THINKING MAPS®
RESOURCE GUIDE

APPLICATIONS AND STRATEGIES FOR
CLASSROOM USE

QUALITY ASSURANCE PROJECT
COLLABORATION D.28/D.75

Together
Everyone
Achieves
More

Look at what we have done!

Thinking Foundation. www.thinkingfoundation.org
Look at our Stamobiles!

How to Make a Stamobile:
1. Draw shapes.
2. Cut out shapes.
3. Glue shapes together.
4. Stand Stamobile up.

Look at our Statutes of Liberty!
Parts of a Plant

There are many different kinds of plants, but most are made up of the same basic parts.

- Leaves: are a plant's food factories. They turn water, air, and sunlight into food for the whole plant.
- Roots: anchor the plant into the ground and soak up water.
- The stem supports the plant, water and food travel through the stem to all parts of the plant.
- Many plants have flowers.
- Flowers are where the seeds are produced that grow into new plants.
Eskimo

Native American

Washington

Lincoln

I, me

igloo

North Pole

teepee

home

cabin

house

SHARON
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Why Should You Read This Resource Guide?

- To become more effective at using Thinking Maps® in your daily teaching.
- To increase your knowledge of connecting Standards and Principles of Learning to Thinking Maps.
- To learn from others.
- To encourage you to want to learn more.
- To further your knowledge about the Quality Assurance Grant in Districts 28/75.
- To motivate you to participate in the training.

"Professional development is the job."

Anthony Alvarado

We are in the profession of teaching and learning. In order to meet the challenge of higher standards we need to raise student achievement. To do that we need to focus on teaching and learning and to realize that "Professional development is the job. . . . that our work, both teachers, administrators and supervisors is professional development and that an occasional workshop or seminar is not the way to go. . . . The underlying vision for professional development is that it is continuous and that it is for everybody. The best people in any profession are the people who work hardest at improving their practice."


The VISION of the Quality Assurance Team in D28/75 is to focus on teaching and learning and to get people at all levels focused on quality instruction to meet the goal of improved student outcomes. Strong emphasis is being placed on the professional development model which includes workshops and college courses to inform, as well as consultants in classrooms to assist with effective implementation.
We are asking our students to work hard and we need to keep reminding them that success takes time, practice, patience, hard work and making mistakes. It's okay to make mistakes. That's part of learning.

As teachers and learners, it is important for us to reflect upon this as we go through our own learning process. In this way we begin to become “reflective practitioners” of our own process of learning.

Innovative and field tested curricula is needed to keep students engaged and motivated. If students are learning in a way that makes sense to them they will be motivated and successful. The Quality Assurance Team chose Thinking Maps® because it is a curriculum tool that can be used in all curriculum areas at every grade level, starting at Pre-Kindergarten up to Post Graduate School. The Thinking Maps® tool gives students a common visual language that assists them to organize information, visualize their thinking and develop thinking skills within all content areas. Thinking Maps increase students abilities to read, write and comprehend. Use of the Maps support teachers when planing lessons.

Teaching children how to behave is critical to the foundation of learning. We chose Applied Behavioral Analysis because it has been field tested for 30 years and has proven to be successful with children, including children with a variety of special needs.

It is our continued vision to see both Thinking Maps® and Applied Behavioral Analysis used in all special education classrooms throughout the District. Can we make a commitment to meet the challenge?
OBSERVATIONS AND SUGGESTIONS FOR FURTHER USE OF THINKING MAPS®

The KEY to using the Thinking Maps® is to get the students to see the connection between the thinking skill and the map. Each map is a visual representation of a particular thinking skill. This is what distinguishes the Thinking Maps® tool from other graphic organizers. What makes this tool even more special is that it can be used in all curriculum areas. In order to assist students to see the connection between the thinking skill and the visual map we need to help them make the connection in our teaching.

Possible Dialogue: You might tell the students that when we use the maps we are practicing visualizing higher order thinking skills. (This is for older students.) For younger ones you might tell them that each map helps us to organize our thinking and that each thinking skill has a name. In this way we are giving the students a name or a label and developing vocabulary in the domain of thinking. We are teaching the language of thinking, language that will improve outcomes for students in school and in the world.

<table>
<thead>
<tr>
<th>Thinking Skill</th>
<th>Thinking Map</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brainstorming/Defining in Context</td>
<td>Circle Map</td>
</tr>
<tr>
<td>Describing Qualities</td>
<td>Bubble Map*</td>
</tr>
<tr>
<td>Comparing and Contrasting</td>
<td>Double Bubble Map**</td>
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<td>Flow Map</td>
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<td>Multi Flow Map</td>
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<td>Classifying</td>
<td>Tree Map</td>
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<tr>
<td>Whole-Part Relationships</td>
<td>Brace Map***</td>
</tr>
<tr>
<td>Analogies</td>
<td>Bridge Map</td>
</tr>
</tbody>
</table>

* Use only adjectives or adjective phrases
** More flexibility - (Adjectives/Adjective Phrases and other parts of speech.)
*** Use only for physical objects.
Assist students to see how using Thinking Maps® helps us in everyday living as well as in academic/school work. For example:

- When you want to plan your day, what thinking skill will you use? What map will you use? Why is it important to plan your day?
- When we receive consequences in our lives, either positive or negative, what thinking skill can we use to determine the events that led to the consequences? What map will we use to demonstrate that skill? Can we make such a map now based upon our personal experiences?
- If a basketball player is on a court, he/she needs to know the sequence of plays. What thinking skill is he using? What map will he use?
- When you want to describe a person or an object, what skill are you using? What do we call the words that we use to describe something? Attributes/characteristics. (We need to teach students to use adjectives and adjective phrases to describe.)

**Suggestions for using Thinking Maps® To Teach Language Skills.**

**Use a Tree Map to Classify Parts of Speech.**

**Learning Standard:** E4a The student demonstrates a basic understanding of the rules of the English language in written and oral work and selects the structures and features of language appropriate to the purpose, audience, and context of the work. The student demonstrates control of:

- grammar;
- sentence construction;
- spelling;
- usage.

*(Performance Standards, New York City First Edition. English Language Arts, pg. 28.)*

**Principles of Learning: Accountable Talk**

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- Talk is essential to learning
- Talk must be accountable to standards of evidence
- We indicate accountable talk when we press for clarification and explanation
Teacher Aim: To teach students parts of speech.
Purpose/Why? Talk is essential to learning. Knowledge of parts of speech and sentence structure assist us in speaking and writing with greater clarity.
Behavioral Objective: Students will begin to make a list of parts of speech and use bubble and double bubble maps to describe qualities using adjectives and adjective phrases.

Thinking Skill: Classifying
Thinking Map: Tree Map

### PARTS OF SPEECH

<table>
<thead>
<tr>
<th>action words</th>
<th>names</th>
<th>words that describe</th>
</tr>
</thead>
<tbody>
<tr>
<td>(verbs)*</td>
<td>(nouns)</td>
<td></td>
</tr>
<tr>
<td>jump</td>
<td>desk</td>
<td>funny</td>
</tr>
<tr>
<td>catch</td>
<td>school</td>
<td>kind</td>
</tr>
<tr>
<td>write</td>
<td>Tonya</td>
<td>bully</td>
</tr>
<tr>
<td>roll</td>
<td>house</td>
<td>athletic</td>
</tr>
<tr>
<td>speak</td>
<td>museum</td>
<td>quick tempered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>good student</td>
</tr>
</tbody>
</table>

*Note: Verbs can be classified by action verbs and state of being verbs. In this example I am only focusing on action verbs.

T: Let’s make a sentence with the words Tonya and school.
S: Tonya goes to school.
T: Let’s make a sentence with the words Tonya and kind.
S: Tonya helps me with my work and is a good student. She is kind.
T: Let’s make a sentence with the words school, write and desk.
S: In school we write on moveable desks.

Let’s underline the names or nouns in our sentences.
Let’s circle the action words or verbs.
Let’s put a box around the words that describe or adjectives.
Question: What part of speech is the word bully? It can be a noun or an adjective. It depends upon how it is used in a sentence. I am going to use it both ways. I will underline the noun, circle the verb and put a box around the adjective. Can you explain why in one sentence it is a noun and why in another sentence it is an adjective?

A bully is a person who likes to push smaller people around. Kenny is a nasty bully who threatens students.

LET'S MAKE A BUBBLE MAP THAT DESCRIBES THE CHARACTERISTICS OF ROY.

![Bubble Map Diagram]

Roy is one of my friends. I like being with him because he is funny and kind. He is also tall and thin. I stay away from him when he gets angry because he is quick tempered. I would like to teach Roy about Conflict Resolution so he could learn what to do when his temper gets the best of him.

Students can be asked to add to their list of nouns, adjectives and verbs and possibly pronouns could be introduced. The goal would be to keep adding to the list until all parts of speech are part of the tree map.
Observation: MIS IV, 1st/2nd grade classroom.
The teacher engaged the students in a math lesson to meet the following objective:

Behavioral Objective: Students will use a piece of string to compare the height of each cylinder to its circumference. Note: This was not the first lesson the teacher had given about cylinders and there was evidence of thinking maps charts in the classroom about cylinders and other shapes used in mathematics.

Below is a possible teaching sequence based upon the above strategy (see previous page) for beginning to use Thinking Maps.

First: Brainstorm - Circle Map
Questions: What do you already know about cylinders?
Where do we find cylinders?

Second: Define in Context - Circle Map
Question: What is a cylinder?

The intention is for the students to build a vocabulary about 3 dimensional shapes, be able to define the word cylinder within the context of math, and to know the function of cylinders. Defining in context teaches the students the linguistic distinctions in a domain - eg. the vocabulary of math.

What is the context? That’s the box around the circle map.
Ask: How do you know about cylinders?
- math lesson on 3 dimensional shapes
- math book
-experiences with cylinders
-the cardboard roller used for toilet paper, paper towels

Let’s write a definition of a cylinder.
A cylinder is a solid 3 dimensional circular shape. An example of a cylinder is a toilet paper roll or a soup can. Cylinder/cylindrical shapes are used in the construction of buildings. Homework: Observe objects in your home. What objects are shaped like cylinders? Observe buildings in your neighborhood. Do you see any cylinder shapes? Hint: Some buildings have columns.

Note: The Circle Map is used for two different thinking skills.
Question: What are they?
Answer: Brainstorming and Defining in Context. Each skill has a different purpose.
Third: **Sequence - Flow Map**

Behavioral Objective: To measure many cylinders of different sizes.

- Take string.
- Put string around circumference.
- Measure height.

Fourth: **Categorize - Tree Map**

- **Cylinders**
  - Compare Height to Circumference
    - Tall Cylinders
    - Short Cylinders

Fifth: **Describe Qualities - Bubble Map**

Remember to use *adjectives or adjective phrases.*

- smooth
- circular shape

Sixth: **Part-Whole Relationships - Brace Map**

What are the component parts and subparts of a cylinder?

- **CYLINDER**
  - **height**
  - circumference (flat face)

Note: Use Brace Maps to discuss parts of physical objects.
E.g. Parts of a plant, chair, tool, computer, etc.
Observation: MIS I, 5/6th grade classroom.

Bill Waste demonstrated the following based upon the teacher’s request to learn how to use a Bridge Map® in a math class and connect it to measurement skills. The students were familiar with the name of the maps and the thinking skill connected to each map. It was obvious that the teacher gave the students a lot of practice naming the thinking skills and connecting them to the maps.

Thinking Skill: Seeing Analogies - Bridge Map®

*Please note his dialogue and the sequence he used to get to measurement.*

BW: “Analogies mean seeing how things are the same. We use analogies all the time. Let’s use the bridge map to show how things are the same”.

Blue and Sky  Green and Grass  Yellow and Sun

How are they alike? Color of Object.

There are two parts to a Bridge Map.

is the color of

relating factor

<table>
<thead>
<tr>
<th>blue</th>
<th>green</th>
<th>yellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>sky</td>
<td>grass</td>
<td>sun</td>
</tr>
</tbody>
</table>

“Blue is the color of the sky as green is the color of grass as yellow is the color of the sun”.

BW: “This is a different analogy. We have a different relating factor.

Is the opposite of

relating factor

<table>
<thead>
<tr>
<th>night</th>
<th>up</th>
<th>tomorrow</th>
<th>front</th>
<th>hot</th>
<th>sharp</th>
</tr>
</thead>
<tbody>
<tr>
<td>day</td>
<td>down</td>
<td>today</td>
<td>back</td>
<td>cold</td>
<td>dull</td>
</tr>
</tbody>
</table>

“Night is the opposite of day as up is the opposite of down, as tomorrow is the opposite of _________ etc.”

“What does all of this have to do with math?

Let’s look at MULTIPLICATION. We need to change the relating factor.”

<table>
<thead>
<tr>
<th>X6</th>
<th>relating factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>24</td>
</tr>
</tbody>
</table>

1x6=6
2x6=12 etc.

Let’s see how factions are = to each other.

Are these the same? Is 2/12 equivalent to 1/6? Is 3/18 equivalent to 1/6?
"**Measurement** - We have two basic measuring systems - metric and standard."

<table>
<thead>
<tr>
<th>relating factor</th>
<th>8oz</th>
<th>16oz</th>
<th>32oz</th>
<th>64oz</th>
</tr>
</thead>
<tbody>
<tr>
<td>cup</td>
<td>1 pint</td>
<td>1 quart</td>
<td>(\frac{1}{2}) gallon</td>
<td></td>
</tr>
</tbody>
</table>

A cup is the name for 8 oz of liquid. A pint is the name of 16 oz of liquid, etc. These are different names for ounces.

**Symbols**

<table>
<thead>
<tr>
<th>relating factor</th>
<th>(\frac{\ }{\ })</th>
<th>(\frac{\ }{\ })</th>
<th>(\frac{\ }{\ })</th>
<th>(\frac{\ }{\ })</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>addition</td>
<td>subtraction</td>
<td>multiplication</td>
<td>division</td>
</tr>
</tbody>
</table>

A plus sign is the symbol for addition as a minus sign is the symbol for subtraction, as a times sign (\(\times\)) is the symbol for multiplication as a \(\frac{\ }{\ }\) is the symbol for division”.

**Observation**: SIE VI Class, Junior High School. The art cluster teacher used various maps to teach about shapes and the students used shapes to make cards. This is an example of one of the maps that was discussed during a post observation conference.

**Thinking Skill**: **Comparing and Contrasting** - Double Bubble Maps®

![Double Bubble Diagram](image-url)
The Double Bubble Thinking Map® shown on page 9 is used to compare and contrast qualities of two shapes. When you first teach the double bubble, model with words that demonstrate qualities/adjecitives. If the students use words that define rather than describe, ask questions so that students turn the words into adjectives or adjective phrases. (Accept the students responses and then rephrase. Tell them why. In this way we are giving students examples of adjectives and adjective phrases, increasing their vocabulary and demonstrating various ways to say the same thing.) Please note that a Double Bubble Map does have flexibility because when comparing and contrasting it is sometimes difficult to use adjectives or adjective phrases exclusively. Below is an example based upon student/teacher work.

Many students have difficulty expressing themselves using adjectives and adjective phrases. Column I represents examples given in class for double bubble maps. Column II represents shifting the language to adjectives/adjecitive phrases.

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>learned to grow crops</td>
<td>crop growers</td>
</tr>
<tr>
<td>hunted for food</td>
<td>experienced hunters</td>
</tr>
<tr>
<td>moved from place to place</td>
<td>migrants</td>
</tr>
<tr>
<td>not waterproof</td>
<td>porous</td>
</tr>
<tr>
<td>fired again and again</td>
<td>glazed and refired</td>
</tr>
<tr>
<td>came in many colors</td>
<td>colorful</td>
</tr>
<tr>
<td>dress myself</td>
<td>independent dresser</td>
</tr>
<tr>
<td>mom feeds me</td>
<td>dependent on mom to feed me</td>
</tr>
<tr>
<td>didn’t listen</td>
<td>inattentive</td>
</tr>
<tr>
<td>didn’t tell the truth</td>
<td>liar</td>
</tr>
</tbody>
</table>

- It’s easy to confuse describing and defining.
- Describing - Focus on the senses. What does it look like, feel like, taste, smell and sound like. Bubble Map.

Thinking Skills

<table>
<thead>
<tr>
<th>Describing</th>
<th>Defining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on Senses</td>
<td>What is it?</td>
</tr>
<tr>
<td></td>
<td>What is its’ function?</td>
</tr>
</tbody>
</table>

Thinking Foundation. www.thinkingfoundation.org
SOME REMINDERS WHEN PLANNING LESSONS

- Know what it is you want to teach and why? Why do the students need to know how to compare the height of a cylinder to its circumference? You need to know why and it’s important to tell the students why so they understand why they are learning what they are learning. “The Power of Purpose.”

- Know the Learning Standard and Principle of Learning.

- Know what it is the students will be able to do to demonstrate they are learning. The students will be able to ............... That is the behavioral/learning objective.

- Clearly state the goal and why. Model what you want the students to do. Much modeling may be needed. Plan for a lot of guided practice and then independent practice. Assess students during guided and independent practice. Individualize and plan further lessons so that students meet independent mastery. If that is not possible for some learners, make sure to state the supports the students need in order to meet the goal. Homework should be on the students independent level, not on the students frustration level.

- TASK ANALYZE the activity. When a student does not understand, look for the missing step. This is crucial to student learning. All students can learn if the task is analyzed to meet their learning needs and they are given enough practice. (Curriculum materials have been ordered that task analyze skills. For some of our students there may still be missing steps. You will fill in those steps.)

- Determine what Thinking Map® will assist you in planning your lesson based upon the purpose of your lesson.

- Be prepared with questions to get the responses that demonstrate the students understand the learning experience.

- Consistent use of a behavior management program is necessary - one that has been field tested for years. Applied Behavioral Analysis is such a program. The teachers who participated in the ABA course with Dr. Rousseau from City College and received in classroom consultations by Dr. Rousseau and Dr. Bahadourian met with success in helping students to spend more time on task.
"Learning is a matter of attitude not aptitude."

Author unknown

Learning takes **time, practice, patience, making mistakes and HARD WORK**. We need to remember that for ourselves as well, and keep telling it to our students. Much repetition is needed as well as carefully planned **direct instruction**. Students need to be **given practice under various circumstances** so that they can **transfer and generalize** the skills they have learned.

**American Educator AFT Magazine**, Summer 2000, has an article by Gilbert T. Sewall entitled **Lost in Action**. His major claim is that “we have lost the focus of traditional pedagogy and have replaced hard and serious work of the mind with activities that are often “time-consuming and trivializing.”

“Sometimes teachers must inform directly; at other times they guide students to figure things out for themselves. Active, attentive listening . . . is imperative. Repetition, practice and memorization have their part, as does learning to take organized notes. **At the core, always, is serious content approached seriously**. Knowledge builds upon knowledge. . . . Needed is sequenced content and classroom time to allow students to build a storehouse of knowledge and skills and the ability to use them. . . . The more students know, they more they will want to know.

“Students need to: unearth meaning; to evaluate , interpret, compare, extend, apply; analyze errors; present findings; defend solutions; attend carefully to what others say; get their thoughts down clearly on paper; to understand. **This is not boring and it is not passive. This is real action learning.** This is the **mind** at work. Those who would banish such teaching by dismissing it as dull and ineffective are better advised to put their efforts into helping teachers sharpen these familiar and research-validated approaches.”

**EXPERIENCE + REFLECTION = GROWTH**

John Dewey

We are often not given the time to think about what it is we are learning, to reflect upon teaching practices, to share our reflections, experiences and suggestions with others and to take what we have learned and use it in depth. The intent in writing this Resource Guide is for it to be a review as well as a vehicle to motivate you to continue to use Thinking Maps® as tools in your classrooms. You can be resources for one another. The Blue Thinking Maps® Manual an excellent and necessary resource. Another intent in writing this guide, is to motivate staff who have not participated to want to participate.

The Quality Assurance Team in D. 28/75 plans to continue Thinking Maps® consultant support and training. We also plan to continue to teach staff members to use the principles of Applied Behavioral Analysis and include classroom consultations with Dr. Marilyn Rousseau and Dr. John Bahadourian. We believe that the Thinking Maps Tool and applying the principles of ABA will give our students what is needed so that they can participate in “hard and serious work of the mind” to meet their fullest potential. It is our continued goal to support teachers and supervisors to "sharpen these research-validated approaches."

Thinking Foundation. www.thinkingfoundation.org
TEACHER ACKNOWLEDGEMENTS
Thinking Maps® Participants

In the section that follows work is presented in the following order by
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Carlin Padmore
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Yosefiah Campbell
Dorothy Taylor

MIS IV
MIS IV
MIS I
MIS I
MIS I

Kindergarten
Second Grade
Third/Fourth Grade
Fourth/Fifth Grade
Sixth Grade

J 72
Agnes Romeo
Resource Room

Seventh Grade

DISTRICT 75

875Q
Sharon Feldman

SIE I
18 years old

P993@J72Q
Anita Dottin

SIE VI
10 - 14 years old

752Q (QSCD)
Steve Mueller
Vinnie Born
Pat Gatuso
Harriet Burger
Marion Lawlass

SIE IV, VII
SIE IV, VII
SIE IV
SIE IV
SIE IV

Grades 7-9
Grades 7-9
15 - 18
15 - 18
15 - 18

Olga Rothman
Judy Goldstein
Support Teacher
Grant Coordinator

Adults
P.S. 140  Ms. Erin Cosgrove

**Objects That Roll**
- Basketball
- Balloon
- Marble
- Pencil
- Car tire

**Caterpillar**
- Cocoon
- Changes to a butterfly
- Sleeps
- What do we know about Charlie?
- He can fly

---

**THE W.P.**

- Bat
- Peanut
- Doughnut
- Gas
- Ma
- Hat
- Nicholas
- Cat
- Fruit
- Yogurt

---

Wilfrid Gordon McDonald Partridge Memory
Learning Standard E.4a - The student demonstrates a basic understanding of the English language: Spelling

Circle Map and Frame

Grade 2
6 years old
Ms. Pedmore
PS 140

Cute
Quion

Cute words that have the long sound

Cucumber

Cute

Unite

Written

Yse

Units

Amusings

Mule

Se I wasabi

Very Good

Circle Map for Defining in Context • Frame for Frame of Reference
Circle Map and Frame

Standard: The student demonstrates a basic understanding of the rules of the English language.

Grade 2

Principle of Learning: Model of student work.

Name: [Blank]  MAR 28 2000

Words that have the long y sound:
- Music
- Music
- Music

Use cute

Cucumber

Human

Amuse

Amuse

You

Circle Map for Defining in Context • Frame for Frame of Reference
Bridge Map

P.S. 140 Q
Grade 2 (7 years old)
2-202
Ms. Readmore
MIS 4
Literacy

Good!

Antonym:

RELATING FACTOR

up as fat

SK innu

down

Standard: E.H. - The student demonstrates a basic understanding of the rule of the English language: Grammar.

Bridge Map for Seeing Analogies (similar relationships between ideas)

Principles of Learning:

- Clear Expectations → Models of Student Work,
Learning Standard E4a - The student demonstrates a basic understanding of the rules of the English language: Grammar Principles of Learning: Academic Rigor in a Thinking Curriculum High Thinking Demand - Seeing Analogies

Bridge Map for Seeing Analogies (similar relationships between ideas)
Bridge Map

Class MIS-2

Grade 2 (7 years old)

Ms. Admore

MIS-4

LITERACY

Antonym

RELATING FACTOR

Thinking Foundation.  www.thinkingfoundation.org

Toshima

March 28, 2000

Name: Toshima

Good

soft

as

Happy

hard

Sad

Learning Standard E4a: The student demonstrates a basic understanding of the English language - Grammar

Bridge Map for Seeing Analogies (similar relationships between ideas)

Principle of Learning: Accountable Talk

Press for clarification and explanation.
**My Story (Pre-K - 2)**

**Morning**

I wake up and go to school.

**Afternoon**

In the afternoon, I go to play in the park.

**Night**

I eat Kix and go to sleep.

---

**Flow Map for Sequencing and Ordering**

Principles of Learning, Academic Rigor in a Thinking Curriculum. Instruction is organized around major concepts.
Standard: S2a. Demonstrates understanding of characteristics of organisms.

Brace Map

- Flower
- Roots
- Stem
- Leaf

Plan:

- **Principles of Learning:**
  - Organize for Effort
  - Expert Instructed Use of Thinking Map to Demonstrate Analysis of Whole/Part Relationships

2-25

Brace Map for Physical Analysis of Whole, Parts, and Subparts of Objects

Innovative Learning Group
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Standard 2.1: Demonstrative understanding of characteristics of organisms

Mapping Out the Parts of a Plant

What are the different parts of a plant?

Parts of a Plant

There are many different kinds of plants, but they are made up of the same basic parts.

- Leaves are a plant's food factories. They turn water, air, and sunlight into food for the whole plant.
- Roots anchor the plant into the ground and soak up water.
- The stem supports the plant. Water and food travel through the stem to all parts of the plant.
- Many plants have flowers.
- Flowers ensure the seeds are produced that grow into new plants.

Brace Map

Name (Students)______

Plants______
Teacher: Ms. Branch  
Class: MIS - 1 → 3/4  
Subject: Literacy  
Type of Map: Double Bubble Map  
Principles of Learning - Organize For Effort  
- The book of the month "When I Was Little, Now I..." by Jamie Lee Curtis was read out loud to the class. After reading a discussion was had about when the students were younger. They then compared the events that happen now.  

Double Bubble Map  

Outcome: Making a "When I Was Little" Book  

Learning Standard: ELA - Student reads comprehends and produces written work (2a, 4a, 4b)
Double Bubble Map was used to compare and contrast the views of Martin Luther King Jr. and Malcolm X.

- Dr. Martin Luther King Jr.: totality, non-violent, advocate for unity, black and white, church-going youth.
- Malcolm X: advocated violence when necessary, advocated separatism, delinquent youth.

Visionaries believed in equal rights for blacks.

Excellent Speakers: courageous, not afraid to die for beliefs.

Principles of Learning, Academic Rigor in a Thinking Curriculum, High thinking demand.

Double Bubble Map for Comparing (similarities) and Contrasting (differences)
Thinking Skill: Cause-Effect Relationships

Thinking Map: Double Flow Chart

Man Killed Himself

Causes:
- He had no money
- His wife killed herself
- He was depressed

Current Events:
- Lorenzo

Effects:
- He had no friends
- He was buried
- Friends were sad

Literacy Warm-up

AIM: To read about current events and take notes using a double flow chart.

Standard: I must prepare and give an oral report to my class.

Principles of Learning

Accountable Talk - Standards of evidence and reasons.
Teacher: Dorothy Taylor

Standard: 1.1.

The student reads informational materials to develop understanding and produces written work.

P.S. H.O. Queens
Class 6-332
Felicia
March 24, 2000

**Literacy/Social Studies**

**Double Bubble Map**
Compare and Contrast

- They lived in caves or tents
- Life before civilization
- Life after civilization
- Used share for tools and weapons
- Learned to get foods
- Learned to grow crops
- Domesticated animals
- Hunted animals and collected wild plants
- A place to sleep
- Permanent homes
Learning Principle - Academic Rigor in a Thinking Curriculum.  
A curriculum that deepens concepts.

Standard: (ELC) - The student reads and comprehends informational materials to develop understanding and produces written work.

Teacher: Dorothy Taylor

Ps.1400
class 3 23

Tiffany
March 24, 2000

Literacy/soc. studies

Double Bubble Map
compare and contrast

Humans moved from place to place

They learned to grow crops

Life before civilization

They both were able to get food

Life after civilization

They both still in the same country

They built permanent homes

Domesticated animals

They hunted for food

They lived in caves or tents
Teacher: Dorothy Taylor
P.S.149,a Labrina 12 yrs. Old
Class: 6-3 23 March 24, 2000

Literacy/Social Studies

Double Bubble Map
Compare and Contrast

Humans moved from place to place.
Humans lived in tents and caves.

Life before civilization
Humans hunted for food.

They both lived in the same country.

Life after civilization
They domesticated animals.

They both learned how to get food.

They learned to grow crops.

They built permanent homes.

Standard: E.1c - The student reads and comprehends informational materials to develop understanding and produces written work.

Principles of learning — Academic Rigor in a Thinking Curriculum. An articulated curriculum that deepens concepts.
Social Studies

The students used a “tree map” to classify Earth’s resources.

They listed “renewable resources” and “nonrenewable resources.”

P.S. 140
Class 5-23

Donald
May 20, 2000

LITERACY

Aim: To use a tree map to classify Earth’s resources.

Tree Map

Earth’s Resources

Renewable Sources

Water

Oil

Plants

Metals

Animals

Coal

Principles of Learning - Academic Rigor

Learning Standard - EZA: creates an organizing structure appropriate to a specific purpose.
Agnes Romeo  
Resource Room  
Grade 7  
ELA Standard #2  
ELA Standard #3

JHS 72  
13 years old  
Narrative Procedure  
Listening

ASSIGNMENT

The students listened to a reading selection on the process of mummification.

They were asked to make notes during the reading, using a flow map (a tool for sequencing).

They used the notes to write a paragraph describing the process.

Principles of Learning
High Thinking Demand
Challenging assignment
J.H.S. 72  Pierre  7-6
Language Arts, Mrs Romeo  April 10, 2000

Process of Mummification

ELA Standard #3

Aim: How do you recognize sequence of events?

Egyptians believed in many things like life after death. In order prepare for life after death they had to use mummification.

This process of mummification took about 70 days. First they removed the brain through the nostrils. Then they removed the vital organs and put them in tightly sealed jars. Third they would let the body sit for 40 days. Then they embalmed the body. Last they wrap the body in bandages.
E.L.A Standard #5

Aim: How do you recognize sequence of events?

**Process of Mummification**

Many years ago Egyptians believed in life after death. Egyptians came up with a process called mummification that prepared the body for life after death.

Mummification took about seventy days. First, they would pull the brain from out the skull through the nose. Then they would take out all the other organs. Next, they would dry the body out for about forty days. After that they embalmed the body with oils and perfume. Finally, the wrapped the body in cloth.
JHS 72
Language Arts, Mrs Romeo
ELA STANDARDS #3

March 30, 2000

Aim: How do you recognize sequence of events?

**Process of Mummification**

Egyptians used mummification to preserve the dead. Mummification usually takes at least seventy days. There were five steps to the mummification process.

First, they removed the brain from the body through the nostrils. Secondly, they took the vital organs out and put them in a tightly seal jar. Next, they let the body dry for forty days. They used natron, a type of salt to do that process. After that, the body was then embalmed. Finally, they wrapped the body in linen bandages. Those are the 5 steps in the mummification process.
Circle Map for Defining in Context - Frame for Frame of Reference

Brainstorm:

On Halloween
Kids go trick or treating

In the minis:
You need:

Flowers -

Beautifull

Flowers

Summer

Winter

Seasons

Spring

Flowers are

In the Spring

There are

Lots of leaves

In the Fall

Beach

Snow

Acm

Fall

is very hot

Not in the summer

Name: Charles
Bubble Map for Describing Using Adjectives and Adjective Phrases

- Beautiful
- Wonderful
- Spectacular
- Exciting
- Perfect
- Mustard
- Summer

Principles of Learning
Learning Standard: A student demonstrates a basic understanding of the rules of English

- Language

Name: Charles
I like the activities that come with the seasons. In the winter I can go to the park and throw snowballs at kids, or I can build a wonderful snowman. In the spring I can plant a beautiful garden with flowers and watch them grow all day long. How exciting it is to play in the leaves in the fall? On Halloween you can put leaves in Halloween bags to make decorations for your homes. Many kids go from house to house and collect candy.

I love summer better then the rest of the seasons. In the summer there are spectacular things you can do. You can go to the beach with your friends and have a wonderful time. You can go on exciting rides on our bikes through the woods. How spectacular it is to watch the beautiful sunset in the summer! On the Fourth of July people go to the parks and have barbecues. Some people watch the fireworks all night long. I go to my mother's house to see all my friends and we light fire crackers to celebrate Independence Day. Since there are so many things you can do in the summer, that is why it is the best of all the seasons.
Language Arts, Mrs. Rameo

It is from Japan

Haiku

It has three sections

First line has 5 syllables
Second line has 7 syllables
Third line has 5 syllables

Thinking Skill - Defining Haiku

Principle of learning: Recognition of Accomplishment
  - Frequent recognition of student work
JHS72
Language Arts, Mrs. Romeo

eLa Standards #5

Aim: How do you write poetry?

_Haiku_

People hate the rain.
There is nothing to do then
You can’t go outside.

My mom is pretty.
She is real special to me.
She is very smart.

I like to read books.
My favorite is a novel.
Some books are real good.
JHS 72
Class 8-3
Language Arts

Kristopher
4/5/00

The rain falls all day.
thick black clouds cover the sky.
Hail falls thunder roars.

Bee's fly and ants run
Birds sing while butterflies ring
Spring is good for all.

When it's cool you rule
When everything is "Hot" ,Rock!
When it's warm you storm.

When you see pigs fly.
When you see sakes run you think.
Now how does this happen?

The sea is blue right!
The sky is a very light blue.
but, the dirt is not.

The sheep eat all day
Mountain goats run and play OK!
lamb sleep but really eat.
JHS 72
Language Arts Mrs. Romeo

Shante
April 7, 2000

ELA Standards #5 The student produces work in a literary genre that follows the conventions of the genre.

Aim: How do you write poetry?

Haiku

Roses are lovely.
People like to get roses.
They like to smell them.

Daisies are very yellow.
They are the color of sun.
Daisies make me glad.

Summer is coming.
Lots of green grass is growing.
Flowers are blooming.

Principles of Learning
Recognition of Accomplishment
- Recognition for real accomplishment, not just trying hard.
- Celebration with family and community.
Ms Romeo

First line is one word - Noun
Second line has two words - Adjectives
Third line has 3 Verbs
CINQUAN
Fourth line has a four word sentence
Poem with 5 lines
Last line has one word - Noun

Circle Map
Thinking Skill - Defining Cinquain
Principle of Learning - Academic Rigor in a Thinking Curriculum:
High Thinking Demand: Extended Projects
J.H.S. 72 Language Arts, Mrs. Romeo

ELA Standards 5

Aim: How do you write poetry?

Cinquain

Mother
Pretty, brilliant
Plays, sings, cleans
She cares for me
Ma

Family
Smart, clever
Jokes, fights, exercises
We have fun together
Relatives

Trees
Pleasant, delicate
Grows, falls, breaks
I like big trees
Wood
**J.H.S. 72**  
Language Arts, Mrs. Romeo  
Charles  Class 7-5  
June 5, 2000

Principle of Learning: Academic Rigor in a Thinking Curriculum  
Progressively Deepens Concepts

**ELA Standard #5**  
Aim: How do you identify parts of speech in sentences?

Thinking Skill: Classifying Parts of Speech  
Thinking Map: Tree Map

---

### Parts of Speech

<table>
<thead>
<tr>
<th>Adjectives (Describe)</th>
<th>Nouns (Names)</th>
<th>Verbs (Action Words)</th>
<th>Adverbs (Modifying Words)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The playful</td>
<td>dog</td>
<td>runs</td>
<td>quickly</td>
</tr>
<tr>
<td>beautiful</td>
<td>mall</td>
<td>jogs</td>
<td>slowly</td>
</tr>
<tr>
<td>fabulous</td>
<td>John</td>
<td>plays</td>
<td>rapidly</td>
</tr>
<tr>
<td>Kind</td>
<td>Manhattan</td>
<td>fights</td>
<td>quietly</td>
</tr>
<tr>
<td>wonderful</td>
<td>Toys R Us</td>
<td>sings</td>
<td>softly</td>
</tr>
<tr>
<td>marvelous</td>
<td>school</td>
<td>works</td>
<td>constantly</td>
</tr>
<tr>
<td>elegant</td>
<td>supermarket</td>
<td>researches</td>
<td>perfectly</td>
</tr>
<tr>
<td></td>
<td>Gymnasium</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>cafeteria</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>precinct</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>laptop</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sharon Feldman  SIE I  
Class 756  18 years old

The students have severe mental and physical disabilities. Therefore, varying degrees of assistance are required by students in accordance with their IEP goals. Along with academic goals, many fine motors goals can be addressed during activities. Much modeling, verbal and physical prompting may be necessary as well. The pictorial organization that “Thinking Maps” provide correlates well with the type of instruction that our students require for learning since only a small percentage can read even “functional words” like “stop” and “go”. The map is either the summary activity or describing an ongoing process rather than the one that leads to independent creativity.

Students will choose from Mayer Johnson picture symbols provided to complete the task.

Thinking Skill: Classification - Tree Map
Purpose: This type of map was used so that the students could identify those snacks that were healthy and those that were not.

Standard 1 - Personal Health and Fitness
Students will develop, demonstrate and practice positive health behaviors, skills and choicemaking.

Thinking Skill: Classification - Tree Map
Purpose: This type of map was used so that the students could record the results of hands on experimentation with a large magnet and various functional items. The columns were labeled “Yes” or “No” to record magnetic attraction.

Standard 4 – Science
Energy and matter interact through forces that result in changes in motion. Students investigate the use of common forces on objects, such as those caused by gravity, magnetism, and mechanical forces.

Principles of Learning
Organize for Effort

Everything is organized for students to work as hard as they need in order to reach high standards.
Thinking Skill: Brainstorming - Circle Map
Purpose: This type of map was used so that the students could choose any of the symbols given to relate to the happenings and the characters involved in the adapted book read, ALICE IN WONDERLAND.

Standard 1- Language for Information and Understanding
Students will use information from books, magazines newspapers, textbooks, audio and media presentations, and from such forms as basic charts, graphs maps and diagrams.

Thinking Skill: Comparing and Contrasting – Double Bubble
Purpose: This type of map was used so that the students could compare and contrast characteristics describing Presidents Lincoln and Washington. Prior to assignment, students were able to view a large poster classifying the descriptives that pertain to each of the Presidents. Two students were chosen to act out the parts and receive the pictorial representations of the descriptives in object form.

Standard 1 Language for Information and Understanding
Communication and writing to acquire and transmit information requires asking questions, applying information from one context to another and presenting the information clearly.
Students use verbal communication, including alternative communications systems, to convey information, needs, and wants.

Thinking Skill: Sequencing – Flow Map
Purpose: This type of map was used so that the students could chart the metamorphosis of a frog. After viewing a film on topic students were asked to put the pictures in the order that they happened. What came first, etc.? Afterward, students will be able to view the process in class with live tadpoles while creating a more detailed flow chart to document the process.

Standard 4-Science
Living things are both similar to and different from each other and nonliving things.
Students observe the major stages in the life cycles of selected plants and animals.
Thinking Skill: Seeing the Analogies-Bridge Map
Purpose: This type of map was used so that the students could relate the different types of homes occupied by the different people or groups of persons we had studied this term.

Standard 1-Language for Information and Understanding
Students organize and categorize information/materials.

Thinking Skill: Sequencing-Flow Map
Purpose: The book entitled TREE OF LIFE, a story about the African Baobab tree, was the basis for the lesson. The map was used so that the students could better understand the interdependence of different forms of life.

Standard 4-Science
Plants and animals depend on each other and their physical environment.

Thinking Skill: Cause and Effect-Multiflow Map
Purpose: This type of map was used to as a sequel to the above map to help to further explain the continuation of the circle of life as shown in the TREE OF LIFE. The interdependence of life is more clearly shown by use of the map.

Standard 4-Science
Plants and animals depend on each other and their physical environment.
THINKING MAPS IN THE ART CLASS

Anita Dottin, Art Teacher P.993@J72Q Sie VI

New York State Learning Standards, Thinking Maps and lessons in the Visual Arts have been combined in the following tasks. The tasks were designed to engage the students in the types of hands-on activities that would help to expand their knowledge in the content area and to attain desired student outcomes for successful futures.

The Thinking Maps were used as tools to elicit prior knowledge of a subject as well as to introduce new ideas and concepts. The maps aided in guiding the students' thinking while helping with the formation of concrete ideas and images.

Results showed that with the use of the maps, there was greater participation on the part of students and a need for more thoughtful planning on the part of the teacher. The desk maps tended to generate dialogue among classmates, who treated the maps like "Board Games." This created a more relaxed and fun-filled way to learn, but teachers are cautioned to carefully link the most appropriate map to the task at hand.

The following tasks and their related "Thinking Maps" were presented to students who have limited proficiency in reading, speaking and cognitive abilities. The students in this SIE VI program range in age from 10 to 14, are mildly retarded, emotionally disturbed and function on an elementary level. They often need help in completing a task.

<table>
<thead>
<tr>
<th>Map</th>
<th>Task</th>
<th>Thinking Skill</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Map</td>
<td>Making Stamobiles</td>
<td>Sequencing</td>
<td>Creating, Performing and Participating in art</td>
</tr>
<tr>
<td>Bridge Map</td>
<td>Art tools and their Uses</td>
<td>Seeing Analogies</td>
<td>Knowing and Using Art Materials</td>
</tr>
<tr>
<td>Bubble Map</td>
<td>Sculpture: Statue of Liberty</td>
<td>Describing Qualities</td>
<td>Responding to and Analyzing Art</td>
</tr>
<tr>
<td>Circle Map</td>
<td>Self Portraits</td>
<td>Defining in Context</td>
<td>Understanding Cultural Dimensions of art</td>
</tr>
</tbody>
</table>
The Arts: Standard 1 Creating and Participation in the arts, students will create works of art based on their personal experiences and their imagination. They will draw and name parts of their bodies.

Principle of Learning: Academic Rigor in a Thinking Curriculum. Prior knowledge of the body and its parts are used to define oneself in context.

SELF PORTRAITS

1. Draw a picture of yourself in the small circle above.
2. In the large circle, draw pictures or write the words; eyes, nose, mouth, ears, hair, smile, teeth, skin, etc.
3. In the space around the large circle, draw pictures or write names of people or things that make you look the way you do. (e.g., brown eyes from mom; clear skin from carrots, etc.)
4. Join the rest of the class in making a graph that shows which one of their features they like best.
FORMS OF ART AND BEST EXAMPLES

When People dance on a stage the audience is seeing a form of art called Performing Arts. The person who creates the dance is called a Choreographer. "The Nutcracker" is one of the best examples of an artistic dance creation.

Below is a Bridge Map that shows how different artistic creations relate to each other in terms of their art form.

**Activity:** Fill in the missing art form or the artistic creation.

Thinking Skill - Seeing Analogies

...is an example of...

- **Moby Dick** *as* **We Are the World**
  - **Literary Arts** *as* **Musical Arts**

- **Cats** *as* **Empire State Building** *as* **Bell Bottom Jeans**
  - **Theater Arts** *as* **Architectural Arts** *as* **Fashion Arts**

- **Cadillac** *as* **Strawberry Cheesecake** *as* **Gone With The Wind**
  - **Industrial Arts** *as* **Culinary Arts** *as* **Cinematic Arts**

- **Sweetgrass Basket** *as* **The Mona Lisa** *as* **Musical Arts**
  - **Folk Art** *as* **Visual Arts** *as* **Literary Arts**

**Principles of Learning - Academic Rigor in a Thinking Curriculum - Thinking Map - Seeing Analogies progressively deepens concepts**

**Goal:** To give myself practice in using a bridge map.

**Standard 2 - Knowing and Using the Arts**

Student will be knowledgeable about various forms of art and what is produced.
Assessing Thinking Maps

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Assessment Activity

Name: Alberto C.  Class 5/2

Bridge Map

Thinking skill - Seeing analogic skill

are used to......

color as paint as cut

crayons as brushes as scissors

draw as measure as paste

pencils as rulers as glues

The Arts: Standard 2 Knowing and Using Art Materials

Students will name various art materials and state what they are used for. They will create simple works of art using the materials.

ART TOOLS AND THEIR USES

The Art class has many tools and materials that are used to perform different tasks. When deciding on a project, teachers and students should be sure that the tools they gather are appropriate for the task.

Fill in the Bridge Map above to show that you know what each tool is used for and that you understand how these things are related.

Principles of Learning: Academic Rigor in a Thinking Curriculum

Students are encouraged to see relationships/analyses when using art tools,

ANITA DOTTIN 1993 72

Thinking Foundation. www.thinkingfoundation.org
NAME: Freddie

**Thinking Skill - Describing Qualities**

**Sculpture: Describing the Statue of Liberty**

1. Working in groups of 5, decide on one person who will draw a Bubble Map in the space above.
2. Choose another person to write the words, "Statue of Liberty", in the center bubble.
3. Elect another member to distribute photos of the statue. Study the picture then have a discussion about what you see in the picture or what you already know about the Statue of Liberty.
4. Each member in the group will give a word or words that describe the statue, while a fourth member records those adjectives in the outside bubbles.
5. The last member will list the characteristics of the statue and share the information with the rest of the class.
6. Compare the descriptive words used by each group. Are there any similarities or differences? Draw a double bubble to illustrate.

The Arts, Standard 3 Responding to and analyzing works of art;
Principle of Learning: Organize for Effort - Students work together.
ANITA DOTTMAN P 993 G 71 and know what is expected.
**Assessing Thinking Maps**

**Assessment Activity**

Name: **Gerry**  
Class: **5th**

**Flow Map:**

**Thinking Skill - Sequencing**

1. Draw shapes
2. Cut out shapes
3. Glue shapes together
4. Stand Stamobile up

---

**The Arts**

**Standard 1:** Creating, Performing, and Participating in the Arts.  
Students will follow sequenced directions and demonstrate basic drawing, cutting, and gluing skills to produce a product.  

**MAKING STAMOBILES**

**Materials:** Glue, scissors, pencil, oaktag.
1. Using these materials, create a freestanding Stamobile.
2. Draw a Flow Map in the space above.
3. In each rectangle, write the steps you took to make your Stamobile.
4. Write the words, "How to make a Stamobile", on a piece of paper.
5. List the steps on the paper and place it next to your Stamobile.

**Principles of Learning - Learning as Apprenticeship**  
Students produce products based on models.

---

Anita Bollin 1993 @ 72
Look at our Stambilies!

How to Make a Stambily:

1. Trace shapes.
2. Cut and separate.
3. Color shapes together.
4. Hold stambily up.

Look at our Statues of Liberty!
**When I Get Angry...**

**I Feel...**
- Like I want to get even
- Hurt
- Hostile
- Scared
- Unhappy
- Sad
- Excited
- On fire
- Hot
- Hurling
- Someone mad
- Exploding
- Depressed
- Humiliated

---

**Circle Map**

**Skill: Brainstorming**

**Social Skills:**

**Conflict Resolution**

**Standard 3 - Universal Foundation Skills**

Students will demonstrate awareness of how they feel when they get angry.

**Principle of Learning:**

Socializing Intelligence

---

**Thinking Skill: Brainstorming**

**Teacher:** Mr. S. Mueller
**Date:** 3-7-00
**Class:** 7A - Grade 7-9

**Ages:** 5th, 6th, 7th

**Standard:** 3

**Social Skills**

Interpersonal Qualities

Students will brainstorm ways to resolve conflicts in order to work cooperatively as a team.

**Principle of Learning:**

Socializing Intelligence

---

**Resolving Conflicts**

- Walk away
- Try to talk it out
- Make a joke
- Use humor
- Ask a friend for help
- Give & take solution compromise
- Explain yourself
- Ignore a bully or a particular comment
- Involve a 3rd party, or a teacher or guidance counselor
- Call a teacher or mediator or counselor

**Grades Level H.S.**

Thinking Foundation. www.thinkingfoundation.org
CIRCLE MAP  (STOP SAFETY)

**Skill:** Brainstorming

- Ask the teacher if you are unsure of what you're doing
- No fooling around or fighting
- Don't put anything on the floor (e.g., books)
- Follow shop safety rules
- How can we avoid accidents in the shop
- Don't touch the kiln
- Work carefully

**V. Born Ceramics**

**QSCD - Grade 7-9**

**Standard 3 - Universal Foundation Skills**

Students will demonstrate awareness of safety procedures in a shop class.

**Principle of Learning:** Clear Expectations.
SAFETY CIRCLE MAP

SAFETY AWARENESS
BEGINNING OF THE YEAR

CIRCLE MAP
IA/TECHNOLOGY EDUCATION

SKILLS:
Brainstorming

LEVEL: JHS
Special Ed. or Regular Ed.

LEARNING
Standard
students will understand the importance of safety,

Principles of Learning:
Clear Expectations

Steve Mueller
FLOW CHART

1. Valentine Heart Picture Frame [Base piece]
   Teacher: Mr. S. Mueller
   Grade 7-9
   Industrial Arts/Technology
   Regular/Special Ed.
   Standard 5 - Technology Education

   Student will follow sequenced directions applying technological skills to complete a project. Principle of Learning: Learning as Apprentice ship

2. Rough Cut Basic Heart Shape Using Bandsaw

3. Machine Sand to Exact Heart Shape Using Disc/Belt Sander

4. Hand Sand Using Fine Sandpaper

5. Polish Edges Using Buffing Machine
FLOW CHART
- STAIRCASE TO COMPLETION -

1. CUT MATERIAL TO BASIC SIZE
   SAFETY FIRST

2. CUT BEVEL 45° USING FIXTURE

3. MACHINE SANDING TO REMOVE DEEP SCRATCHES

4. HAND SAND TO REMOVE FINE SANDPAPER

5. MACHINE POLISH ON BUFFING MACHINE

6. REMOVE MASKING PAPER

7. BEND USING STRIP HEATER

8. DRILL HOLE 1/8" DIAMETER
   DRILL PRESS INSERT KEYCHAIN

COMPLETE PROJECT

PICTURE FRAME KEY CHAIN (WALLET SIZE)

INDUSTRIAL ARTS/TECHNOLOGY
GRADE 7-9
Mr. Mueller

LEARNING STANDARD - 5 - TECHNOLOGY

Students will apply technological skills to complete a project.

Principle of Learning - Learning as Apprenticeship
DOUBLE BUBBLE MAP (CERAMICS)

COMPARING PAINTED PROJECTS WITH GLAZED PROJECTS

Project is not waterproof

Both projects are made from clay

Painting... Decorate the project

Paint and glaze cans in many colors

Painted ceramic project

Glazed ceramic project

Project is waterproof

Project is food safe

Project is not food safe

Project is not fired after painting

Painted ceramic project

Glazed ceramic project

Standard 3 - Universal Foundation Skills

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

Thinking Skills - Compare and Contrast products made in shop class.

Learning Principle - Accountable Talk - Press for clarification and explanation.
FLOW CHART

CERAMIC (SLIP CASTING)

Pour Slip (Liquid Clay) into the mold

Empty Slip from the mold after it reaches the proper thickness

Trim the spare clay from the mold

Remove the rubber bands from the mold and remove the here

Clean the mold and put the rubber bands back on it

STANDARDS - TECHNOLOGY
Alternate Level: Tools Resources, and Technological Processes (pg 25) in "Learn, Standard for Students with Specific Disabilities"

Students will process materials into more useful forms.

Principle of Learning - Learning as Apprenticeship -

Students are engaging in "authentic" work.

QSCD
V. Born
Grades 7-9
Industrial Arts/Technology Ed
MULTI-FLOW MAP (CAUSE & EFFECT)

V. BORN

Standard 3 - Universal Foundation

Skills

Interpersonal Qualities - Students develop an awareness of consequence of their behaviors.

Cause

Calling each other names

Getting in each other's faces

Egged on by the other students

Event

Rashawn and Stanley fight

Effect

Interrupted learning time for them and other students

Suspended from school

In trouble at home with parents

Principle of learning:

Socializing Intelligence - Students are using cause/effect thinking to make sense of the world.
COMPLETED FETTLED PROJECT

SPONGE SEAMLINE WITH DAMP SPONGE TO REMOVE DUST

SAND SEAMLINE WITH SANDING PAD

FILE SEAMLINE WITH FETTLING KNIFE

CERAMIC SHOP
V. BORN
V. BORN

Learning as Apprenticeship

Alternate Level: Tools, Resources, and Technological Processes (p. 25 in Learning Standards for Students with Severe Disabilities)

Students will develop basic skills in the use of hand tools.
Suggestions for Taking Shop Lesson Further
Possibilities for using other maps.
by Judy Goldstein

Planning Learning Experiences

- Know what you want to teach and why. What is the purpose for this learning experience?
- Refer to the Learning Standards and Principles of Learning.
- Plan learning experiences using Thinking Maps where they can support student learning.
- At first, the teacher needs to connect the Thinking Skill to the Map. After enough practice, the goal is for the students to be able to see the map and state the thinking skill or state the thinking skill and choose the correct map. The ultimate goal is for the students themselves to use the maps to support their own learning.

Effective Pedagogical Practice for Teaching Lessons:
Begin with an opening statement that tells the students: This is what we are going to do and why. Relate it to their lives.
E.g. Today we are going to discuss safety procedures in shop class so that we can all work together in a safe way. Following safety rules are important in all jobs.

Learning Standards

CAREER DEVELOPMENT AND OCCUPATIONAL STUDIES
Standard 3 - UNIVERSAL FOUNDATION SKILLS
Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.
3. Personal Qualities -
- Include positive behaviors for success in the workplace
  listening
  stating rules and purpose for rules
  reading rules
  following rules

Principles of Learning
Clear Expectations
- Safety standards available and discussed.

Learning Experiences Using Thinking Maps
- Students will demonstrate awareness of safety procedures in a shop class.
  Thinking Skill - Brainstorming
  Thinking Map - Circle Map
  Question for Inner Circle: How can we avoid accidents in the shop? (See
  Brainstorm Map - Shop Safety - Vinnie Born.)
- Students will clarify any vague statements in "Brainstorming" map such as what it means to "work carefully".

Thinking Skill - Defining in Context - Circle Map
Question for Inner Circle - What do we do when we "work carefully"?

- Working carefully means being aware of what you are doing, paying attention, working slowly and handling tools properly. Be aware of other people and give yourself space.

- Creating things from available resources to satisfy personal and societal needs and wants.

  Following directions
  Using Tools
  Creating a finished product

Principles of Learning
Learning as Apprenticeship
- Students make products that meet quality standards.

Learning Experiences Using Thinking Maps
- Students will follow sequenced directions applying technological skills to complete a project.
  
  Thinking Skill - Sequencing
  Thinking Map - Flow Map
  (See Flow Chart for Valentine Heart Picture Frame)

- Students will name the tools and the parts of the tools used to make the picture frame.

  Thinking Skill - Part-Whole
  Thinking Map - Brace Map

1. Basic Skills
- Include the ability to clearly communicate.

Principles of Learning
Accountable Talk
- Talk is essential to learning

Learning Experiences Using Thinking Maps
- Students will describe the qualities of the materials or the final product.
  
  Thinking Skill - Describing Qualities
  Thinking Map - Bubble Map
6. Managing Information
- focuses on the ability to access and use information

**Principles of Learning**
Academic Rigor in a Thinking Curriculum
Teaching focuses on mastery of core concepts.

**Learning Experiences Using Thinking Maps**
- Students will classify tools used in the shop class.
  
  **Thinking Skill - Classifying**
  **Thinking Map - Tree Map**

Note: The above standards come from: *The Learning Standards and Alternate Performance Indicators for Students with Severe Disabilities*, New York State Education Department. Office of Vocational and Educational Services for Individuals with Disabilities. 1998
QSCD Math/Literacy Newsletter

Teacher: Pat Gatuso

Twenty-two students toured Rikers Island on Tuesday, November 16th. When asked to describe Rikers Island, the students in classes 504 and 510 gave the following responses:

- no privacy
- smelly
- no choices
- tough
- dangerous place
- rough
- ugly
- barbed wire
- guards are mean to prisoners
- 5 minutes to eat
- recreation area not nice
- only your mom cares
- the guards curse at you
- dirty, nasty cells

I was glad to leave

Thinking Skill - Brainstorming - CircleMap
Ms. H. Burger  
Queens School for Career Development  
High School SIE IV District 75  
Map: Bubble Map  
Thinking Skill: Describing Qualities  
Fall - 1999

Basic Literacy

Following class discussions, students used the Bubble Map to Describe Qualities of some famous people, characters in stories and staff. Here is the result of some of our discussions. This work was done with the students as a group.

**English Language Arts**

Learning Standard E4 a Demonstrate a basic understanding of the rules of the English language.

- Students will use adjectives to describe people.
- Students will build a vocabulary using adjective and adjective phrases.

**Principles of Learning**

Clear expectations - Standards Modeled and Discussed,
Michael Jordan

- Very rich
- Happy
- Very nice person
- Caring
- Spoke well
- Good speaker
- Best of the best
- Good sport
Shaquille O'Neal

- Excellent basketball play
- Very tall
- Big feet
- Good sport
- Nice guy
- Slow center
DMX

- rude
- good rapper
- serious
- young
- violent
- mean
- bad
Sherlock Holmes

- Rarely wrong
- Famous detective
- Very smart
- Serious
- Interesting
Circle Map

Good food
Pilgrim
working together

Parade

Thanksgiving

Turkey
too much food

helping
Vacation
trip
Indians

Ms. Burger
12/11/2000

SIE II
Basic Literacy

Circle map - Brainstorming
Ideas and what students know and remember about Thanksgiving.

Standard I - Language for information and understanding, students brainstorm to convey information.

Principles of learning: Academic rigor in a Thinking curriculum. Students are engaged in thinking about prior knowledge.
Buddy

January 5, 2000

Nate likes pancakes
Lost List

eggs
sugar
milk
salt

nate the great and the lost list

claudie
rosamond
annie
fang the dog
sludge

cat party meeting

Mrs. Burger
Basic Literacy
December 1999
SIE III O.S.C.D.

16 years

Brainstorming Circle Map

Students will brainstorm using circle map
to recall information from a story.

Students will write 3-4 sentences using
circle map as support

Principles of Learning - Academic Rigor

A - Independent practice with help

Produce a report of information
Buddy

The name of the book is Lost List.

Nate likes pan cakes.
Claude Lost List.
Nate finds list at Rosamond's cat party.
Circle Map

Eat Animals

Skin is very dry - do not live near N. Pole or S. Pole

2,400 kinds of snakes

Thread snake is smallest

Giant snake is anaconda.

Snakes that kill prey by squeezing are called constrictors.

Mrs. Burger
Basic literacy
December 1999
S.I.E. T. O.S.C.D.
17 years old

Brainstorming Circle Map

Students will brainstorm using circle map to recall information from a story.

Students will write 3-4 sentences using circle map as support.

Principles of Learning - Academic Rigor in a Thinking Curriculum

E.D.A. - Cauldron practice will help produce a report of information.
Tony

1. A snake's skin is very dry.
2. There are 2,400 kinds of snakes.
3. The smallest snake is the Thread snake.

6/12/00
Mrs. Burger  
January 2000  
SIE,  
O.S.D.  
16 years old  
Basic literacy  
Describing using adjectives + adjective phrases  
Bubble Map  
Students will describe qualities of classmates  
Learning Standard E714a. Demonstrate a basic understanding of the rules of the English language.  
- Build vocabulary by using adjectives to describe qualities of people.  
Principles of Learning: Clear Expectations  
Models of Student Work,
Mr. Oh left town never to be seen again.

Sir Whong's plan worked and

Mr. Oh planned to outsmart Sir Whong and get his money back.

Mr. Oh's tricked Sir Whong and

Sirens and lazy friends

spent the money on parties,

Mr. Oh tricked Sir Whong and

Mr. Oh said Sir Whong could hold his treasure "A Golden Pig"

until he returned his money.

Mr. Oh asked Sir Whong to borrow money for medicine for his sick mother

Sir Whong left Mr. Oh borrow

the money.

Sir Whong and his Map

Flow Map
Korea

South Korea

North Korea

The capital of Korea is Seoul.

Korea is located in Asia.

Korea is a small country compared to its neighbors, China and Japan.

Korea is divided into North Korea and South Korea.

South Korea is a free country.

North Korea is controlled by communists.

A popular game in Korea is Taekwondo.

Korea is a poor country.

From Korea, there are maritral arts.

Circle Map

Thinking in Context

Brainstorming
Veronica

November 18, 1999

Thinking Skill - Brainstorming prior knowledge.

panic
Danger

Crackling

Fire
lead them out
red light

Flickering

Violent

thundering

Marion Lawless
Class 508 SIE11 QSCD
Basic Literacy

Circle Map: Brainstorming

Before reading a selection from Black Beauty, students brainstormed ideas about fire.

Standard 1: Language for Information and Understanding

Learning Principle: Accountable Talk - Students discussed what they knew about "fire."
Daniel

He loved sports
He supported his family
He played baseball in Brooklyn
He was the best player
First black man to play on a major league team

M. Lawless
Class 504 ASCD S1E4
Basic literacy

Read a discussed a story about Jackie Robinson.
Students verbalized important words and phrases on a circle map.
Thinking Skill: Defining in Context
Standard 2: Language for Literacy, Response and Expression
Principle of Learning: Accountable Talk- Students stated reasons why J. Robinson was a hero.
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Circle Map: Brainstorming
Q.S.C.D.
E.L.A. - Guided Practice

Students will brainstorm what they learned after listening to a story.

Poet teacher

Gwendolyn Brooks

Born in Kansas
Won a prize
Wrote poetry

Principles of Learning:
Organize for Effort
Use Brainstorming
Thinking Map
to share what was learned about G. Brooks.

Rosemarie 508
Marian Lawless

District 25, 4th Grade

Basic Literacy Level 4

Circle Map: Used for brainstorming and organizing information, (student worked on his own)

Principle of Learning - Socializing Intelligence

English Language Arts Standard: 2c

Writing: Produce a narrative account, historical or autobiographical.
noncooperative
indisciplined
athletic
fun
too
nice
out
son
handsome
artistic
lazy
J.C.

- cute
- athletic
- handsome
- nice big smile
- moves around a lot
- talkative
Buddy

- Funny
- Talkative
- Kind
- Respectful
- Nice
- Friendly
- Cute
- Smart
- Helpful
Kido

- Frustrated
- Brave
- Sad
- Afraid
- Angry
Shirley Temple Wong sails from China to America.

Shirley doesn't know any English.

Bandit Switch her name to Shirley Temple Wong from a movie star.

Shirley gave Jackie Robinson a key to P.S. 8

Shirley was babysitting and getting paid some money and the parents.

Shirley goes to school and the kids make fun her language.

Shirley finally gets some friends.

Circle Map:

Brainstorming
Circle map to brainstorm information from a book they read.
Circle map will be used as a support as students write a summary of the book.

H. Burger RSCD
March 2000
SITE IV 17 yrs. old
Basic Literacy
Steven 509

Principle of Learning = Accountable Talk
Annenberg Grant

Class 507, Mrs. Burger, and Mrs. Serrano participated in a project with the Teachers’ and Writers’ Collaborative. Daphne Greaves worked with class 507 Mondays and Thursdays period seven.

We wrote a play called Two Enemies, Two Friends and are demonstrating the writing process using a Flow Map.

A Flow Map is one of eight thinking maps. Thinking maps are used as a common visual language for transferring thinking processes, integrating learning, and for assessing progress.

The Flow Map is used for sequencing and ordering information.

We enjoyed working with Daphne and learned a great deal about how to write and perform a play.

THANK YOU, DAPHNE!!

English/Language Art

Standard 4 - Language for Social Interaction

Students will read, write, listen and speak for social interaction.

Principles of Learning: Recognition of Accomplishment.
FLOW MAP

1. Think of ideas for a play.
2. Write the script.
3. Give out a part to each student.
4. Rehearse our play.
5. Perform Two Enemies, Two Friends for staff and students.
April 2000 16 years old

S1. EI - Guided practice with help E2B

Produce a response to an experience.

Students used circle map to brainstorm information after participating in District 75's Music and Poetry Festival.

Circle map was used as a support to write a summary of the activity.

- Video cameras
- A lot of people
- Nice poem
- Nice instrument
- Brooklyn museum
- Poetry
- Reading

mrs. burger is the nicest teacher I have.

I wanted to go to the bathroom, mrs. burger said, no, I will not let me.

It was a mean day, I could not eat.

I don't like this lady.

She was sitting in front of me. She told me to shut up.

I was so nervous, to read my poem. But I thank mrs. bieman for being there.

District 75's music and Poetry Festival

On Tuesday and April 11/4/00 and April 11, 2000, the
we went on a trip. We were going to Brooklyn
our museum to read our poems. I was very happy
When we went inside it was so beautiful.
We took the elevator to 3 K100. When we
Got up there we used the bathroom.
and then we went inside we 30. A lot
of people, some of them were retarded.

And we started. I was very scared and nervous
of the cameras. It was a big auditorium.
And then we started doing the poem.
the first group was great. I liked those.

Poems and then a couple of groups went
and then it was our turn. Everyone

I thank all those teachers
that went with us, especially Ms.
Bienstock, and Mrs. Burger, for helping us
Do our poems.
We saw a big auditorium with instruments.

Different school singing different poetry.

I was reading a poem it was "I Am Thankful For"

Mrs. Bierman was reading a poem for Miguel.

We had small kids singing different songs and dance.

My classmates were scared to read it but I told my friends not to be scared.

We behaved with respect to other people.

Steven

Hector Berger, DSC
April 2000 - SIE III - Basic Literacy
17 years old
Guided practice with help
English Language, Arts, EOB
Produce a response to an experience
Thinking Skills: Brainstorming, Thinky-Map Circle
Principles of Learning: Accountable Talk
press for clarification and explanation
April 6, 2000

Steven
O.S.C.D.

District 75’s Music and Poetry Festival

On Tuesday April 4, 2000 we went to the Brooklyn Museum Poetry Reading. There were a lot of different schools there performing and reading. My classmates was scared to read, but I told them not to be afraid. It was a big auditorium with lights cameras, and people. They had staff members helping other kids out. The teacher told us we couldn’t use the bathroom because we were up next so we had to wait. Ms. Bieina was reading a poem for Miguel because he was absent. The whole class had a lot of fun when we were there. It would be nice to do it again bye.
Steven
Q.S.C.D

April 6, 2000
Class 509

District 75's Music and Poetry Festival

On Tuesday April 4, 2000 we went to the Brooklyn Museum Poetry Reading. There were a lot of different school's there performing and reading. My classmates were scared to read but I told them not to be afraid. It was a big auditorium with lights, cameras, and people. They had staff members helping other kids out. My teacher told us we can't use the bathroom because we were up next so we had to wait. Ms. Bierman was reading a poem for Miguel because he was absent. The whole class had a lot of fun when we were there. It would be nice to do it again bye.
Buddy

It was a good trip to the Brooklyn museum going poetry reading.

Small candles den caost seeing they were scared to do tar homes had you cameras.

Ms. Burbank was watching.
Student Product

April 14, 2000

District 75's Music and Poetry Festival

On Tuesday, April 14, 2000, we went to a poetry reading at the Brooklyn Museum. We performed for District 75's music and poetry festival. We were in a big auditorium with lots of people from many schools. Small children and older kids were performing songs and poems. They did some dancing too. Some of us were scared to perform but I wasn't because I am used to it. I've had years of practice.

Cameras were taping everybody. Mrs. Burger was watching us and helped some kinds read their poems. I read mine with no help whatsoever.
Dictated to teacher.

District 75's Music and Poetry Festival

On Tuesday, April 4, 2000 we went to a poetry reading at the Brooklyn Museum. We performed for District 75's Music and Poetry Festival. We were in a big auditorium with lots of people from many schools. Small children and older kids were performing songs and poems. They did some dancing too. Some of us were scared to perform but I wasn’t because I am used to it. I’ve had years of practice. Cameras were taping everybody.

Mrs. Burger was watching us and helped some kids read their poems. I read mine with no help whatsoever.
Mrs. Burger Q.S.C.D.
SIE IV--Basic Literacy H.R. 506 16/17 years old

E2-Produce a report of information
E5-Respond to non-fiction, fiction poetry and drama using interpretive and critical processes

Principles of Learning: Academic Rigor in a Thinking Curriculum
-Curriculum and Instruction are organized around major concepts
Recognition of Accomplishment
-Celebration with community

THINKING MAPS
As our contribution to Q.S.C.D.'s Multi Cultural Fair, our class 506 studied the country of Korea. We read a Korean folk tale -- "Sir Whong and The Golden Pig" as well as other books to gather information about Korean customs.

Thinking Maps were used as a major part of our class presentation. We demonstrated how we could compare and contrast two characters in our Korean fable using the Double Bubble Map. We sequenced the events of Sir Whong and The Golden Pig using a Flow Map and brainstormed information about Korea with the support of a Circle Map.

H.R. 506 Paraprofessionals: Mrs. Lindsay and Mrs. Clark

Students: Jae Won, Steven, Christine. Christina, Constante, Tony, Lanece. Asmaa, Norris, Adrienne, Sandra, Janet and Mario
DENNIS

508

People call me Dennis the menace. But I am intelligent and gentle. I help my family in the house. I am a poetry writer. My favorite things are basketball and football.
Keith
508

- Tall
- Nice
- Funny
- Good Friend

Marian Lawless
P.7529 District 75
STEVE Basic Literacy Age 14

Bubble Map - skill of describing using adjectives and identifying qualities with teacher direction.

English Language Arts Standard Ex: Writing (produce a narrative account, fictional or autobiographical)

Principle of Learning: Organize For Effort
Keith

My name is Keith.

I am very tall. I am a nice and funny person. And I am a good friend. When I graduate, I would like to be a basketball player.
Amy

508

brown-haired
great
dressed well

funny

talkative

smart

nice

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Mrs. Lawless
January, 2000
SIE IV
17 years old
Basic Literacy
Describing using adjectives and adjective phrases.

Bubble Map: thinking skill. Describing qualities
Students will describe their own qualities and write a paragraph about themselves using the map as a support.

Independent practice with help.

good-looking
brown-haired
Ray
well-dressed
smart
intelligent
great
nice
friendly
funny
interesting
gentle
Thinking Foundation. www.thinkingfoundation.org

McLawless
February, 2000
S.I.E. III
17 years old
Basic literacy

Describing using adjectives and adjective phrases.
Bubble Map: Thinking skill - describing qualities
Students will describe the qualities of chocolate and write a short paragraph using the map as a support.

Done during guided practice.
Thinking Maps

Supporter: Olga Rothman

Sat in on post observation conferences. Observed teachers and students using thinking maps.

Excellent learning teaching tool. Helps students develop thinking skills. Helps students organize their thoughts. Increases student participation in class.

Used to develop curriculum. Helps students and teachers organize their thoughts. Used with all types of students in all types of classroom settings.

Thinking Maps

IT WORKS.

Participated in lessons where thinking maps were used.
Thinking Maps® can be used by adults in many real life situations. The following maps are some samples of notes taken in a graduate course I audited in Applied Behavioral Analysis at City College given by Professor John Bahadourian.

Taking notes in this way helped me to better understand the material and remember what I had heard and/or read. The Maps were a great assist in studying for the tests.

I wish to thank Dr. Marilyn Rousseau for the opportunity to audit the course and Dr. John Bahadourian for teaching the course in such an interesting, informative and passionate manner.
Thinking Foundation - Sequencing

Flow Map

What does an ABA specialist/therapist do?

- Videotapes client at home for 2 weeks
  - Child and family get used to therapist
  - Observes what client can do
  - Continues to take data and compare with baseline

- Records behavior to get baseline data

- Measures behavior
  - How many bites
  - Kicks, verbal assaults

- Develops plan/strategy to decrease behavior

- Works with teacher in classroom

- Teaches techniques to teachers and parents

- Teaches T&F to become ABA experts

Goal:
- Teach social skills
- Increase time on task
- Increase academic skills
- Decrease disruptive behavior
Circle Map
Thinking Skill - Brainstorming
What did I learn about ABA during my first class - 2/8/10.

Course at LIU.
Course on D. 28
- Needs baseline data before program can begin
- Needs intensive 1-1 work with severe behavior disorders
- Developed by a psychologist
- Changes behavior in children, adolescents and adults

ABA
- Excellent for use in E.I., Special Ed., and adults
- Grounded in 30 yrs of research
- Uses specific in language
- Uses clear verbal instructions consistently
- Goal is for staff and family to become ABA experts
- Develops strategies to change behavior based upon baseline data

- Look at what a client can do
- Compares baseline data before and after treatment
What is a useful theory? Does it apply to the Behavioral Theory?

Thinking Skill - Describing Qualities - Bubble Map

Thinking Skill - Defining in Context - Circle Map

Useful Theory

- Parsimonious
  - Behavior is explained on the basis of observed, not imagination
  - Inclusive
    - Accounts for bulk of human behavior

- Predictive
  - Provides reliable answers as to what people are likely to do under certain circumstances
  - Verifiable
    - Can be tested

J. Goldstein
Using T.M. to take notes - To organize and visualize information in ABA Course.
Behaviorist - A behavior must be Observable and Quantifiable.

Thinking Skill - Describing Qualities

Thinking Skill - Defining in Context

Bubble Map

Behavior

observable

quantifiable

Circle Map

see it

observational behavior

hear it

smell it

feel it

behaviorist definition

measure it - count - measure - internals

How much

How long

How often

behaviorist definition
How would a "Behaviorist" explain human behavior?

Defining a context

Thinking Skill -
The Quality Assurance Team thanks Dr. Marilyn Rousseau for allowing her ABA check off lists to conclude this Resource Guide. We include them as a review for those teachers who took the Applied Behavioral Analysis course given by Dr. Rousseau as part of the Grant, in September, 1999.

We are pleased that the State has extended the Grant for the year 2000-2001 so that we can continue with staff development in Applied Behavioral Analysis and Thinking Maps®.
# ABILITY TO USE APPLIED BEHAVIORAL ANALYSIS PROCEDURES

<table>
<thead>
<tr>
<th>PROCEDURE</th>
<th>ACCEPTABLE</th>
<th>NEEDS IMPROVEMENT</th>
<th>NEEDS TRAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Materials used (teacher’s manual, students’ books, handouts, etc.) ready and easily available. (Antecedent)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Teacher uses appropriate signals for students’ attending and responding. (Antecedent)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Lesson is appropriately paced. (Antecedent)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Teacher follows a logical sequence in presenting the antecedents. (Antecedent)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Teacher ensures that all students in the lesson are on-task. (Student response)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Teacher observes students closely to see that they are responding correctly. (Antecedent)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Teacher uses appropriate procedures to correct errors. (Consequence)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Errors are corrected immediately and consistently. (Consequence)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9. Teacher gives adequate feedback to students (“Yes, the word is red,” or, “Good answer.”) (Consequence)</td>
<td></td>
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<tr>
<td>10. Record keeping procedure is up-to-date.</td>
<td></td>
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</tbody>
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_________________________  ____________/
Observer  Date
# EXPLANATION OF RATING SHEET FOR APPLIED BEHAVIOR ANALYSIS PROCEDURES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>RATIONALE</th>
<th>IMPORTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Materials ready &amp; easily available.</td>
<td>To eliminate wasted time.</td>
<td>When students are not actively engaged in the lesson, they will stop paying attention and are likely to become disorderly.</td>
</tr>
<tr>
<td>2. Signals for attending &amp; responding.</td>
<td>Students learn the correct response to make to the teacher’s signals.</td>
<td>Signals prompt students’ responses.</td>
</tr>
<tr>
<td>3. Lesson is appropriately paced.</td>
<td>Lesson should move at a pace that keeps the students on their toes.</td>
<td>Lesson that is too slow causes students to lose interest; too fast, and they give up.</td>
</tr>
<tr>
<td>4. Logical sequence in presenting the antecedents (sequential curricular materials).</td>
<td>Each lesson must be part of a larger goal, and each step within lessons should enable students to move towards understanding or learning the skill being taught.</td>
<td>Lessons that are not clearly &amp; logically presented will confuse students, prevent learning, and increase behavior problems.</td>
</tr>
<tr>
<td>5. All students are on-task. (On-task means appropriately engaged with the teacher, other learners, the curricular materials, or the motivational system.)</td>
<td>Students who are off-task are not learning.</td>
<td>Learning occurs when students are engaged with the teacher, the materials, or the motivational system.</td>
</tr>
<tr>
<td>6. Teacher observes closely to see that all students are responding correctly.</td>
<td>Teacher must be alert to which students are making errors, so they can be corrected immediately. (See 7, 8, &amp; 9)</td>
<td>Helps keep students from falling behind and failing to learn necessary skills and concepts.</td>
</tr>
<tr>
<td>7. Teacher uses appropriate procedures to correct errors.</td>
<td>Error correction should not be punitive; otherwise, it will suppress students’ willingness to try.</td>
<td>Use of positive correction will enable students to learn more and learn faster. Students will be more willing to learn.</td>
</tr>
<tr>
<td>8. Errors are corrected immediately and consistently.</td>
<td>Errors must be caught as soon as they occur to avoid students’ practicing incorrect responses.</td>
<td>Immediate error correction helps students discriminate correct and incorrect responses, and increases the likelihood that they will respond correctly the next time.</td>
</tr>
<tr>
<td>9. Adequate feedback.</td>
<td>Feedback should be immediate and descriptive to help students learn the correct responses to make to particular antecedents.</td>
<td>Helps reduce errors in learning, and increase the likelihood that students will respond correctly the next time. Students know why they are being reinforced.</td>
</tr>
<tr>
<td>10. Record keeping procedure is up-to-date.</td>
<td>Instructional decisions (when to move forward or step back) are based on daily individual student performance records.</td>
<td>The teacher should use student performance data (i.e., correct &amp; incorrect responses and objectives mastered) for decision-making.</td>
</tr>
</tbody>
</table>
scale was used with 1 = Poor and 5 = Excellent. The resulting mean score was a perfect 5.0. There was no argument about how they felt about Dr. Hammonds.

The respondents were asked how relevant the course was to their specific teaching needs. Except for one respondent they said that they learned:

- to understand the needs of individual children
- the meanings of behavior problems
- how to maintain student journals
- how to teach students with learning disabilities

The respondents were asked what approach used by the presenter impressed them the most. The answers of two respondents failed to address the question. The others were impressed by:

- the personal knowledge and caring demonstrated by the presenter
- the thoughtful way in which the course was presented

The respondents were asked what kind of help will they need to implement what they learned in the course. In order of frequency the answers were:

- help with hands-on activities
- more resources (manuals, guides, books, etc)
- more workshops to enhance what they learned

Some of the individual comments made at the end of the survey were:

- I would like to take another class with Dr. Hammonds (3)
- I was glad to be invited to participate in such an extraordinary and rewarding course
- Dr. Hammonds is the best education teacher that I ever had
- Dr. Hammonds is a fantastic instructor

Note: While teachers were invited to participate, the primary group for whom this 15-session masters level course on assessing and interpreting child behavior was intended were District 28 SBST clinicians and members of the Committee on Special Education. The course description stated that participants will learn how to apply new assessment tools for students with special needs, and to help them understand, interpret and use collected data in the formulation and review of the goals and objectives of Individual Education Plans (IEPs). The course was scheduled for the fall semester but was postponed and rescheduled for the spring term. This change may have deterred the involvement of these clinicians. It is not clear how many clinicians (if any) would have participated if the course were given in the fall, as planned.