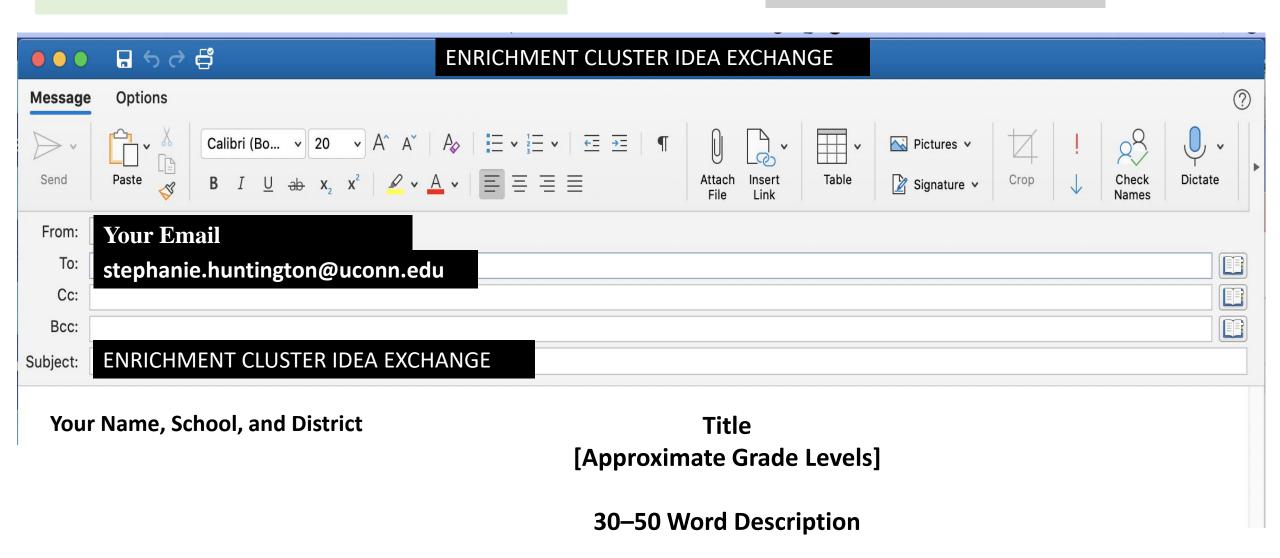
Developing and Implementing Enrichment Clusters: A Great Way to Start SEM Programs

Joseph S. Renzulli
Sally M. Reis
University of Connecticut



"Teamwork makes the dream work."

Send Us an Email for the Renzulli Center Enrichment Cluster Exchange Database



Enjoyment



Engagement



Enthusiasm For Learning

Quick
Review of
All You
Need to
Know About
Learning
Theories

Continuum of Learning Theories*

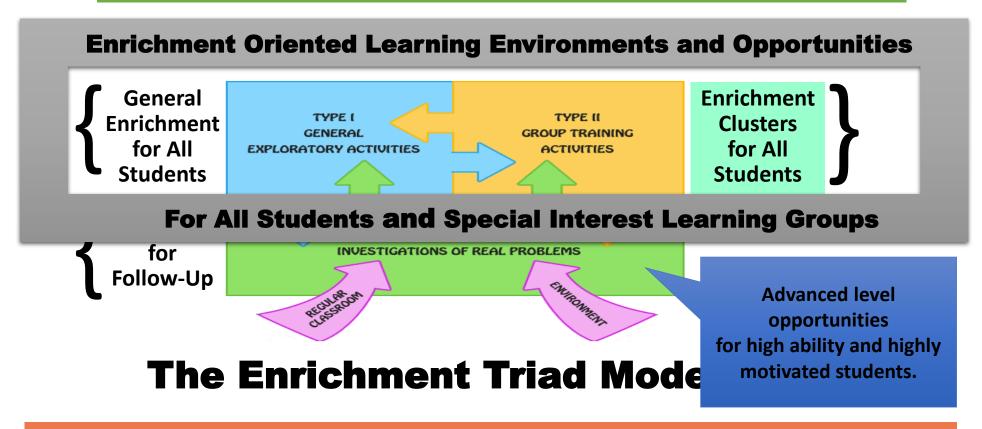


*Both ends of this continuum are important, and schools should integrate them whenever possible to produce the best balance between the two models of learning.

The Schoolwide Enrichment Model Joseph S. Ra & Sally M. Reis Organizational Model onal ructures 100l The Continuum The Regular Enrichment Renzulli Learning System Clusters of Special Curriculi Services · Odyssey Learning Identification Instruments ssment Portfolio Comprehensive Strength Curriculum Materials **Curriculum Modify** on Techniques (SEM-R; Mentoring Wathematical Minds g and Teaching **Enrichment Lea** (Project M3, M2) Staff Development **TYPE II** TYPE I The Pedagogical **GENERAL GROUP** Training Materials **EXPLORATORY** Model **TRAINING ACTIVITIES ACTIVITIES** Evaluation Instruments TYPE III **INDIVIDUAL & SMALL GROUP** Resources **INVESTIGATIONS OF REAL PROBLEMS Environment** Regular in General Classroom **Service Delivery Components**

www.gifted.uconn.edu

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



Curriculum Compacting for All High
Achieving Students
in Their Domain Specific Strength Area(s)

Type II Enrichment

TAXONOMY OF COGNITIVE & AFFECTIVE PROCESSES

(The "Type II Matrix" JSR: 2001)

I. Cognitive Thinking Skills

- 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

- 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

What Are Enrichment Clusters?

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

Two Major Decisions for Developing an Enrichment Cluster Program

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

General Performance Areas

Social sciences

Visual arts Law

Physical sciences Religion

Philosophy Language arts

Music

Life science

Movement arts

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.

Mathematics

Mathematics

High Achieving Students

All Students

All Students **Creative Writing**

High Achieving Students

All Students

All Students

Science and Technology

High Achieving Students

All Students

All Students

Example is the best school of mankind and they will learn at no other. Philosopher, Edmund Burk







Cluster Title

Social Entrepreneurship: Starting a Business to Help Others

Inviting Description

Have you ever thought about raising money so you could help people in our community who may need something they can't afford? In this cluster you will be asked who and how you might like to help others. We will have some local owners of small businesses tell you about how they got started and the things they did to promote their business. You can then make plans to explore the tools you need to actually start your own small business.





Type I Enrichment (Start-Up Activities)

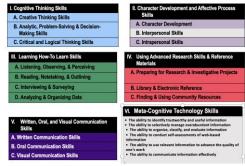
Local business owners came in to tell how they started their businesses (A Donut Shop and a Children's Toy Store)

Students brainstormed what types of businesses they might want to start to raise money for a charitable cause.

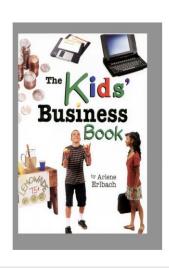
Video on Enrichment Clusters from NYC

 One of many that are available on the web

 Let's watch the joy on the faces of the children... and their teachers!



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





Divisions of Labor

- Designers
- Manufactures
- Advertising & Sales

Type II Enrichment: Skills and Resources









Type III Enrichment

Development of a Real Product



The Basics of Enrichment Clusters

Major Features of Enrichment Clusters

Theme: Every Students is special if we create conditions that make that student a specialist in a specialized group.

- 1. The Golden Rule of Enrichment Clusters: All activity is directed toward the production of a product or service.
- 2. Students and teachers select the clusters in which they will participate. All students and teachers are involved.
- 3. Students are grouped across grade levels by interest areas.
- 4. There are no predetermined lesson or units plans.

5. The authentic methods of professional investigators are used to pursue products and service development. [How-to Books]

6. Divisions of labor are used to guarantee that all students are not doing the same thing.

7. Specially designated time blocks are set aside for clusters.

8. The Silver Rule of Enrichment Clusters: The rules of regular school are suspended!

Divisions of labor is *very important*.

Students should be doing different jobs based on their interests and strengths when carrying out their work.



Six Key Questions

[For Facilitating an Enrichment Cluster of Type III Investigations]

- 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?

A few things you should **NOT** do when you develop clusters...

Develop unit or Lesson plans!

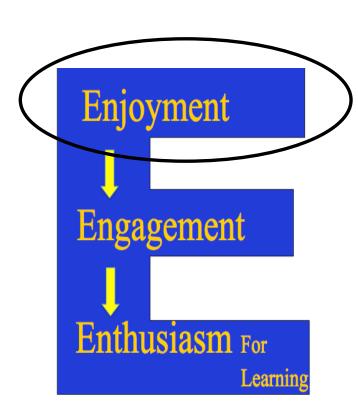
Have predetermined expectations other than some kind of creative productivity.

Talk too much.

Have every student doing the same thing.

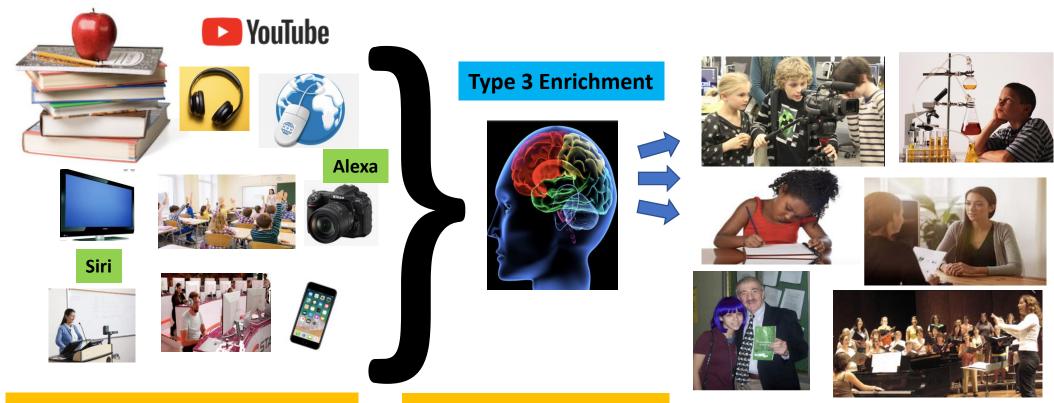
Conduct a traditional, orderly, quiet classroom.

Preparing students for a test.



Major Goals of Enrichment Clusters

What do we mean by creative/productive giftedness?



Sources of Information and the Development of Thinking Skills

The Assembly Plant
of Mind
Applying Knowledge &
Skills to a Product,
Performance, or
Presentation





TEACHER TRAINING ACTIVIYU]Y

"Things You Already Know How to Do."



Science - Math - Technology

Robotics Competition
Math League
Science Fair
Computer Club
Technology Group
Rocket Club



Written, Visual, and Performing Arts

Drama Productions

Newspaper

Band

Creative Writing Workshop

Yearbook

Chorus

Computer/Graphic Design

Fashion Design

Video/Filmmaking

Clubs/Extracurricular Activities

Future Problem Solving National History Day

Science Fair Coach

Mock Trial

Model UN

Outward Bound

Service Clubs



4-H

Junior Achievement
Invention Convention
Boy Scouts/Girl Scouts
Photography Club
Future Farmers of America



Three Questions....

1. Who came?

2. What did the students do (not learn)?

3. What roles did you play?

High-End Learning

Teacher Roles and Responsibilities

These are some of the skills that define the role of what we call "The-Guide-On-The-Side" as opposed to "the sage-on-the-stage."

?

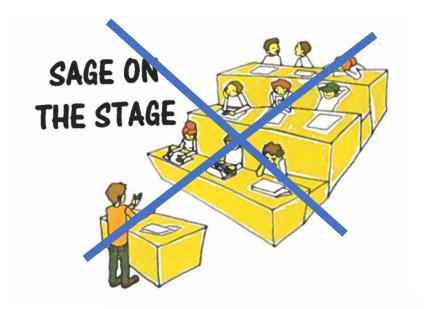
Please list the roles you fulfilled in addition to disseminator of information?

place of instructor and

General Contractor	Librarian
Conductor (as in a symphony)	Taxi Driver
Consultant	Coach
Counselor	Producer, Director, Stage Manager (as in a play)
Accountant, Fund Raiser	Press Agent
Operations Manager	Talent Scout
Business Agent	Arbitrator
Forager/Scavenger	Auditor
Therapist, Confidant	Supply Sergeant
Advocate	Transportation Coordinator
Production Manager	Caterer
Secretary	"Fixer" (something like a lawyer)
Internet Detective	Friend
Recorder (for young kids)	Editor
	Collaborator

The Teacher's Role as Guide-On-the-Side

Your main role as an Enrichment Cluster facilitator









The Teacher's Role as Guide-On-the-Side

1. Keep an informal tracking of your verbs...

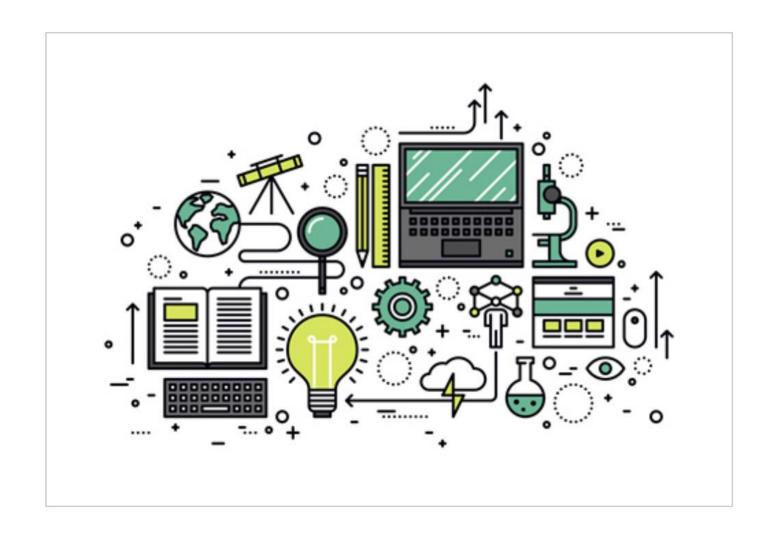
Typical Verbs
Used for
Raising
Questions
About
Three Kinds
of Knowledge

Words Uses to Prompt Received Knowledge Learning	Words Uses to Analyzed Knowled	•	Words Uses to Prompt Created Knowledge Learning
Define State Describe Identify Label List Match Outline Memorize Point to Recall Select Name Label Arrange Report Give examples Calculate Repeat Tell Recite	Explain Interpret Demonstrate Conclude Compare Contrast Categorize Design Speculate Interpret Relate Predict Estimate Extrapolate Reconstruct Hypothesize Design Critique Distinguish between	Point out Defend Differentiate Reconstruct Reorganize Construct Devise Illustrate Infer Compose Construct Infer Paraphrase Translate Evaluate Defend Justify Organize	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

The Teacher's Role as Guide-On-the-Side

- 1. Keep an informal tracking of your verbs.
- 2. Review the rules for brainstorming.
- 3. Encourage brainstorming about product formats.
- 4. Encourage brainstorming about possible audiences.

Super Hint for High Interest and Engagement for All Students



Divisions of Labor



Finding Students' Interests, Learning Styles, and Preferred Modes of Expressing

Themselves

Reverse Engineering

Working "backwards" from interests, product, and expression style preferences to necessary skills for product development



Expression Style Inventory (Sample Items)



My Way . . .

An Expression Style Inventory K. E. Kettle, J. S. Rensulli, M. G. Rissa University of Connecticut



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.

My Name is:

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.)

		Interested	Interest	Interested	Interested	Interested
	Example: writing song lyrics	1	2	3	4	5
1.	writing stories	1	2	3	4	5
2.	discussing what I have learned	1	2	3	4	5
3.	painting a picture	1	2	3	4	5
4.	designing a computer software project	1	2	3	4	5
5.	filming & editing a video	1	2	3	4	5
6.	creating a company	1	2	3	4	5
7.	helping in the community	1	2	3	4	5
8.	acting in a play	1	2	3	4	5

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Table 1: Expression Style Inventory Items, Factors/Components and Loadings:

Principal Factor Analysis (PFA) with Varimax & Oblique Rotations
Principal Component Analysis (PCA) with Varimax & Oblique Rotations

Name of Factor	Item			Item PFA		PCA	
	PFA	PCA					
or Component		Number	9	Stem			
			,	Varimax	Varimax	Oblique	Oblique
						Loading	
	Loading	Loading	Loading				
				14		designing	an
interactive comput				.86		.61	
	.89			.89			
1				34			a computer
game				.84		.85	
	.88			.89			
Computer		4			designing a com	puter software p	rogram
	.84			.84		.88	
	.89						
Products		44			designing a mul	ti-media comput	er show
	.82			.82		.82	
	.83						
			į	54		designing i	information
for the computer in	nternet	.80			.84		
	.83			.85			
			7	24		designing	computer
animation				.79		.80	
	.81			.84			
			į	57		working to	help others
					.81		
	.77			.85		.84	
2			4	47		collecting	clothing or
food to help others	S	.78			.79		
	.83			.84			
Service			3	37		helping ot	hers by fund
raising				.71		.74	
	.73			.78			
Products		7			helping in the co	ommunity	
				.70		.49	
	.73			.78			
			2	27		helping ot	hers by
supporting a social	cause			.69		.73	•
-	.68			.72			
			-	17		helping ot	her students

What do we mean by Expression styles?

Just a Few Product Options

Things young people create as they investigate various topics of interest and interact with the principles, concepts and methodology of one or a combination of disciplines. The goal is always the same – Impact Upon Audience the *raison d'être* of the creative and productive person.

- Artistic Products
 - Architecture
 - Murals
 - Sculpture
 - Maps
 - Graphic, Digital, & Landscape Designs
 - Etc.
- Performance Products
 - Skits
 - Role Playing
 - Dance
 - Mime
 - Interpretive Song
 - Plays
 - Etc.

- Spoken Products
 - Debates
 - Speeches
 - Demonstrations
 - Panel Discussions
 - Book Talks
 - Poetry Readings
 - Broadcasts
 - Etc.
- Visual Products
 - Videos
 - Musical Scores
 - Blueprints
 - Diagrams/Charts
 - Timelines
 - Multimedia
 - Cartoons
 - Etc.

- Constructed Products
 - Puppets
 - Models
 - Robots
 - Set Designs
 - Gadgets
 - Furniture
 - Sports Equipment
 - Costumes
 - Jewelry
 - Software
 - Quilts
 - Gardens
 - Games (board & virtual)
 - Etc.



- Skits

Dance

- Mime

- Etc.

- Role playing

Interpretive Song

Product Planning Guide

- Musical Scores

- Timelines

- Cartoons

- Etc.

- Multimedia

- Software

- Gardens

- Quilts

Etc.

Spoken Products						
Debates	Lecture	D. J. Shows	Book talks			
Speeches	Mock trials	Panel discussions	Chronicles			
Radio plays	Songs	Celebrity roasts	Forums			
Advertisements	Sales promotions	Narrations	Sign language			
Poetry readings	Simulations	Sermons	Puppet shows			
Storytelling	Demonstrations	Dedication ceremonies	Book reviews			
Poetry for two voices	Phone conversations	Weather reports	Audiotapes			
Interviews	Eulogies	Rap songs	Infomercials			
Oral histories	Announcements	Town crier	Master of ceremony			
Newscasts	Comedy routines	Guided tours	Oral reports			

Product Planning Guide

Written Products					
Pamphlets Brochures Books Speeches Captions Charts	Parables Advertisements Laws Graphs Notes Diaries/journals	Analyses Epics Web pages Autobiographies Flow charts Amendments	Lists Budgets Criteria listings Census reports Folktales Graphic organizers		
Radio programs Instructions Interview questions Outlines Simulations Recipes Legends Definitions Bibliographies	Poetry Marketing plans Comic strips Jokes/riddles Slogans Songs/lyrics Questionnaires Invitations Story boards	Family trees Position statements Banners Plays/skits Letters/postcards Crossword puzzles Summars Consumer reports Articles (newspaper,	Story problems Public service announcements Ethnography Maps Timelines Multimedia presentations Discussion group questions		
Rhymes	Greeting cards	journal, etc.)	Limericks Grants		

Product Planning Guide

Artistic Products					
Architecture	Batik	Landscaping	Puzzles		
Murals	Exhibits	Terrariums	Car designs		
Decoration	Cartoons	Mosaic	Maps		
Sculpture	Book covers/designs	Collage	Sewing		
Filmstrips	Fabric design	Silk screens	Puppets		
Slide shows	Maps	Movies	Set design		
Comic strips	Mobiles	Videos	Tin ware		
Yearbook	Fashion design	Computer graphics	Pottery		
Advertisements	Jewelry	Aquariums	Iron work		
Drawing	Diorama	Painting	Weaving		
Graphic design	Furniture design	Web pages	Calligraphy		
Photography	Wood carvings	Package design	Tessellations		
Engraving	Political cartoons	Postcards	Multimedia presentations		
Etching	Horticultural design	Posters			
		Computer graphics			

Product Planning Guide

Visual Products						
Videos	Layouts	Ice sculptures	Maps			
Slide/digital photo shows	Models	Demonstrations	Diagrams			
Computer printouts	Pottery	Cartoons	Mobiles			
Sculptures	Proclamations	Travel brochures	Set design			
Table settings	Computer programs	Athletic skills	Experiments			
Advertisements	Timelines	Blueprints	Caricatures			
Puppets	Diagrams/charts	Lists	Silk screening			
Calendars	Sketches	Multimedia presentations	Graphic organizer			
Musical scores	Graphs	Graphic design	Photography			
Book jackets	Collages	Paintings	Fashion design			

Product Planning Guide

	Leadership Products							
Speeches Plans School patrols Leading rallies Consensus building	Mock trails Musical performances Elections Debates Campaigns	Open forums Fund raising Student council/ government Organizing a business	Service learning projects Editing a newspaper Directing a plan Bulletin board/chat room/ discussion group on internet					
Role playing	Protests	Organizing a group Editorials	Club or class webmaster					

Product Planning Guide

Performance Products						
Skits	Dance	Films/videos	Interpretive song			
Role playing	Mime	Reader's theater	Composition			
Simulations	Puppet shows	Poetry readings	Chorale			
Theatrical performance	Dramatic monologues	Improvisations	Concerts			
Vocal	Comic performances	Musical performance	Parades			
Athletic events	Demonstrations	Experiments	Reenactments			

Product Planning Guide

Models/Construction Products						
Drama sets	Gardens	Bird houses	Instruments			
Sculpture	Dioramas	Bulletin boards	Robots			
Relief map	Shelters	Circuit boards	Machines			
Habitat	Collections	Paper engineering	Rockets			
Bridges	Ceremonies	Puppet theaters	Play facilities			
Inventions	Learning centers	Computer programs	Quilts			
Food	Pottery	Computers	Multimedia presentation			
Vehicles	Working models	Documentaries	Hydroponic farms			
Fitness trails	Ant farms	Exhibitions	Masks			
Microscopes	Buildings	Interviews	Robots			
Microscope slides	Toys	Scale models	Gifts			
Aqueducts	Games	3-d figures	Catalogs			
Terrariums	Books	Graphs	Mazes			
Greenhouses	Solar collectors	Furniture	Blueprints			

How do you like to express yourself?

- Artistic Products
 - Architecture
 - Murals
 - Sculpture
 - Maps
 - Graphic, Digital, & Landscape Designs
 - Etc.
- Performance Products
 - Skits
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 - Cartoons
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 - Models
 - Robots
 - Set Designs
 - Gadgets
 - Furniture
 - Sports Equipment
 - Costumes
 - Jewelry
 - Software
 - Quilts
 - Gardens
 - Games (board & virtual)
 - Etc.



Those aren't just any old doodles, Ms. James. They're notes for my graphic novel.

LOGISTICS

WHO: All students in your school, grouped by 2–3 grade levels (i.e., GRADES 1–3, 4–6)—All teachers and professionals in the school, parent volunteers, community members to work with professionals

WHAT: ENRICHMENT CLUSTERS FOR ALL, potentially sponsored by your PTO for expenses (but these are often not expensive)

WHEN: A SERIES OF TWO, EACH YEAR—8 in the fall and 10 in the spring, Friday or Wednesday afternoons

WHERE: All over the school, spaces for under 10 and up to 25 (with more than one adult.

WHY: Joyful Learning

Six Key Questions

[For Facilitating an Enrichment Cluster of Type III Investigations]

- 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?



Save Dur Planet

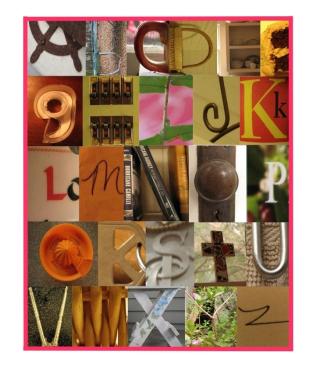
- Would you like to become a "Dumpsite Detective" and uncover ways to reuse our trash?
- Would you like to see worms at work reducing our lunchroom garbage?



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

Be a Mother Nature Super Hero and Save the World!

Abc... Click!





The Alphabet can be found all around us...

Do you like to take pictures? Have an eagle eye? Join this cluster and use technology to take pictures of letters that you find in nature and architecture.

Cardboard Arcade

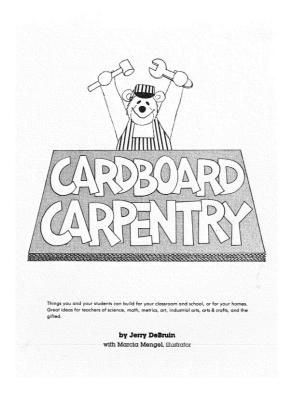
Do you like going to arcades?

Do you like to create things from leftover boxes?

Join us to help create the first ever Kelly Lane School Cardboard Arcade!











Cooking With Books

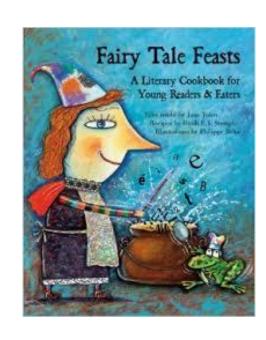
Do you like to cook?

Do you like to read books?

Do you like to make recipes that

go along with books?

Join us for some FUN!!!













Duct Tape Doodads

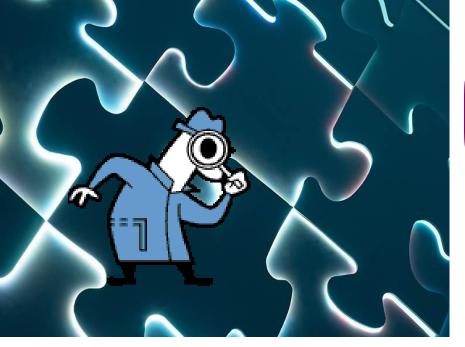




Do you like to create with Duct Tape? Do you like to make someone smile?

Can you imagine raising money for a charity of your choice?

Come and have some fun while we create Duct Tape crafts to make people smile.



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

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.

The Arts and Mathematics

- 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

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

Social Sciences and Humanities

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

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

Technology and Sciences

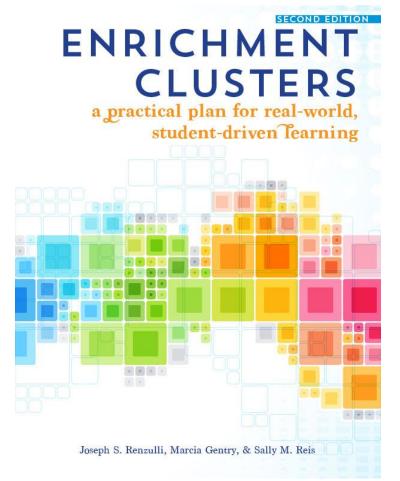
- The Computer Graphics Design Team
- The Computer Games Production Company
- The Computer Literacy Assistance Association
- The Creative Software Society
- The Desktop Publishing Company

- The Save the Dolphins Society
- The Physical Science Research Institute
- The Mansfield Environmental Protection Agency
- The Experimental Robotic Team
- The Horticultural Beautification Committee
- Save our Rivers and Waterways

What Cluster will YOU facilitate?

- What will the title be?
- What is your first line of the description?
- Think about what you love to do in your spare time—get a fun, descriptive title.
- Talk to an expert who works in this area-get a guest speaker for a Type I.
- Go on line and find some fun background reading and video clips about your topic.
- Find a few examples of creative products, especially if they were done by young people and plan to talk about them with your students.
- Find some competitions and contests/ask what is a problem we can solve in our community or area?

Practical
Information on
Developing
Enrichment
Clusters





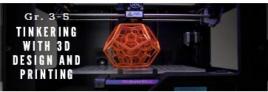


Tell a Story About Your Favorite Super Hero





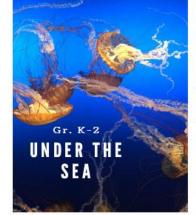










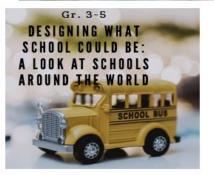




THE ART OF SILENT

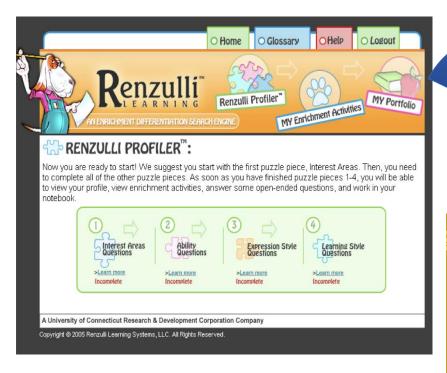






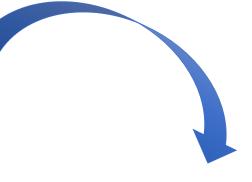
Summer Virtual Enrichment Clusters

Cluster Offerings for Entering K-7 Students



Individualized Strength Assessment

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



A Tool for Personalization & Curricular Infusion



Resource Matching Search Engine 50,000 Enrichment Resources

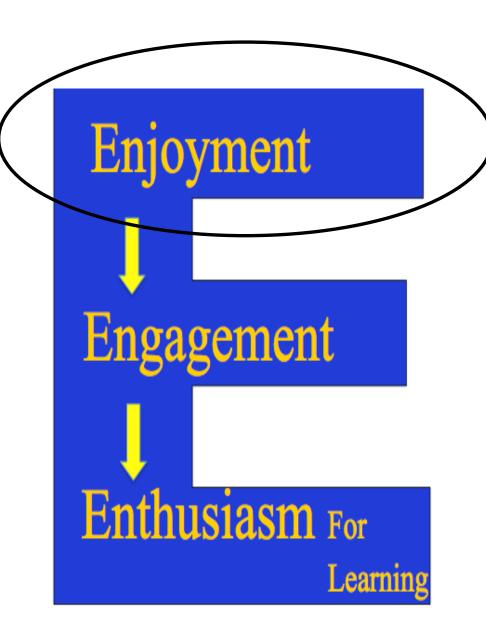
https://renzullilearning.com

Research about the SEM and Enrichment Clusters

https://gifted.uconn.edu

https://gifted.uconn.edu/schoolwideenrichment-model/semresearch/

https://confratute.uconn.edu





The Enrichment Cluster Happiness Scale



...and we hope this is the way your students will respond every day when they leave your enrichment cluster.

"Teamwork makes the dream work."

Send Us an Email for the Renzulli Center Enrichment Cluster Exchange Database

