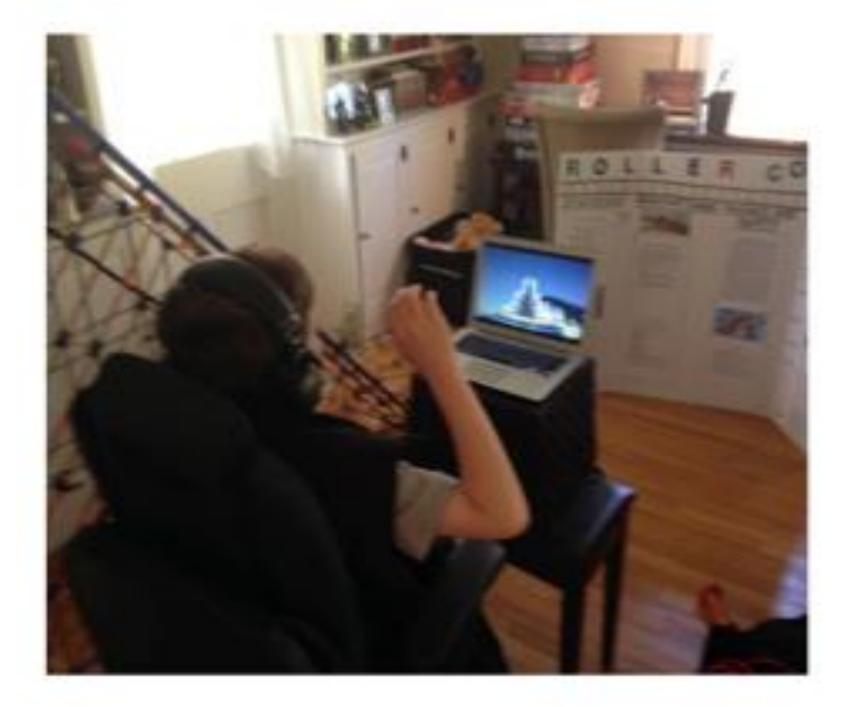


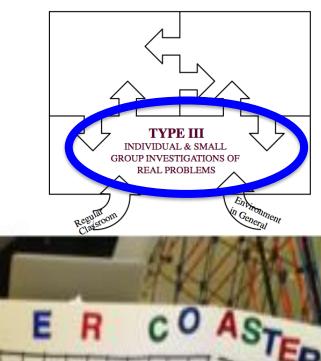




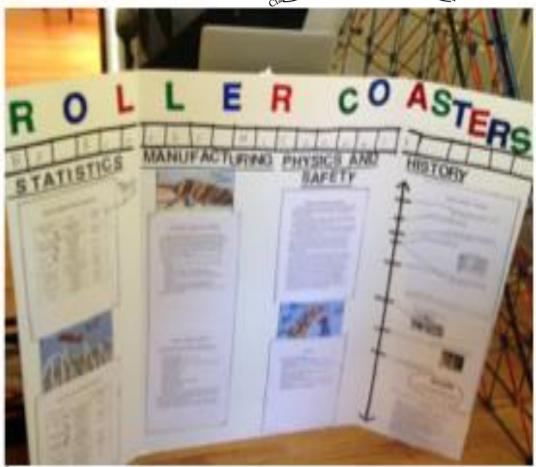












I have already sent the idea to three major roller coaster companies hoping they can expand on the idea. When I was searching the internet for your address so I could write to you, I heard about Sam's passing. My mom and I were so sorry to read that. I would like to thank you, and him, for being such 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,

TYPE III
INDIVIDUAL & MALL
GROUP INVESTIGATIONS OF
REAL PROBLEMS

Grandings

Grandings

Grandings

Brooks McConnell

# Continued

# Examples of Group Type III Enrichment Projects



#### **Example of Type III Enrichment From An Enrichment Cluster That Started With A Field Trip For All Students**



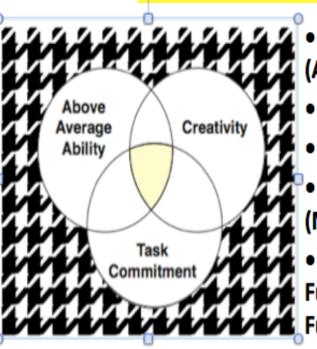
#### Example of High School Type III Enrichment

Carla's Students' Amazing Type III





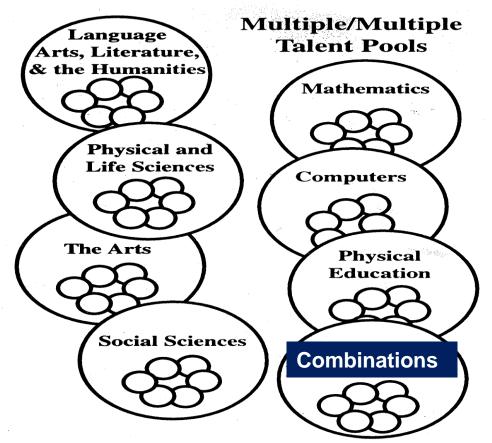
#### Comprehensive Strength Assessment



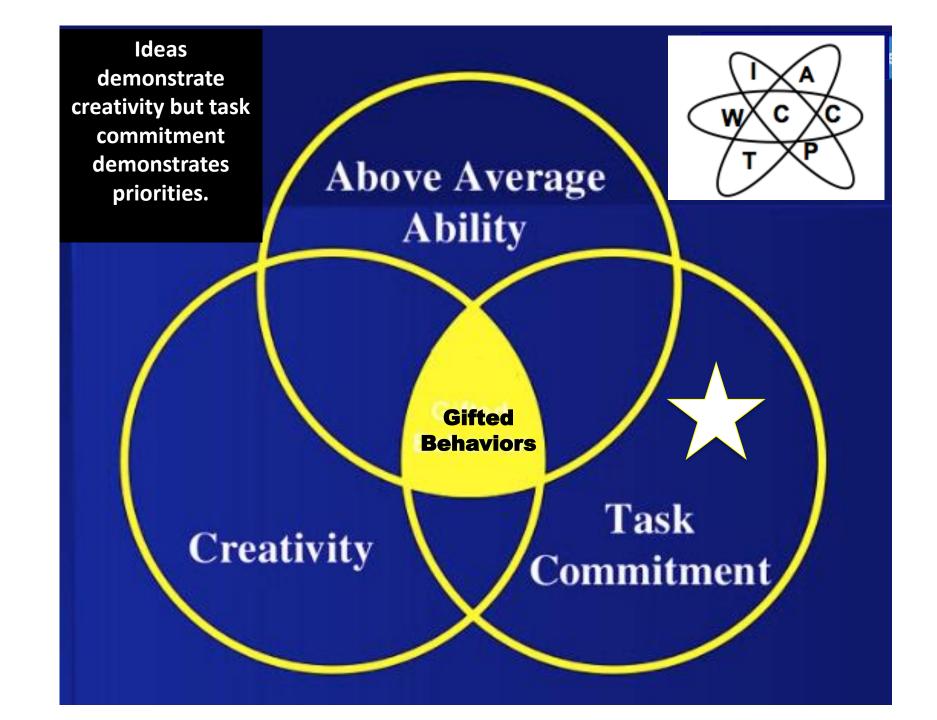
- Academic Strength Assessment (Achievement Tests + SRBCSS)
- Interest Assessment (I-A-L)
- Learning Styles Assessment (LSI)
- Expression Styles Assessment (My Way)
- Assessment of Co-cognitive
   Functions (Leadership & Executive
   Functions)

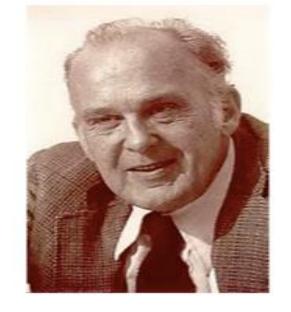
Why must we expand our Identification process?





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





It is better to have imprecise answers to the right questions than precise answers to the wrong questions.

**Donald Campbell** 

### **Types of Identification Information**

- 1. Status Information -- Anything you can put down on paper beforehand that tells you something about the student.
- 2. Action Information -- Things that you can only document when they are happening or after they happen.

Identification of what has been learned.

Identification of strength-based characteristics that will facilitate future learning [Interesrs, Curiosity, Creativity, Motivation, Learning Styles, Expression Style Preferences]

# Virgin

#### **Target Populations**

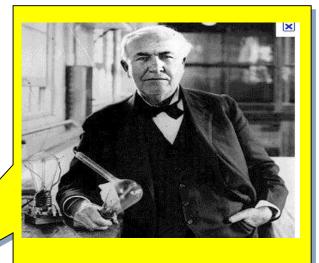
Top 5% Identified by
State Criteria
Group I

15-20% Identified by Achievement Levels and Non-Test Criteria

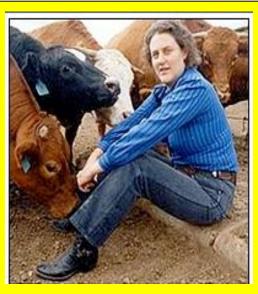
**Group II** 

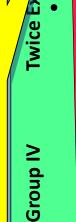
75-80% General Population











ional Students

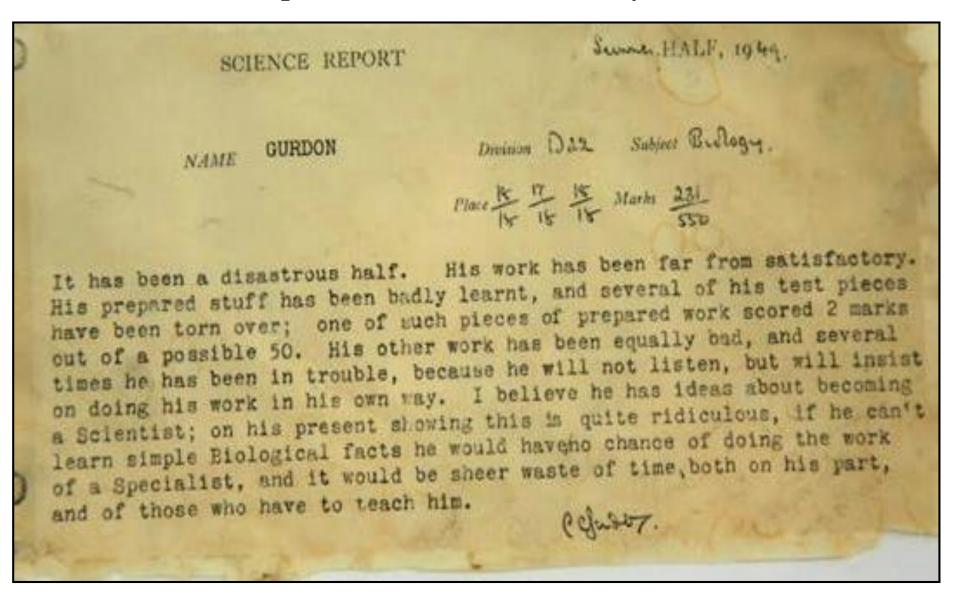
**Group III** 



Sir John Gurdon with the framed school report (Clara Molden)

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

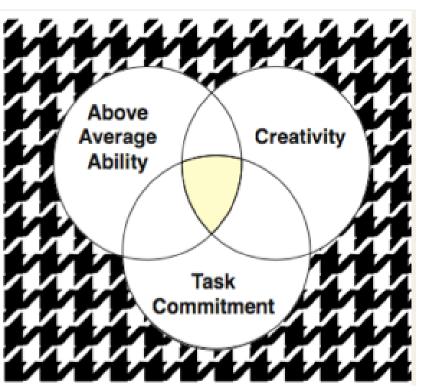
As a 15-year-old schoolboy John Gurdon was told that a career in science was "ridiculous." The following is a report by one of his teachers that he keeps over his desk to this day.



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.

#### 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)

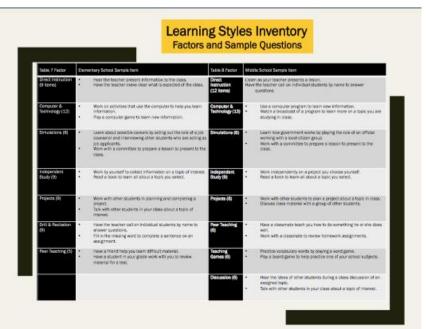
#### **Sample Questions**

**Middle Grade** 

**Interest-A-Lyzer** 

1.	Imagine that your class has decided to create its own Video Production  Company. Each person has been asked to sign up for his or her first, second or third choice for one of the jobs listed below. Mark									
	your first choice with a 1, second choice with a 2, and third choice with a 3.									
	Actor/Actress		0							
	Director		ĺ							
	Musician									
	Business Manage	•		Costume Designer						
	Computer Effects	Specialist		Scenery Designer						
	Prop Person			Light/Sound Person						
	Advertizing Agen	t		Camera Operator						
	Script Writer		111	Dencer						
2.	Imagine that you have be the general subject of you	come a famous ir book? Circle	euthor ( One.	of a well-known book. What is						
	Fine Arts	Business		Science						
	Writing	History		Social Action						
	Athletics	Mathematics	!							
	Performing Arts	Technology								
	What will it be about?									
	What would be a good title for your book?									

#### Sample Items From Other Instruments For Comprehensive Strength Assessment



#### **Parent Rating Scale**

My child will spend more time and energy than his/her age mates on a topic of his/her interest. (Joan is learning to program computers and spends every free minute writing code herself or reading about how to code on the Internet.)

My child is a "self-starter" who works well alone, needing few directions and little supervision. (After watching a YouTube video about musical instruments, Pedro began to make his own guitar from materials he found around the garage.)

#### Scale for Rating the Executive Functions of Young People

Joseph S. Renzulli
The University of Connecticut

Sample Items					
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					

#### Expression Styles Inventory

Factor	Item No.	Sample Items	Factor	Item No.	Sample Items
Computer	14	Designing an interactive computer project	Commercial	26	Marketing a product
Products (6 Items)	34	Designing a computer game	Products (6)	36	Marketing an idea
Service	57	Working to help others	Oral	32	Discussing my research
Products (6)	47	Collecting clothing or food to help others	Products (5)	52	Discussing ideas
Dramatization	28	Acting out a story	Manipulative	39	Constructing a working model
Products (7)	38	Performing a skit	Products (6)	59	Building a project
Artistic	3	Painting a picture	Musical	30	Playing a musical instrument
Products (6)	13	Drawing pictures for a book	Products (3)	40	Playing in a band
Audio-Visual	15	Filming & editing a television show	Vocal Music	20	Singing a rap or chant
Products (6)	55	Filming & editing a movie	Products (4)	10	Performing a song
Written Products (6)	31 51	Writing an essay Writing a report			

#### **Primary Grades Interest-A-Lyzer**

Click on the faces in yellow that tell how much you like DIRECTIONS: If you really like something a lot, click the If you do not like something a little. click the face that is frowning a LITTLE. face that has a BIG smile. If you do not like something at all. If you like something a little, click the face click the face that has a BIG frown. that smiles a LITTLE. If you are not sure, click the face that is NOT smiling. Think about your interests. Look at the pictures and words below and tell us how much you like each. Plays & Theater Reading **Mathematics** 

#### INDIVIDUAL EDUCATIONAL PROGRAMMING GUIDE

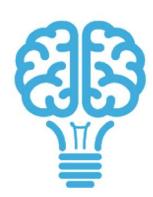
Strength - A - Lyzer

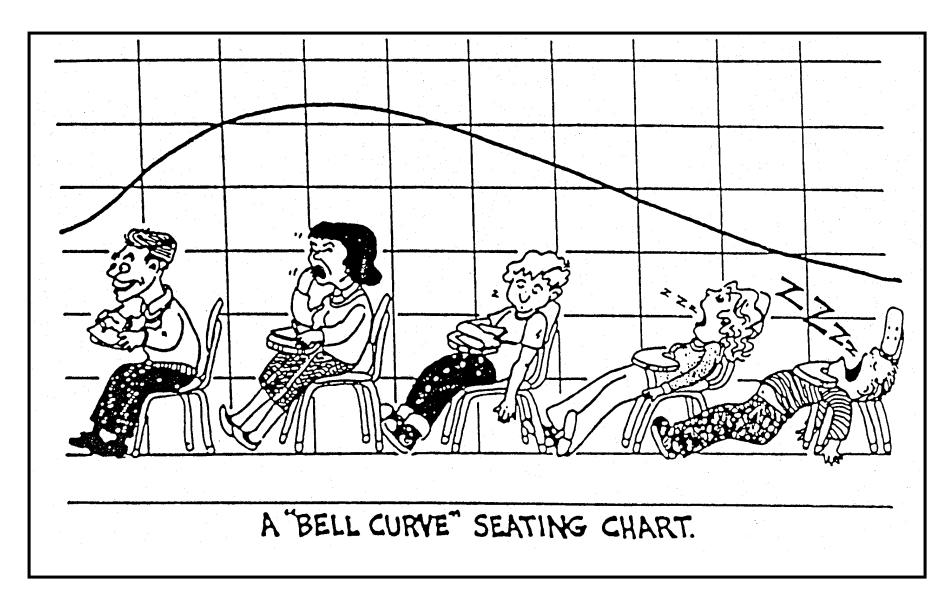
Prepared by: Joseph S. Renzulli Linda M. Smith

NAME_Joa	n Sutt	on				T	AGE 10				R(S)						nference Dates and P n Planning of IEP	ersons
			ITIES								RESTS				LEA	RNI	NG STYLES	
INTELLIGENCE - APTITUDE - CREATIVITY In the spaces below, enter the results of standardized test scores and circle all scores above the percentile.				As a result of student responses to the Interest-A-Lyzer or other interest assessment procedures, indicate the general area(s) in which levels of interest seem to be High, Average, and Low.						Enter the scores from the Learning Styles Inventory in the spaces below. Circle the highest area(s).								
Test				Score	Equiv.		HAL HAL						Learning Style Score Learning Style Score			Score		
-8	- 5	IQ	4: -	126		94	Fine Arts/Crafts	X			Managerial		X		Projects	4.2	Teaching Games	3.5
CTBS	C	omposit	e			97	Scientific/Technical		X		Business			X	Simulation	2.6	Independent Study	4.3
		Reading				93	Literary/Writing	X			Historical		Х		Drill and Recitation	3.0	Programmed Instruction	1.0
-22	90	Math				95	Political/Judicial	1000		X	Performing Arts		X		Peer Teaching	4.1	Lecture	2.0
	36						Mathematical	X			Other	Т			Discussion	3.5		
(C	54.0		1			1	Athletic		X		Other			1	Comments regarding	informa	observation about Learning	ng Styles
In the spaces below, enter the scores from the Scale for Rating Behavioral Characteristics of Superior Students. Circle unusually high scores.  Group Scale Score Mean Scale Score Mean				Group	particular topics, issues, or areas of study in which the student would like to do advanced level work. short story writing poetry						can also fit into group situations. She seems to adapt to the task at hand.							
(Learning)	28	1 10	Musical				mathematical p	uzz	des	an	d games							
Motivation	25		Dramatic											- 53				
(Creativity)	29		Comm.: P	recision			1 1000000000000000000000000000000000000	200	97076	SAVIVE:			4670	20020		garates (J.C.)		
Leadership	24		Comm.: E	xpressive	9		A STATE OF THE STA		1						The second secon	the state of the state of the state of	NT INFORMATION	
Artistic	1		Planning				In this space below summarize (1) strengths, interests, and learning styles, (2) areas in which remedial work or additional skill building appears to be warranted, and (3) specific higher mental processes and advanced skills that should be developed.											
Enter final grad			AR GRA	DES			Joanie is extrem	nel	y st	tron	g in all basic sk	ills a	rea	ıs ar	nd shows above a	verage	ability as an indepen	
Reading	A	A	Art		A	A	100 mm (100 mm										erature. Joanie inter-	
Mathematics	A		Foreign La	nguage		377	well with her p	eers	s ai	nd p	participates activ	ely i	in g	grou	p situations. At t	imes th	is can be a problem	for
Language Arts	A		Other	33-			her, as she will	"go	o a	long	g" with the group	p rat	her	tha	in pursue her own	interes	sts.	
Social Studies	B+		Other									and the same						
Science	A	A																
Music	В	A																

## **Curriculum Compacting**

A Systematic Approach For Adjusting The For High Achieving Students





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

#### What is Differentiation?

Matching the given content area with a student's interests, abilities, and learning styles through various instructional strategies!

#### WHY?

Students already know (or could master at a fraction of a time) much of their regular curriculum before learning it.



#### Goals of Compacting

- Create a challenging learning environment in the classroom and the enrichment programn for all children!
- Define objectives and guarantee proficiency in basic curriculum.
- Find time for alternative learning activities based on advanced content and individual student interest.

#### Some Differentiation Strategies

**Curriculum Compacting Tiered Assignments Alternate Choice Assignments Enrichment and Acceleration Higher level Questions Grouping Options Independent Study and Research Studies Competitions and Mentorships** 

#### **Curriculum Modification For High Achieving Students**

Individual Educational Programming Guide Prepared by Joseph S. Renzull Unda M. Smith								
Name:	Age:	Teacher(s):		Individual Conference Dates and Persons Participating in Planning of IEP				
School:	Grade:	Parent(s):						
Curriculum Areas to Be Considered for Compacting 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.	Describe activitie	r Compacting Basic Material is that will be used to guarantee y in basic curricular areas.	Describe acti advanced-leve	n and/or Enrichment Activities vities that will be used to provide el learning experiences in each area the regular curriculum.				
Namelt		rove It		nange It				
Mo	Y							
Check here if additional information is recorded on the reverse side.								

#### INDIVIDUAL EDUCATIONAL PROGRAMMING GUIDE The Compactor

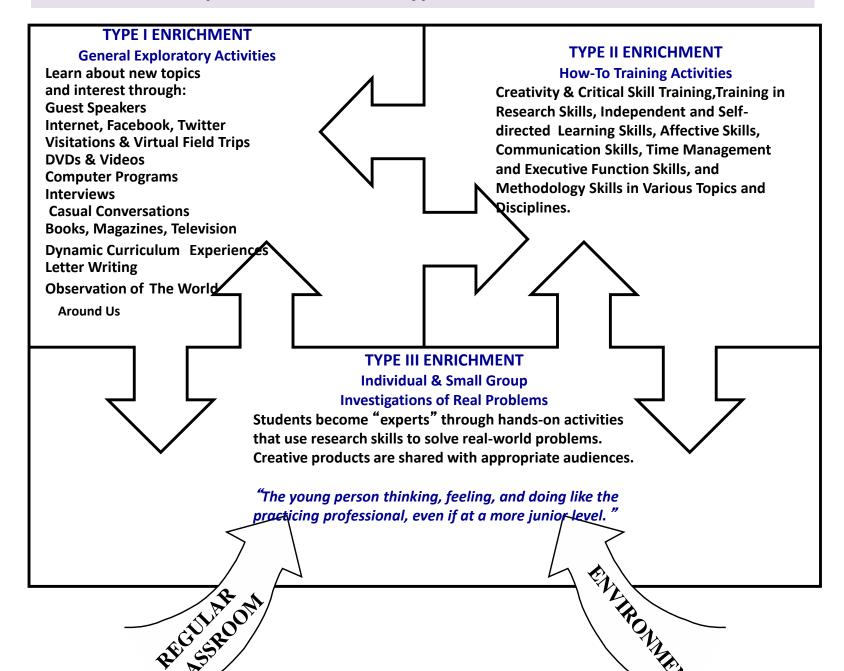
Prepared by: Joseph S. Renzulli Linda M. Smith

NAMEAlison	AGE 6 TEACHER(S)	Individual Conference Dates And Persons Participating in Planning Of IEP
SCHOOL	GRADE 1 PARENT(S)	
CURRICULUM AREAS TO BE CONSIDERED FOR COMPACTING Provide a brief description of pasic material to be covered during this marking period and the assessment information or evidence that suggests the need for compacting.	PROCEDURES FOR COMPACTING BASIC  MATERIAL Describe activities that will be used to guarantee proficiency in basic curricular areas.	ACCELERATION AND/OR ENRICHMENT ACTIVITIES Describe activities that will be used to provide advanced level learning experiences in each area of the regular curriculum.
Holt Basic Reading Series - Levels 3-6, as determined by Holt level tests. Alison has mastered most of the comprehension and phonetic objectives introduced in these levels.  Individualized Spelling Program by Economy - Alison has mastered Levels 1-4. She will be placed in Level 5.	Capital letters and periods 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.  Contractions - Level 7 Teacher's Manual pages 81, 119, 175, 216, 217, and 255-256. Check proficiency by Holt Level 7 test (Contractions).  Change y to i and add es/and other plural forms: Level	Classroom 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 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).
Math - 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.	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.  Compound Words - Level 9 Teacher's Manual pages	Talcott Mt. Science Center Alison will participate in Science programs presented in school—Crystals, weather, forest life, aerial photos and mountains, snow, planets and constellations.
	77, 267. Check for proficiency - Level 9 test page 9 (compound words).  Pronouns - Level 9 Teacher's Manual page 325.	TAC Resource Room Critical thinking skills, creative thinking skills, creative problem solving, critical problem solving, Type III independent study.
	Check for proficiency - Level 9 test (language skills) page 9.	

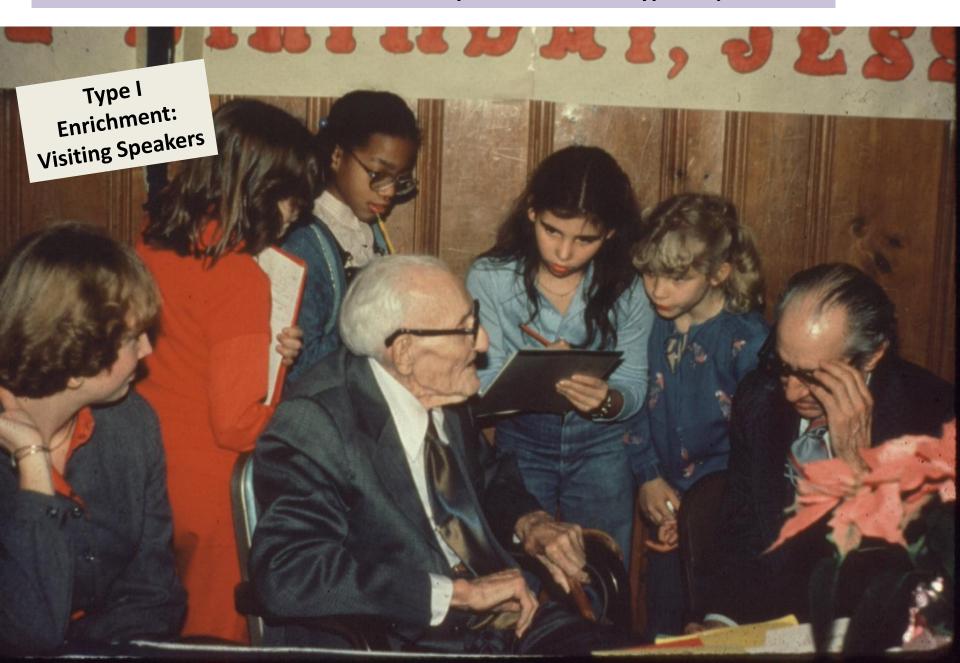


#### **Practical Suggestions For Developing Creative/Productive Giftedness Using The Schoolwide Enrichment Model**

#### **Learn How to Implement The Three Types Of Enrichment In the Triad Model**



#### Have the Schoolwide enrichment Team Explore all Possible Type I Experiences





Type I Enrichment







#### **Virtual Field Trips Raise Test Scores**

A scientifically designed research study returned evidence that web use, carefully designed and integrated into the curriculum, can raise student achievement. Students at two Maryland middle schools who participated in three online field trips scored higher on a national standardized reading comprehension test than those who used traditional learning methods alone.

Source: U.S. Newswire

http://news.techlearning.com/cgi-bin4/DM/y/envL0FKoBI0E2V0DPJk0E3



## The Media A Great source of Type Is



#### **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?





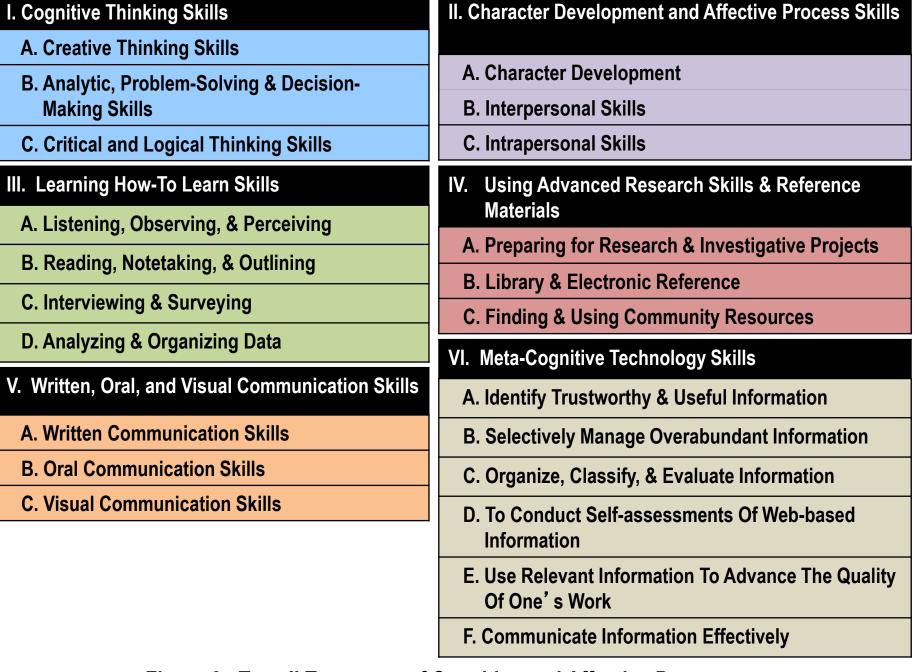
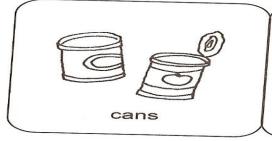


Figure 3. Type II Taxonomy of Cognitive and Affective Processes

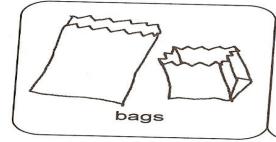
#### 17 Recycling (b)

What could you make out of these items?



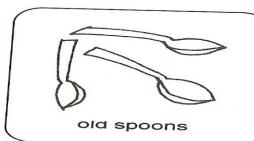








Creative Examples From Students

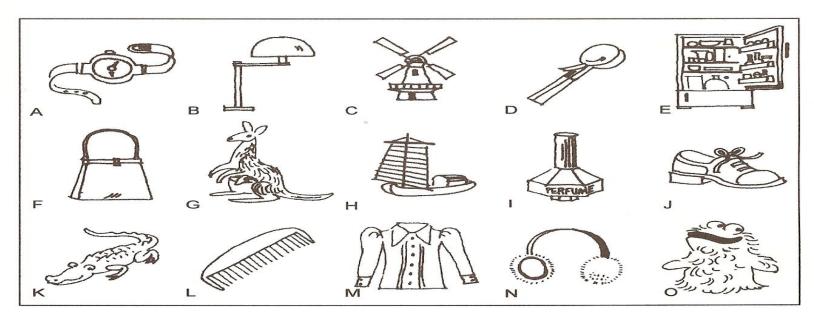




#### Figure Families (b)

Type II
Enrichment

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	Figures
furry things	G, N, O

#### 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
erybody runs away when they see me coming.
ay see the coming.

# **Type III Enrichment**

Individual and Small Group Investigations
Of Real Problems

The young person thinking, feeling, and doing like the acting practicing professional, even if at a more junior level than the adult scientist,



What makes a problem real?

**Type III Enrichment:** Learn The Essential Steps For Being A Coach or Mentor (The "Guide-On-The Side")

# What Makes a Problem Real?

- 1. Personalization of Interest
- 2. Use of Authentic Methodology

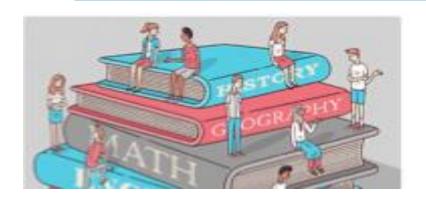




"...the young person thinking, feeling, and doing like the practicing professional, even if at a more junior level than adult professionals."



## The Importance of J-I-T Knowledge



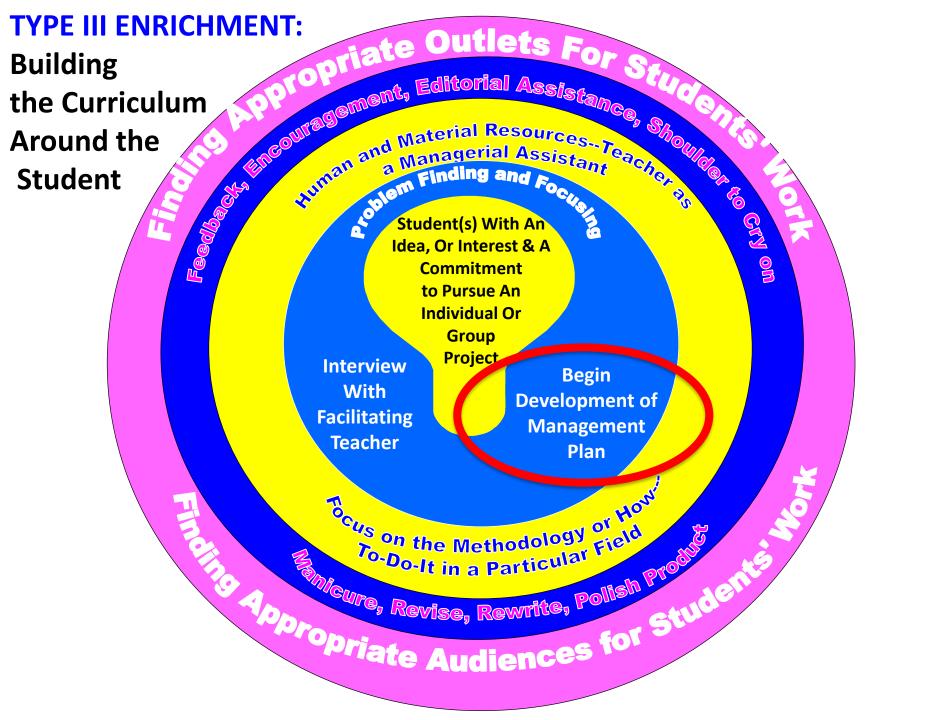


# **To-Be-Presented Knowledge**

### Just-In-Time Knowledge Knowledge

Prescribed and required curriculum based on standards developed by ministry's of education. T-B-P knowledge is generally related to improving performance on standardized achievement tests.

Knowledge that you only go and get when needed. It addresses a problem or project that a student(s) is working on. This type of knowledge is exactly what practicing professionals mainly use in their work.



#### MANAGEMENT PLAN FOR INDIVIDUAL AND SMALL GROUP INVESTIGATIONS

(Actual Size: 11" x 17")

	· · · · · · · · · · · · · · · · · · ·			Prepared by: Joseph S. Renzulli Linda H. Smith
NAME	GRADE		Beginning Date	Estimated Ending Date
TEACHER	CHER SCHOO		Progress Reports Due on Following Dates	
Social Studies	(Check all that apply) Personal and Science Social Development Music Other (Specify) Art Other (Specify)			cription of the problem that you estigation? What do you hope to
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?  1	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 vehicle (journals, conferences, art shows, etc.) are typically used by professionals in this field?	& addresses of persons who it books that are available in t	might provide assistance in attachis area of study. List other resc camera, tape recorder, question	DACTIVITIES List the names cking this problem. List the how-to-do- burces (films, collections, exhibits, etc.) naire, etc.). Keep continuous record of
GETTING STARTED What are the first investigation? What types of information or data whow can it be gathered, classified, and presented information or data, where is it located and how can be considered in the constant of t	will be needed to solve the problem? If "raw data," ? If you plan to use already categorized			

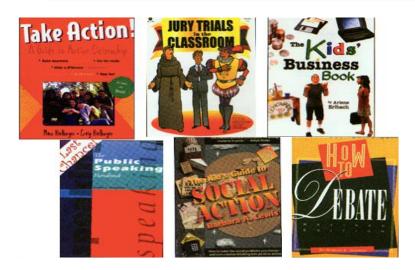
#### MANAGEMENT PLAN FOR INDIVIDUAL AND SMALL GROUP INVESTIGATIONS

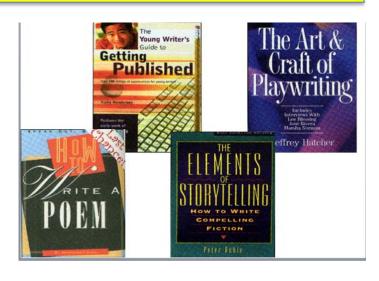
	NAME _mall group		GRADE	4-6	Beginning Date	Estimated Ending Date
	TEACHER ( IN M. )		SCHOOL Ele	nville Central School	Progress Reports	otes —————
		Science — Personal D		What do you hope to	find out ?	a brief description of the problem objectives of your investigation?  what happened to it?  local architecture. From the past is destroyed.
	Archatology	INTENDED PRODU	JCT(S) AND	METHODOLOGIC	to present Victorian struct	AND ACTIVITIES to the names &
	interested in the findings? List the organized groups (clubs, societies, teams) at the local, regional, state, and notional levels. What are the names and addresses of contact persons in these groups? When and where do they meet?	communication of the communica	(s) ? What outlet	exhibits, etc. ) and special Keep a continuous record	il oble in this area of study. I of all activities that are a p	
	2 Town historian - Katherine Termilliger  3 Ulster County Historical Society	field?  C. Survey of asisting Victo Elbenille. Present to Elle For their records. Public houspapers.  2. Presentation to Village (Maps - Photo Port Folio	ih results in local  Board of Trustee  io - List of	2. How to Do It books  - Wreng & Malloy. As  - Bulleck, Orin M. J.  - Hammond, Philip C.  - Hale, Richard W. M.	merical Forgotten Architen Restoration Manual Archaelagial Tealingues for 1	heiture. New Yark: Pantheon Books, 1976. Norwalk, Cana.: Silvernine Publishers, Inc., Imateurs. Princeton, N.J.: D. Van Nostrand G., Iha Amatour Historian. Nashville, Tens: Amatou
	4. Victorian Society in America  5. National Trust for Historia	Renovation Possibilities 3. Display photos at Eller Square in August. 4. Design and build a m Victorian living room, us and objects discovered in Display at Ellenville Pub	mulla Art in the	3. Other resources - p Bulktin, Historic Pre House Journal, fres Collections - private of Autoque Shapes and	eriodicals — Petersen <sup>3</sup> . N coervation, Journal of the ervation Neum. and public flea markats.	lagazine, Godey's Ladies Book, Antiques, Ap Society of Architectural Historians, The (
	GETTING STARTED What are the investigation? What types of information or data, where is it lo	rst steps you should take to a will be needed to solve the and presented? If you plan i crates and how can you abto	to begin this problem? If to use already in what you need?	1	ictorian Glass nouses - Roosevelt Home	at Hyde Park, N.Y. , Vanderbilt Mans
1. Letters to Preservation Information Sources, Preservation Funding Sources, each of the intended audiences (Outline our objectives, ask for assistance)  2. Obtain maps from Village Clerk's Office, Town Clark's Office, U.S. Geologica & Survey (get recent maps, and any available old maps dating from 1830 - to present.)  3. Locate existing Victorian structures - Map them on a recent map. Key this map to a chant listing current addresses, present owners, conclition.  Locate and Map Victorian structures existing 100 years ago. Indicate on map those structures offil in existence.			- 35 mm. camera, tripod, telephoto lans - black-and-white film (Plus-X and Tri-X) - derkroom facilities and equipment - telescope and binoculars - tape recorder			
	Whit town historian with a tape record	der. Ask about previous si Ask for personal recollect	ions. Ask about	11		

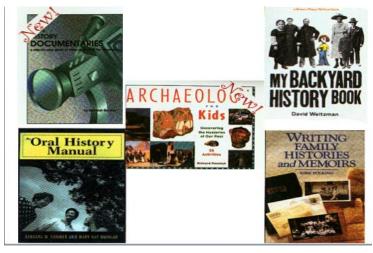
This form is bosed on a model for individual and small group investigations developed by Joseph S. Renzulli. A complete description of the model can be found in: The Enrichment Triad Model: A Guide For Developing Defensible Programs For The Gifted And Talented. — Creative Learning Press.

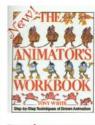
parsons to interview.

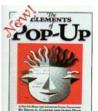
# Gather A Collection of How To Books For Your Library



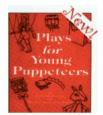












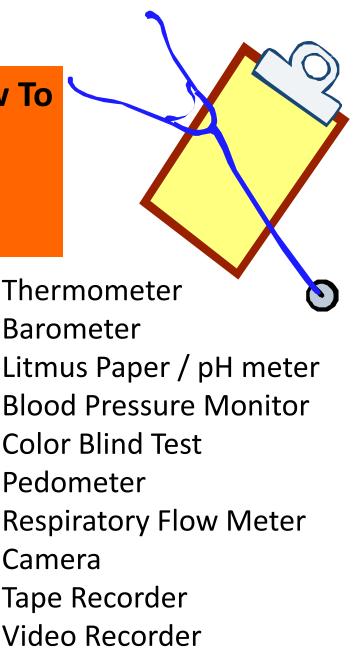




# Teach Students How To Use Data Gathering Instruments

Interview
Questionnaire
Rating Scale
Observation Record
Sociometric Device
Salt Analyzer
Metal Detector
Dissecting Kit
Biofeedback Monitor

Maze



Water Test Kit Oxygen Analyzer Magnifier Microscope Telescope Eye Chart Scale Ruler Tape Measure Voltmeter Amp Meter Ohm Meter Light Meter Sound Meter Spectroscope

#### **Type II Enrichment**

(Group Training Activities In Research Skills)

**Teach Students How To Use Data Gathering Instruments** 

Ask questions about what they might be interested in investigating after they have learned how to use the instrument(s)

Students studied changes in temperature and blood pressure after engaging in various types of physical activity











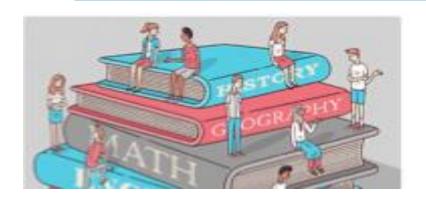






# Using Technology To Find Resources For Differentiation

## The Importance of J-I-T Knowledge





# **To-Be-Presented Knowledge**

### Just-In-Time Knowledge Knowledge

Prescribed and required curriculum based on standards developed by ministry's of education. T-B-P knowledge is generally related to improving performance on standardized achievement tests.

Knowledge that you only go and get when needed. It addresses a problem or project that a student(s) is working on. This type of knowledge is exactly what practicing professionals mainly use in their work.



# Individualized Strength Assessment

- Interests
- Learning Styles
- Preferred Modes Of Expression
- Achievement Levels

# Renzulli Learning Data Bases



Rural Low SES High Achiever

Print!

#### Student Profile

#### This profile is for: Valerie

Valerie is a seventh grade student who has special interests and abilities in school. She described her grades as above average in math, above average in science, above average in reading, and above average in brudies. She seems to have several areas of interest. Her **primary interest appears to be in writing**. She seems to enjoy writing, and should have opportunities to develop skills in writing in a variety of seems as fiction and non-fiction, poetry, and journalism.

Valerie's **second area of interest appears to be a performing arts**. See really enjoys various types of performing arts, such as music, dance or drama and management of the stage, or design sets!

Valerie's **third area of interest appears to e in athletics.** e seems to like physical activity and may be interested in learning about sports, nutrition, physical arrapy, or sports medicine.

Valerie also has specific preferred instructional styles. Learning or instructional styles are the ways students like to learn and the strategies parents and teachers use to help them learn. Valerie has very clearly defined learning preferences. Her **preferred instructional style s through technology** to helps her to learn by playing games or participating in activities with cards, beautique, or even electronic games. These activities can be sumplified individually, in small groups of students, or in a whole class of students. Valerie also er by simulations that help her to learn content and skills through role-playing people or events. Valerie also kes acting, or preter ing to be a character, and may like to study history by participating in simulations. For each, the learn Roosevelt during World War II.

Valerie also has a preferred product style. That is, she has certain kinds of products that she likes to complete, der **first product choice is dramatic**. She enjoys participating in the atrical performances, such as acting and the playing Her second about the product style is musical. She njoys list using playing, and/or thinking about various forms of music. Valerie's **third choice of product style is written**, as she enjoys writing articles, stories, or other types of written products.

As Valerie has a chance to consider some of her choices and think about what she really enjoys doing, it is our hope that these opportunities will enable her to fully develop her interests through the variety of exploratory activities in the Renzulli Learning System database. When she takes a virtual field trip to a museum, interviews a favorite author on the web, or explores an historical site on-line, she will be learning to further explore her interests and learning styles. These kinds of exploratory activities can introduce Valerie to new ideas and experiences and let her explore many possible interests.

**Interests** 

Learning Styles

Expression Styles

#### A Renzulli Learning Systems Interest Assessment Example...



Oi, sou Stickles e aluna do 6º ano.

Return

Print!

#### Dieses Profil ist für: Jessica Schmidt

Jessica ist eine Schülerin der 8. Klasse welche spezielle Talente und Fähigkeiten hat. Sie beschreibt ihre Noten in Mathematik in als überdurchschnittlich, in Naturwissenschaft als durchschnittlich und in Literatur als überdurchschittlich. Sie scheint verschiedene Interessengebiete zu haben. Ihr hauptsächliches Interssengebiet schein im Bereich Lesen zu sein, da sie am Lesen von Romanen, Geschichten und Gedichten sowie anderer Literatur interessiert zu sein scheint.

Ihr zweites Interssengebiet schein im Bereich Schauspielerei zu sein. Sie interessiert sich sehr für verschiedene Arten von darstellenden Künsten, so wie Musik, Tanz oder Schauspiel und könnte Spaß daran haben, selber zu schauspielern oder eine Aufführung zu leiten oder die Kulisse zu designen.

Interssengebiet

Ihr drittes Interessengebiet scheint im Bereich Fremdsprachen zu sein, da sie daran interssiert zu sein scheint, durch das reisen andere Sprachen zu lernen und andere Kulturen kennenzulernen.

Jessica hat auch bevorzugte Lernmethoden. Lernmethoden beschreiben die Art und Weise, wie ein Schüler bevorzugt zu lernen und welche Strategien Eltern und Lehrer nutzen können, um ihr dabei zu helfen. Jessica hat sehr klare Präferenzen wie sie gerne lernt. Ihre **bevorzugte Lernmethode** ist das lernen durch **Lernspiele**. Diese lassen sie spielerisch Stoff lernen in dem sie Gesellschafts- oder Kartenspiele oder sogar elektronische Spiele spielt. Diese Aktivitäten können entweder alleine, in kleinen Gruppen oder in der gesamten Klasse ausgeführt werden. Ihre zweite Wahl bezüglich der **Lernmethode ist Simulationen**. Diese helfen ihr Stoff und Fähigkeiten durch Rollenspiele zu lernen. Jessica mag es auch zu schaupielern oder sich vorzustllen ein Charakter/Person zu sein und mag es vielleicht so über geschichtliches Geschehen zu lernen. Zum Beispiel könnnte sie die Rede von John F. Kennedy, in der er den berühmten Satz "Ich bin ein Berliner" sagte, nachspielen. Jessica gefällt es auch mit Technologie zu lernen welche ihr hilft durch interaktive Multimedia Geräte und dem Internet Stoff zu lernen.



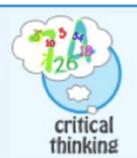
Jessica hat ebenfalls einen bevorzugten Lernstyle. Ihre **erste Wahl bezüglich des Lernstyles** ist **schauspielerisch.**Sie nimmt gerne an Aufführungen teil (z. B. Schauspielerei oder Rollenspiele). Ihre **zweite Wahl bezüglich des Lernstyles** ist musikalisch. Sie hört und spielt gerne Musik und/oder denkt gerne über verschidene Formen von Musik nach. Ihre dritte Wahl bezüglich **Lernstyles schriftlich**, da sie gerne Artikel, Geschichten und andere Dinge schreibt.



Jessica hat die Möglichkeit manche ihrer Auswahlmöglichkeiten zu berücksichtigen und darüber nachzudenken, was sie gerne tut. Es ist unsere Hoffnung, dass diese Möglichkeiten sie befähigen ihre Interessen durch die Benutzung des Renzulli Learning Systems vollständig zu entwickeln. Wenn sie eine virtuelle Tour durch ein Museum unternimmt, einen lieblings Autor online interviewt oder eine historische Stätte online erkundet wird sie lernen ihre Interessen und Lernmethoden weiter zu erforschen. Diese Art von Erforschungen können Jessica neue Ideen und Erfahrungen näherbringen und lassen sie weitere mögliche Interessen entdecken.

#### Las Torres de la Fruta (Botanical, 1999 - 2010)

¿Te gustan los juegos de lógica? ¿Te gusta pensar? ¡Este es el juego para ti! Utiliza tu lógica para mover las cajas de fruta lo más rápido posible y en tan pocos movimientos como sea posible.

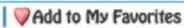


#### Botanical

Se require Adobe Flash Player.



Rate it! Self Assessment Add to My Favorites



#### Multiplicación de Binomios (Utah State University, © 1999-2010)

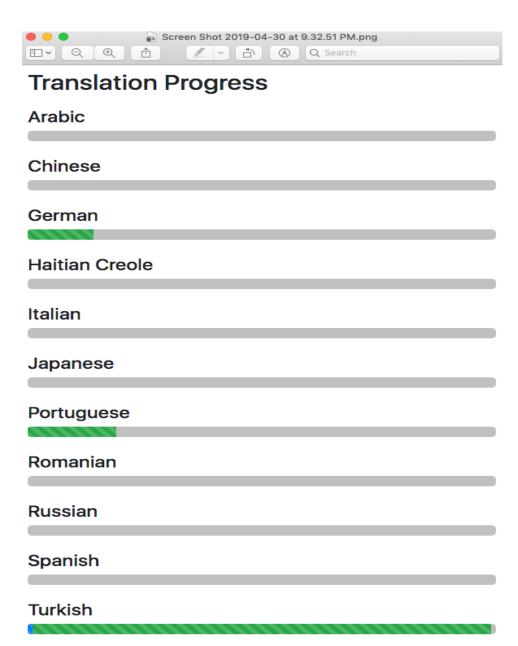
¿Has trabajado con un gráfico por el red en línea? ¿Sabes multiplicar los binomios? ¡Este sitio te enseñará los dos! Trabaja con ejercicios de multiplicar los binomios por manipular los coordinados x e y. Haz clic por el botón a la derecha para presentar más metas adicionales.



Biblioteca Nacional de Manipuladores Virtuales Se requiere Java.



Rate it! Self Assessment WAdd to My Favorites





#### **Cebeci Test of Creativity (CTC)**

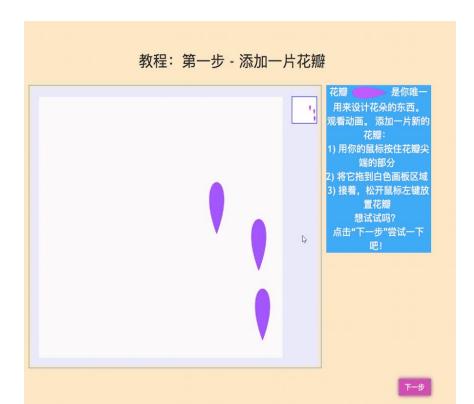


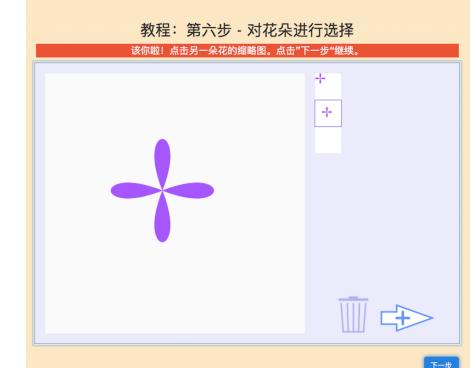
Renzulli Learning with SEM



www.renzullilearning.com

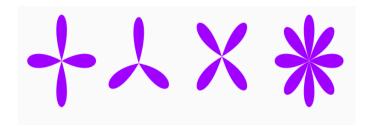


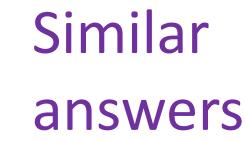


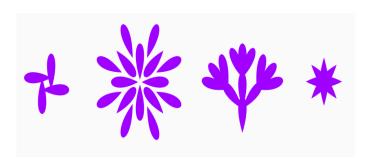


# Examples Flexibility

Difference of the responses



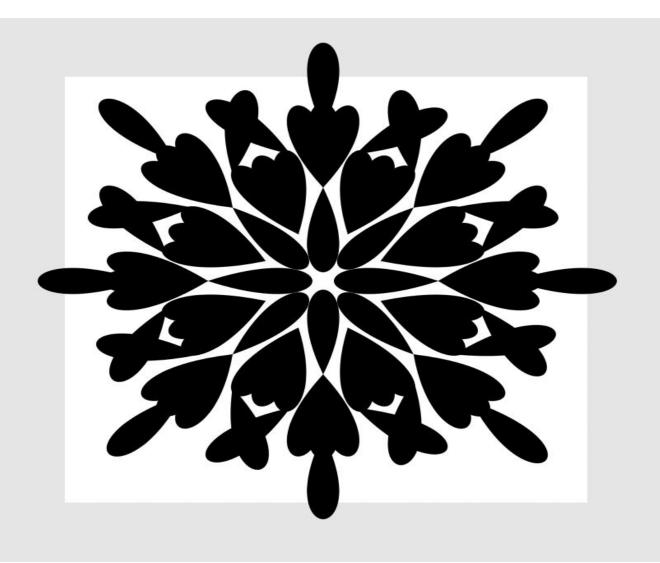




More various

VS

RenzulliLearning.com



# The Role Of Technology In Infusion, Differentiation, And Jazzing Up The Regular Curriculum



# **Two Quick Examples**

1. Unit on the U. S. Constitution

2. Unit on Ancient Egypt

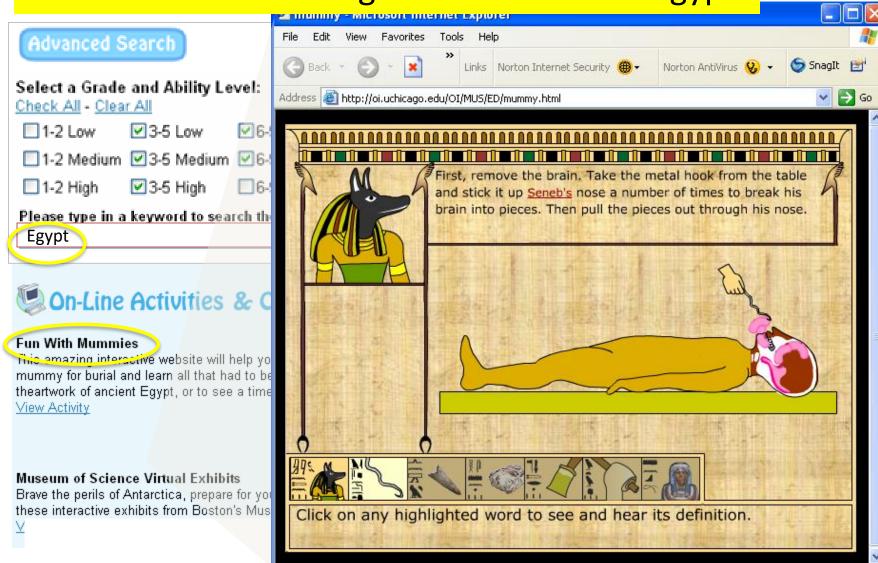
# Use Infusion To Add Enrichment Activities To Prescribrd Curriculum

# How Infusion Works





Teacher Use – Teaching a unit on Ancient Egypt



Internet

@ Done

#### Required Topic: Study of The U.S. Constitution

#### Directions-

Review the resources Renzu was our country's first constituted Government? 3) Describe the proceedings of the Constitution must prevail in a society if the

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Required Activities To Rev

Constitutional Knowledge

Celebrate the Constitution

Madison's Notes Are Missing

Enrichment Activity Title

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#### -Directions

Review the resources Renzulli has selected for you, and ar was our country's first constitution called? 2) What are the r Government? 3) Describe the Fifth Amendment. 4) How mu proceedings of the Constitutional Convention? 5) What did E must prevail in a society if the people hoped to maintain a free

#### Required Activities To Rev

Enrichment Activity Title

Constitutional Knowledge
Celebrate the Constitution -

Madison's Notes Are Missing

#### Required Activities To R

Enrichment Activity Title

Constitutional Knowledge

Celebrate the Constitution

Madison's Notes Are Miss

#### Required Activities To Review:

Constitutional Knowledge
Celebrate the Constitution - The Game!
Madison's Notes Are Missing!

#### Activities Matched To Your

Enrichment Activity Title

Ben's Guide to the U.S. Gov

A History of US: Revolution

Our America

Constitution of the United Sta

Benjamin Franklin: An Extrac

Creating the United States

The Scales of Justice

This Nation

#### Activities Matched To Your

Enrichment Activity Title

Celebrate the Constitution -

Stand Up for Your Rights

Are You Smarter Than a Fift

The Patriot Papers Activities

Our America

Restore the Bill of Rights

Flashcard Exchange

#### Activities Matched To Yo

Enrichment Activity Title

America's Story

Our America

Smithsonian American Art

The Benjamin Franklin Te

The Scales of Justice

State WebQuest

#### Activities Matched To Your Profile:

Enrichment Activity Title

A Revolutionary WebQuest

Ask a Civics Question

Jeffersonian Era

Understanding the Constitution

The New Nation

Constitutional Knowledge







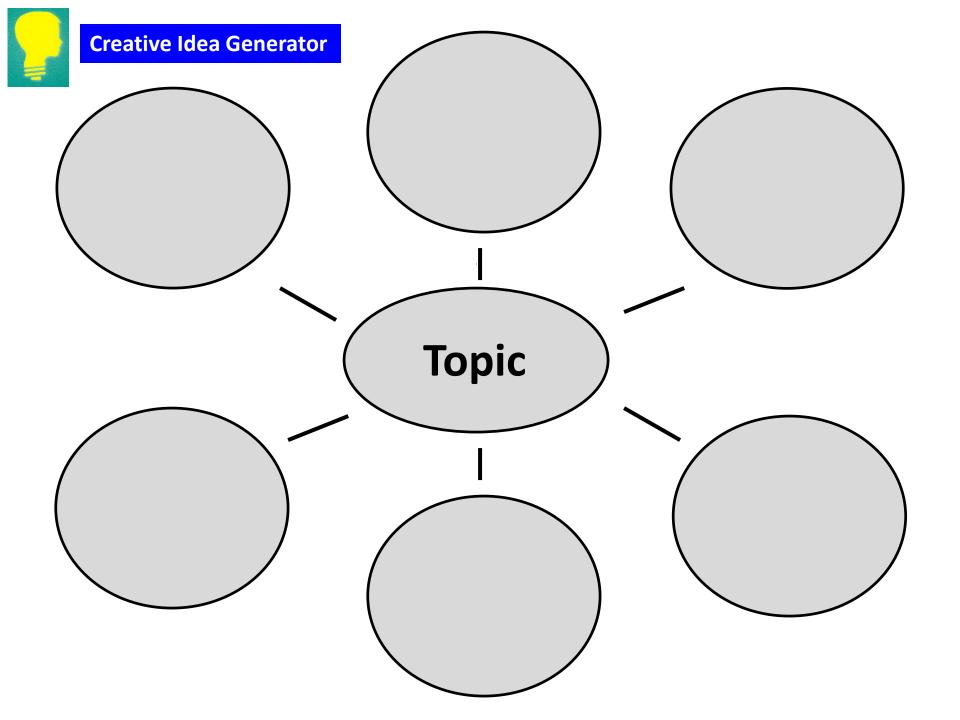




The Standards
(Outcomes)
Based Curriculum

If you would persuade, you must appeal first to interest rather than intellect.

Benjamin Franklin American statesman and inventor





#### **Creative Idea Generator**

- A Rap State Song
- Design a state motto/logo
- Travel Game (clues to find destination)
- Create alimerick/poem

- Design a Jeopardy style game
- Who am I? Match capitals & states
- Profiles of famous people from state

- Create state flag
- Students make board game
- Write/choreograph state song
- U. S. Dart Board

#### State and Capitals (topic)

- Create state political cartoons
- Guessing game for state bird/flower
- PR material for tourism
- Origin of states

- Debate over capitol locations
- Photographic essay of state/capital
- Character sketch of state/capital

- Major events within states
- History of transportation
- Route planning to visit all capitals
- Unique facts

# 22 Ideas in 10 Minutes!

New Jersey resembles an Indian head.

Minnesota looks like a chef's hat.

Louisiana is shaped like rain boots.

Iowa looks like a face.

#### **Example of Infusion in Practice**



#### Ten minutes of brainstorming with a group of teachers

- A Rap State Song
- State Shapes made out of play dough
- Travel game (find clues to get to destination like \* Carmen Sandiego)
- Route planning to get there (most efficient way to visit all capitals)
- Who am I? game to match states and capitals
- Students make board games
- History of transportation determining capital location
- Character sketch of state and capital
- Photographic essay of state/capital using Internet photos
- Create a flag based on information researched about the state
- Create political cartoons and original songs about the state and capital
- Debate over a better city for a state capitol
- Design a state motto/logo
- Create a limerick/poem
- Design a Jeopardy-style game to learn capitals and states using given supplies and time limit

- Write a song/poem/limerick that students can sing about capitals and states
- Profiles of most Famous men/women from the state
  - Write/choreograph state song
- Guessing game on state bird/flower
- PR material to get tourists to state
- A dart board (more points for smaller states)
- Origin of state/capital names
- Debate over better capitol locations
- Major events that took place in the state (Wright Brothers @ Kittyhawk)

*Teacher* Creativity

24 Ideas in 10 Minutes



NI						
Name:						

Date:

#### The Great State Geography Challenge Quiz No. 1

Draw a line to match the state name to its corresponding interesting feature.

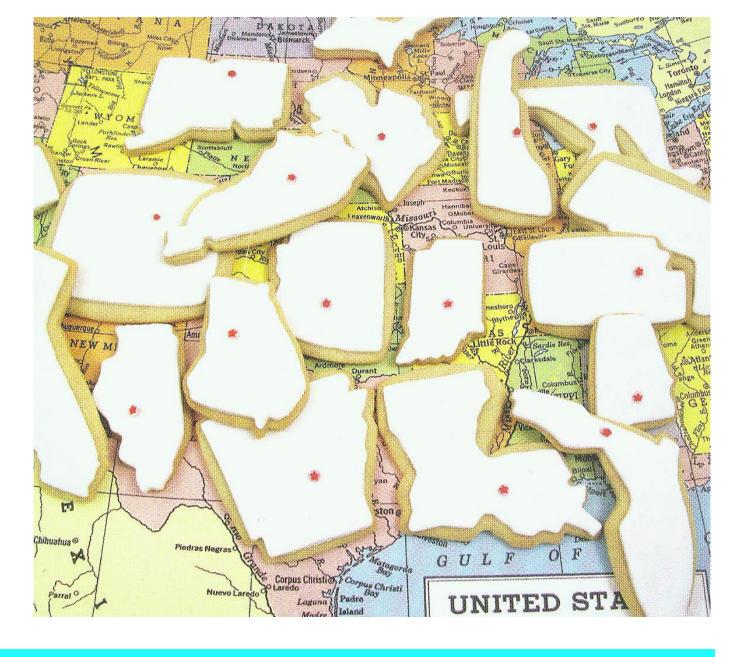
State Name	Interesting Feature
Alaska	It was the first state to allow women to vote.
California	It is the birthplace of the ice cream cone.
Connecticut	It is so large that it covers as many square miles as the other five New England states combined.
Georgia	Its economy is so large that if it were a country, it would rank seventh in the entire world.
Kentucky	Home of the first Krispy Kreme doughnut store.
Maine	One out of every 64 people have a pilot's license.
Missouri	Home of the world's largest office building, The Pentagon.
North Carolina	Has more than 6\$ billion in gold underneath Fort Knox.
Virginia	It was here, in 1886, that pharmacist John Pemberton made the first vat of Coca-Colainteresting!
Wyoming	The Frisbee was invented here at Yale

University.

Best Extension to come out of this activity.

I asked her and everybody asks me...





http://www.cheapcookiecutters.com/products/united-states-cookie-cutter-set

# Using Differentiation For Two Math Questions

- 1. How much is 6 x 4?
- 2. How many different ways can you make 24?

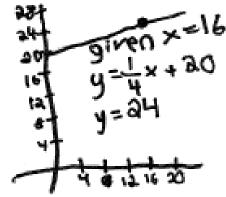


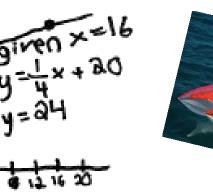




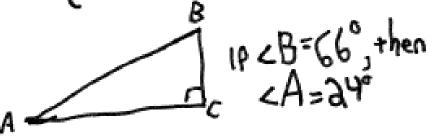
Ways Can I Make 24? Multiplication Addition+Sub Addition 20+5-1-24 6×4=94 23+1=24 30-10+4-24 8×3=24 99+9=3H 10+10+5-1=24 12×2=24 12+12=24 Addition + Mult. ełc. DIVISION Subtraction 10+2×1=34 48+2=24 3×10-6=24 25-1-24 96:4=24 425+4=24 34-10=24 etc. 124-100=24 Mult + Division 6×8+2=24 etc. 12×12+6=24

## Advanced











Non-graded groups of students who:

- 1. Share a common interest
- 2. Come together during specially designated time blocks to pursue their interests
- 3. Produce a product, performance, publication, presentation, contest or competition entry, or some form of service or community action project



#### **Enrichment Clusters**

Are non-graded groups of students who:

- 1. Share a common interest
- 2. Come together during specially designated time blocks to pursue their interests
- 3. Produce a product, performance, publication, presentation, contest or competition entry, or some form of service or community action project

Renzulli & Reis

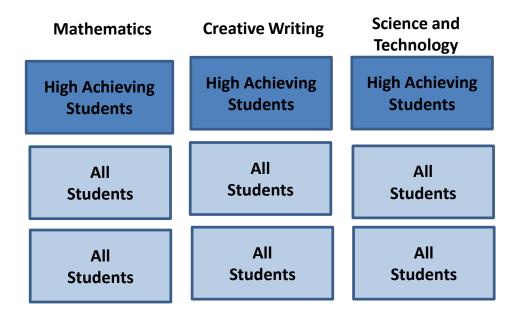
#### Two Major Decisions For Developing An Enrichment Cluster Program

1. Over time, provide clusters that cover the major areas of knowledge.

Mathematics F
Physical Sciences S
Life Sciences Language Arts
Visual and Graphic Arts
Entrepreneurism & Business

Performing Arts Social Sciences Inventions Community Service
Games & Recreation
Culinary Arts
Foreign Languages
Fashion Design
Technology

2. In basic skill areas, provide an academic range of clusters that accommodate high levels of challenge for your highest achieving students in particular subject areas.



# Language Arts, Literature, and the Humanities

- The Young Authors' Guild
- The Poet' Workshop
- •The African-American Literary Society
- The Investigative Journalism Group
- The Quarterly Review of Children's Literature

## Physical and Life Sciences

- •The Save the Dolphins Society
- •The Physical Science Research Institute
- •The Mansfield Environmental Protection Agency
- •The Experimental Robotic Team

#### The Arts

- The Electronic Music Research Institute
- The Visual Artist's Workshops
- The Meriden theater Company
- The Native American Dance Institute
- The Video Production Company
- The Young Musicians' Ensemble
- The Photographers' Guild

#### Social Sciences

- The Hispanic Cultural Awareness Association
- The Junior Historical Society
- The Social Science Research Team
- The Torrington Geographic Society
- The Creative Cartographers' Guild

#### **Mathematics**

- The Math Materials Publication Company
- The Math Mentors' Association
- The Female Mathematicians' Support Group
- The Mathematics Competitions League
- The Math Puzzle Challenge Quarterly

## Computers

- The Computer Graphics Design Team
- The Computer Games Production Company
- The Computer Literacy Assistance Association
- The Creative Software Society
- The desktop Publishing Company

### Physical Education

- The Experimental Games Research Team
- The Physiology of Sport Study Group
- The Physical Fitness Support Group
- The Institute for the Study of Multicultural Recreation



# 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 lunchroon garbage?



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

Be a Mother Nature Super Hero and Save the World!

# Crime Seene 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



# Summary and Conclusions

"Those who own the rights to inventions own the world.

From the political platform of the Japanese Democratic Party

? How do we create giftedness?



## Always, Always In The Student's Area(s) Of Interest



#### What Makes for an Outstanding SEM School?



"The real difficulty in changing the course of any enterprise is not in developing new ideas but escaping old ones. To make change you must have a dream"

John Maynard Keynes

Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever does.

**Margaret Mead** 



