

THOUGHTFUL CLASSROOM PORTFOLIO SERIES

Task Rotation™

Differentiating Questions, Activities, and Assessments by Learning Style

TEACHER PLANNING AND IMPLEMENTATION GUIDE

WORKSHEETS • TEMPLATES • EXAMPLES

The
Thoughtful Classroom™

MAKING STUDENTS AS IMPORTANT AS STANDARDS

The Hidden Skills of Academic Literacy

Research-Based Strategies

Diversity That Works

Classroom Curriculum Design

Instructional Learning Teams

THE THOUGHTFUL CLASSROOM™



Dear Thoughtful Educator:

Sometimes the simplest innovations produce the greatest results. Designed by a collaborative of teachers, administrators, and trainers, the all-new **Thoughtful Classroom Portfolio Series** makes the important work of bringing high-impact, research-based instructional strategies into your classroom or school easier than ever before.

Each Thoughtful Classroom Portfolio (and its accompanying booklet of worksheets, templates, and examples) serves as a Planning and Implementation Guide focused on a specific method, strategy, or perspective for improving teacher instruction and student learning. There are four types of Thoughtful Classroom Portfolios:

- **Research-Based Strategies** – Designed specifically to support the important research of Robert Marzano (author of *Classroom Instruction That Works*), Harvey Silver, and Richard Strong, these portfolios help educators study and implement the most up-to-date and effective strategies for improving instruction.
- **The Hidden Skills of Academic Literacy** – Focusing on key skills that significantly affect student performance on state tests and standards, each of these portfolios shows teachers how to approach a different skill in the classroom. Among the skills covered (or soon to be covered) are Thoughtful Vocabulary Learning, Notetaking and Notemaking, and Developing Thoughtful Explanations.
- **Diversity Guides** – These portfolios help teachers develop powerful new strategies for assessing and responding to student differences.
- **Leadership Guides** – These portfolios describe strategies that academic leaders and mentors can utilize to enhance professional learning opportunities in their schools.

At Silver Strong & Associates/Thoughtful Education Press we believe that successful schools are built on a culture of support that encourages teachers to apply new ideas and strategies in their classrooms. We are confident these portfolios will play a significant role in fostering such a culture and that they will help you improve the quality of teaching and learning in your classroom and throughout your school.

Please write us (at suggestions@ThoughtfulEd.com) after you have used this Thoughtful Classroom Portfolio. We would love to hear your ideas and suggestions as we develop new titles and revise current ones.

For a complete list of available Thoughtful Classroom Portfolios, please visit our website at www.ThoughtfulEd.com. Check back often—we are constantly adding new portfolios to this series.

Sincerely,

The Thoughtful Classroom Team

Silver Strong & Associates • Thoughtful Education Press
800.962.4432 • www.ThoughtfulEd.com • 227 First Street • Ho-Ho-Kus, NJ 07423

USING YOUR PORTFOLIO

This Thoughtful Classroom Portfolio was designed to be used as part of a Thoughtful Classroom Learning Club, a collaborative support structure developed by Silver Strong & Associates. Through Learning Clubs, teams of teachers and administrators work together to plan, implement, and evaluate lessons and units to make a difference in student learning.

Our research has consistently shown the value of Learning Clubs in helping teachers not only learn but also apply what they learn in the classroom. However, we realize that not every user of this portfolio is part of a Learning Club. So, here are some simple guidelines for using your portfolio with a Learning Club or solo:

WITH A LEARNING CLUB

1. About a week before your Learning Club meeting, read through the portfolio carefully and come to the meeting with 2 or 3 ideas about how to use the skill or strategy to enhance student learning.
2. At the Learning Club meeting, work with other Learning Club members to develop plans you can use as individuals or as a team.
3. Use the enclosed templates to flesh out your plans and to reflect on what happens when your plans and those of your partners are put into operation. We believe that reflecting on your own and your colleagues' experiences can be a powerful tool for effective professional learning.
4. After you and the other Learning Club members have developed and implemented a number of plans using the portfolio, conduct a student work meeting. At the meeting, you and your colleagues will use the *Examining Student Work* component of the portfolio to study the actual effects your plans had on student learning and thinking.

INDIVIDUALLY

1. Review the portfolio carefully. Familiarize yourself with the various panels of the portfolio and the supplemental pages and planning forms.
2. If at all possible, invite a colleague into your learning, planning, and implementation processes. It will always be easier to master a new strategy or technique if you can discuss and test your ideas with another teacher.
3. Use the enclosed templates to flesh out your plans and to reflect on what happened when you put those plans into operation. We believe that self-reflection is a powerful (and often undervalued) tool for effective professional learning.
4. Use the *Examining Student Work* component to study the actual effects your plans had on student learning and thinking.
5. Why aren't you part of a Learning Club? Pull a few teachers together and start one. Get some pizza and let the conversation begin.

To find out more about how to create and conduct a Thoughtful Classroom Learning Club in your school, please visit our website at www.ThoughtfulEd.com

IMPORTANT COPYRIGHT NOTICE AND PERMISSION INFORMATION

SELECTED PAGES WITHIN THIS PUBLICATION ARE INDICATED AS REPRODUCIBLE FOR USE BY THE INDIVIDUAL USER OF THIS PORTFOLIO. PERMISSION IS NOT GRANTED FOR MASS OR ELECTRONIC REPRODUCTION AND DISTRIBUTION, INCLUDING DISTRIBUTION ON THE INTERNET, WITHOUT THE WRITTEN PERMISSION OF THOUGHTFUL EDUCATION PRESS, LLC.
© 2005 Thoughtful Education Press, LLC. All Rights Reserved.

TABLE OF CONTENTS

Task Rotation: A Diversity That Works	4
Task Rotations Examples	6
Planning Task Rotations: Six Steps in the Circle Planning Template	12
Sample Task Rotation Classroom Scenarios	14
Task Rotation Strategic Practice Note Sheet	18
Examining Student Work Note Sheet	20
Appendix: Task Rotation: Two Dozen Ways to Make it Happen	22

TASK ROTATION:

A DIVERSITY THAT WORKS

Differentiation is nothing new. All teachers adjust instruction, assignments, and even tone of voice to meet the needs of different students. However, recent calls for wider and more varied approaches to differentiation have overwhelmed many schools, teachers, and administrators. If differentiation is to work, if it is to meet its goal of increasing each and every learner's opportunity to find relevance and achieve success in school, then it must be manageable.

Task Rotation was designed specifically to address the manageability issue that so many educators face as they are being called on to raise standards while, at the same time, respond meaningfully to the diverse needs and interests of their students. The Task Rotation strategy is based on a model of diversity that is both practical and well-researched: **learning styles**. Over the last thirty years, we have helped thousands of schools engage, motivate, and raise the achievement of all learners with a classroom-friendly model of diversity based on four dominant learning styles:

The Four Learning Styles

Mastery Learners

Want to learn practical information and procedures.

Like drills, lectures, demonstrations, and practice.

May experience difficulty when learning becomes too abstract or when faced with open-ended questions.

Learn best when instruction is focused on modeling new skills, practicing, and feedback sessions.

Interpersonal Learners

Want to learn about things that affect people's lives.

Like group experiences, discussions, cooperative learning activities, role-playing, personal attention.

May experience difficulty when instruction focuses on independent seat work or when learning lacks real world application.

Learn best when their teacher pays attention to their successes and struggles.

Understanding Learners

Want to use logic, debate, and inquiry to investigate ideas.

Like reading, debates, research projects, independent study, making cases or arguments, asking "Why?"

May experience difficulty when there is a focus on the social environment of the classroom (e.g., cooperative learning).

Learn best when they are challenged to think and explain their ideas.

Self-Expressive Learners

Want to use their imaginations to explore ideas.

Like creative and artistic activities, open-ended and non-routine problems, generating possibilities and alternatives, asking "What if?"

May experience difficulty when instruction focuses on drill and practice and rote problem solving.

Learn best when they are invited to express themselves in unique and original ways.

TASK ROTATION: A DIVERSITY THAT WORKS

(Continued from previous page.)

Engaging all four learning styles is a challenge. But, if the learning preferences and styles of some learners are routinely ignored, then those learners will likely disengage from or feel threatened by the material. Quite simply, by failing to reach out to the different learning styles, teachers produce uninterested, unmotivated, uncomfortable students. Task Rotation provides a diverse and manageable structure for instruction and assessment that allows teachers to reach all students without imposing a hierarchy of style.

All styles are equally important and all styles must be used by every individual throughout his or her life. By using the Task Rotation Strategy, teachers will help students see material in new ways and investigate content more deeply through a series of tasks that emphasize facts and details; logic and critical thinking; creativity and self-expression; and personal and social relevance.

Task Rotation is a flexible strategy; it can be used in a variety of ways to meet a host of instructional and assessment purposes. You can design Task Rotations that ask students to:

- Complete all four activities in a specified sequence.
- Complete a certain number of activities in any sequence.
- Complete specified task(s) and choose a preferred task.
- Choose the tasks they want to complete.

On the next 6 pages, you will find 12 examples of Task Rotations in various content areas and at four separate grade levels: primary, elementary, middle, and high school.

On page 12, you will find a blank Task Rotation Planning Template, followed by a set of examples showing how four teachers used this template to design their own Task Rotations.

In the Appendix, we have included a menu of 24 types of tasks, organized by learning styles, to facilitate your work in developing Task Rotations for your students.

NOTES

TASK ROTATIONS

EXAMPLES

On the pages that follow you will find twelve Task Rotations designed by teachers of all grade levels and content areas. Examine them carefully, paying close attention to those Task Rotations in your content area and/or at your grade level. Which ones do you like best? Why?

PRIMARY - Understanding Coins

Mastery Task - Activity 1

Using a magnifying glass, describe the characteristics of a penny, nickel, dime, and quarter according to the following criteria: color, shape, size, words, and pictures.

Interpersonal Task - Activity 2

Team up with a friend. Have your friend close his or her eyes.

Your teacher will give you two different coins. Can your friend tell which coin is which without looking?

Now switch places with your friend.

Understanding Task - Activity 3

Compare and contrast a penny, a nickel, and a dime. How are they all alike? How is one different from the others?

When you are done with your comparison, you will discuss with the class how you can tell these coins apart.

Now, explain how the quarter is different from the other three you have already compared.

Self-Expressive Task - Activity 4

In your journal, write about what you have learned about telling coins apart.

Then, select one coin and write a poem about it.

PRIMARY - Teddy Bears, etc.

Mastery Task

The teacher helps the students create a teddy bear bar graph by arranging their stuffed animals in four sizes. Then, students brainstorm other characteristics that could be used to create new bar graphs.

Interpersonal Task

Each student brings to class his or her favorite teddy bear – or other stuffed animal. The students sit in a circle and introduce their stuffed animal (tell the stuffed animal's name and what makes him/her special).

Understanding Task

Students sit together in pairs to compare and contrast their stuffed animals according to five characteristics:

- Size
- Shape
- Color
- Expression
- Special features

Self-Expressive Task

Students design a stuffed animal for someone they love and care about. Their stuffed animal should serve one of three purposes:

- 1) To help you feel calm when you're afraid.
- 2) To keep you company when you feel sad.
- 3) To be a companion in pretend games.

TASK ROTATIONS

EXAMPLES

ELEMENTARY - Nouns

Mastery Task

Nouns are words that name a person, place, or thing. Underline the nouns in the sentences below. Next, write each noun in the correct column of this chart:

PERSON | PLACE | THING

Interpersonal Task

Ask your mother or father to help you make a list of the first words you ever spoke when you were an infant. Look over your list. What do you notice about the first words?

Understanding Task

Before you can use better nouns, you must be able to find the nouns. If you are a good noun detective, try to find the nouns hidden in these three sentences. Tell how you discover them.

1. Lethargy is difficult to combat.
2. Those fallacies are often believed.
3. Did you write those six formulae?

Self-Expressive Task

Now try this: Write sentences that are full of nonsense words like, "My beautiful snagrid won the porfgret." Write your own sentence so that a friend can easily spot the nouns no matter how many nonsense words are in the sentence.

ELEMENTARY - How a Setting Changes a Story

Mastery Task - Activity 1

Read a story and find two different settings. List three things about each setting.

Interpersonal Task - Activity 2

Identify two settings you liked from the story. What character would agree with you and why?

Understanding Task - Activity 3

With the two settings you identified in Activity 1, identify how they are similar and how they are different.

Self-Expressive Task - Activity 4

Imagine and draw a very different setting than the ones presented in the story. How would that change the character's behavior?

TASK ROTATIONS

EXAMPLES

ELEMENTARY - Lions and Tigers and Bears and Mosquitoes

Mastery Task

Select an irritating, powerful, or dangerous animal.
Use your computer to construct a profile sheet that includes at least 10 features of your animal.

Interpersonal Task

Write a friendly letter explaining why you love your animal.

Understanding Task

Develop a plan that will help preserve your animal and help others understand the role your animal plays in our world.

Self-Expressive Task

Create a myth to explain an important trait or behavior of your animal.

ELEMENTARY - Wagons West!

Mastery Task

Make a map of the trails going west on construction paper. Be sure to include a map key and label any important names on your map.

Interpersonal Task

Write a letter to a friend who stayed back in the colonies. Try to persuade this friend to come out west.

Remember that this friend has no idea what The West is like. Describe it in detail.

Understanding Task

Make a list of the pros and cons for moving to Kentucky in the late 1700's.

On white lined paper, write if you would make the move and explain the reasons for your choice.

Self-Expressive Task

What if "The West" had already been settled by people who came across the Pacific Ocean?

Write a poem explaining what would have happened differently during the Westward Movement.

TASK ROTATIONS

EXAMPLES

MIDDLE SCHOOL - Slope

Mastery Task

For each problem, sketch the graph and determine the slope.

- $6x + 2y = 6$
- $3x + 2y > 2$
- $y = 4$
- $x = 2$

Given just one point and the slope, sketch the graph of the line.

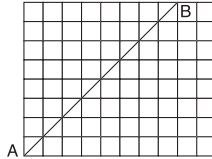
- $(0, 0)$ and $m = 2$
- $(-3, 3)$ and $m = \frac{1}{2}$
- $(2, -1)$ and $m = 0$
- $(\frac{1}{3}, 2\frac{2}{3})$ and $m = -3$

Interpersonal Task

Work with a partner. Imagine that the graphs of the equations and inequalities in the Mastery box represent the steepness of bike paths. Identify the paths that you believe you could and couldn't ride up or down. Assume that you are pedaling while sitting down and riding your bicycle from left to right.

Understanding Task

Line segment AB originates at the origin and has slope 1 (Why?). Draw segments AC and AD with slopes $\frac{1}{2}$ and 8. According to the slope values, AB should be twice as steep as AC and AD should be sixteen times as steep as AC. Visually, does this seem to be the case? Explain how this can or cannot be.



Self-Expressive Task

When riding a bike up or down a hill, slope matters. Create a list of ten activities or situations other than bicycling where slope is an important factor. Estimate the greatest and least slopes associated with these activities.

MIDDLE SCHOOL - Casey at the Bat

Mastery Task

"Casey at the Bat" is a poem written in thirteen stanzas. Can you retell the poem in seven sentences: six sentences for the first twelve stanzas and one sentence for the last stanza?

Interpersonal Task

Everyone is a little like Casey. What attitudes do you have that help you perform well in school? What attitudes do you have that might make school more difficult for you? Explain how these attitudes are beneficial to you.

Understanding Task

Prove or disprove this statement with evidence from the poem: Casey's attitude is responsible for his failure.

Self-Expressive Task

Let's write a little poetry ourselves. We'll add just one stanza. Imagine Casey is being interviewed after the game. Based on your discussion about his attitude, what would Casey say in the interview? Be sure to follow the style and rhyme scheme of the poem.

TASK ROTATIONS

EXAMPLES

MIDDLE SCHOOL - The Phases of Water

Mastery Task

Draw a complete cooling curve for water, with properly labeled axes.

Label each phase present. Explain the behavior of the water molecule during all portions of the curve.

Interpersonal Task

You are a molecule of water. Write a story describing yourself as you travel along the cooling curve from one end (200°C) to the other (-32°C).

Include in your story what you look like and how you feel at each portion of the curve.

Understanding Task

Compare and contrast the heating and cooling curves of water. Be as detailed and specific as possible.

Self-Expressive Task

Imagine if water froze at 50°C and boiled at 87°C. Create a cooling curve using the new data, and draw pictures showing how the water molecules change at each stage of the curve.

HIGH SCHOOL - An Orientation of the Human Body

Mastery Task

You are planning on going to medical school and need to take the MCAT exam. A portion of the exam includes being able to identify anatomical body structures and their functions. In preparation for this exam, develop techniques to memorize the 12 body systems including the major organs in each.

Interpersonal Task

Your birthday is next Tuesday. In registering for your driver's license, you decide to become an organ donor. Prioritize the organs you would donate. Explain why you chose these organs.

Understanding Task

You are outdoors on a very hot day and become thirsty, which causes you to drink fluids. Describe whether the thirst sensation is part of a negative or positive feedback system. Defend your choice.

Self-Expressive Task

As an author of *Anatomy and Physiology for Dummies*, you have been requested to illustrate appropriate anatomical terminology. In keeping with the company's motto, "We make the complex simple," your work must be created for a nonscientific audience. Your illustrations must include 10 directional terms, 10 regional terms, 5 body planes, and 5 body cavities.

TASK ROTATIONS

EXAMPLES

HIGH SCHOOL - Constitutional Complexities

Mastery Task

Read through the selection of legal briefs in our Citizenship Library. Then, using these briefs as a model, develop a legal brief for this case.

Interpersonal Task

Put together a portfolio of cases that reflect similar ambiguities in our right to free speech and two other basic rights. Accompany your portfolio with a journal that explores your personal feelings about these cases.

Understanding Task

Put together a debate team to discuss this issue: Resolved, it is possible to rewrite our description to eliminate problems in freedom of speech relating to obscenity, political correctness, and the denigration of ethnic identity.

Self-Expressive Task

Create a folk song about this case. Your song should take a position on the case and its resolution.

HIGH SCHOOL - The Amazing Pythagorean Theorem

Mastery Task

Summarize and Retell:

Do some research and find three ways to prove the Pythagorean Theorem (other than the proof in your textbook) using area and simple diagrams.

Interpersonal Task

Real World Application:

Find four examples of right triangles in art, architecture, or other real-world applications. If you get them from a book or from the Internet, be sure to cite your sources.

Understanding Task

Yes, but Why?

Of your three proofs for the Pythagorean Theorem from the Mastery section, which one would you use if you had to explain the theorem to fifth graders? Why did you choose that proof, and why not the other two?

Self-Expressive Task

Create:

The Greek government is planning to honor Pythagoras' contributions to mathematics on the 2500th anniversary of his death. Design a poster for the celebration. Use at least six different right triangles. The poster needs to illustrate the Pythagorean Theorem and its converse, Pythagorean triples, as well as the two "special" triangles.

PLANNING TASK ROTATIONS: SIX STEPS IN THE CIRCLE

PLANNING TEMPLATE

1 COLLECT YOUR STANDARDS AND WRITE THEM OUT IN STUDENT-FRIENDLY LANGUAGE

2 IDENTIFY YOUR PURPOSES

What do I want students to know?

What do I want students to understand?

What skills do I want students to develop or improve?

What attitudes do I want to foster in my students?

3 ROTATE TASKS TO REACH ALL FOUR LEARNING STYLES

MASTERY TASK

INTERPERSONAL TASK

UNDERSTANDING TASK

SELF-EXPRESSIVE TASK

PLANNING TASK ROTATIONS: SIX STEPS IN THE CIRCLE

PLANNING TEMPLATE

4

CREATE A SCENARIO AND A HOOK TO AROUSE INTEREST AND CREATE MEANING

5

LOOK FOR CRITERIA THAT UNITE ALL FOUR TASKS

6

ESTABLISH A WORK PLAN

PLANNING ROTATIONS: SIX STEPS IN THE CIRCLE

SCIENCE, GRADE 1 - PLANTS

The Steps

- 1 **Collect** your standards and write them out in student-friendly language.
- 2 **Identify** your purposes:
 - What do I want my students to know?
 - What do I want my students to understand?
 - What skills do I want my students to develop or improve?
 - What attitudes do I want to foster in my students?
- 3 **Rotate** tasks to reach all 4 learning styles.

MASTERY TASKS
 Recall
 Summarize
 Sequence

INTERPERSONAL TASKS
 Describe feelings or values
 Empathize
 Make connections

UNDERSTANDING TASKS
 Compare
 Prove
 Explain cause or effect

SELF-EXPRESSIVE TASKS
 What if?
 Create
 Think metaphorically
- 4 **Create** a scenario and a hook to arouse interest and create meaning.
(How will I connect this topic to my students' interests and experience?)
- 5 **Look** for criteria that unite all four tasks.
(What standards will I use to evaluate my students' work?)
- 6 **Establish** a work plan.
(Ask students to choose one or more tasks or to complete all four.)

An Example

- 1 Julie Morales has just finished a unit with her first graders on plants. Focusing in on first-grade science standards related to the relationship between structure and function and plant and animal interdependence, Julie decides to design a Task Rotation as a culminating assessment.
- 2 Next, Julie sketches out her four purposes:

Know: The main parts of flowering plants

Attitudes:
 Empathy: *students will get to "be" plants*
 Appreciation: *Plants are essential to our world*

Understand: Why are plants important to us and to our world?

Skills:
 • Visual representation
 • Imaginative thinking
- 3 Julie then designs her four style-based tasks:
 - Mastery:** Draw a flowering plant and label its parts.
 - Understanding:** Why are plants important to our world? Think of three reasons.
 - Self-Expressive:** What would our world look like if there were no plants?
 - Interpersonal:** How would you feel on a sunny (or rainy) day if you were a plant?
- 4 Before distributing the Task Rotation to students, Julie spends a few minutes reviewing the class' previous lessons on plants. She then explains to students that they will be working on a very special kind of assignment called a Task Rotation, and that the idea behind a Task Rotation is that it allows all students to show what they know in ways that work best for them.
- 5 Julie establishes the criteria for success on the Task Rotation as follows:
 - Can students identify the main parts of a plant and represent them accurately?
 - Can students provide three central reasons for the importance of plants?
 - Can students imagine and describe a world without plants?
 - Can students personalize the life of a plant?
- 6 Julie has students work on all four tasks. While students work, Julie walks around the room to observe them, making herself available to students who are struggling with particular tasks and providing coaching as needed.

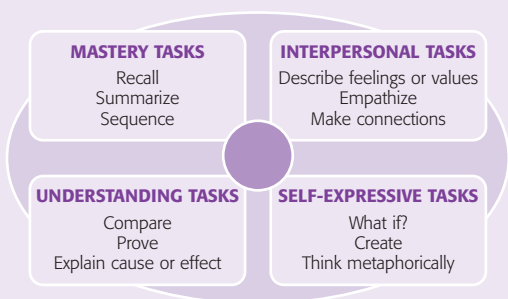
PLANNING TASK ROTATIONS: SIX STEPS IN THE CIRCLE

MATHEMATICS, GRADE 5 - AREA AND PERIMETER

The Steps

- 1 **Collect** your standards and write them out in student-friendly language.
- 2 **Identify** your purposes:
 - What do I want my students to know?
 - What do I want my students to understand?
 - What skills do I want my students to develop or improve?
 - What attitudes do I want to foster in my students?

- 3 **Rotate** tasks to reach all 4 learning styles.



- 4 **Create** a scenario and a hook to arouse interest and create meaning.
(How will I connect this topic to my students' interests and experience?)
- 5 **Look** for criteria that unite all four tasks.
(What standards will I use to evaluate my students' work?)
- 6 **Establish** a work plan.
(Ask students to choose one or more tasks or to complete all four.)

An Example

- 1 Alan Liu is teaching his students about area and perimeter, but has found that many students are having a hard time discerning and articulating the differences between the two ideas. After reviewing state standards related to comparing/contrasting and communicating about critical math concepts, Alan decides that a Task Rotation will help students cut through the abstraction and fuel deeper learning.

- 2 Alan determines his four purposes as follows:

Know: How to compute area and perimeter for different geometric shapes to summarize the plot.

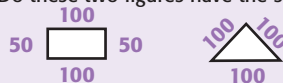
Attitudes: Appreciating how knowledge in math can help people make good decisions in life.

Understand: How area and perimeter relate to one another and the differences between the two concepts.

Skills: Developing mathematically-sound explanations.

- 3 Here are Alan's four tasks:

Mastery: Do these two figures have the same size, perimeter, and area?



Understanding: Explain why area is more important than perimeter when selling or buying a piece of land. Would the same be true for purchasing a carpet for a room?

Self-Expressive: Use graph paper to create two shapes that have the same perimeter but different areas. Can you create two shapes that have the same area but different perimeters? Can you create two shapes that have the same area and perimeter but are not the same shape?

Interpersonal: Which of the two plots of land from the Mastery Task above would you buy if you wanted to maximize the amount of space the recreation committee would receive? Why would you choose that plot?

- 4 In order to engage students' attention, Alan opens the lesson with a provocative question: How can knowing mathematics keep you from being treated unfairly?

After collecting students' ideas, Alan presents them with this scenario:

Imagine that you're a member of the town recreation committee. Mr. Robinson has two plots of land he wants to sell to the committee. Mr. Robinson shows you the perimeters of each plot and explains that both plots are 300 feet around, so both plots will cost the same price. Is this fair?

- 5 The key criteria for students' success in completing this Task Rotation are:

- Accurate computation of perimeter and area
- Quality of explanation regarding the importance of area over perimeter in determining cost
- Deep exploration into the relationships between area and perimeter using various shapes

- 6 Students must complete all four tasks, but Alan lets them choose any order they like.

PLANNING TASK ROTATIONS: SIX STEPS IN THE CIRCLE

ENGLISH/LANGUAGE ARTS, GRADE 5 - MY BROTHER SAM IS DEAD

The Steps

- 1 **Collect** your standards and write them out in student-friendly language.
- 2 **Identify** your purposes:
 What do I want my students to know?
 What do I want my students to understand?
 What skills do I want my students to develop or improve?
 What attitudes do I want to foster in my students?
- 3 **Rotate** tasks to reach all 4 learning styles.

MASTERY TASKS
 Recall
 Summarize
 Sequence

INTERPERSONAL TASKS
 Describe feelings or values
 Empathize
 Make connections

UNDERSTANDING TASKS
 Compare
 Prove
 Explain cause or effect

SELF-EXPRESSIVE TASKS
 What if?
 Create
 Think metaphorically
- 4 **Create** a scenario and a hook to arouse interest and create meaning.
 (How will I connect this topic to my students' interests and experience?)
- 5 **Look** for criteria that unite all four tasks.
 (What standards will I use to evaluate my students' work?)
- 6 **Establish** a work plan.
 (Ask students to choose one or more tasks or to complete all four.)

An Example

- 1 While reading the novel *My Brother Sam is Dead* with her fifth graders, Cindy Pirone is working with her students toward standards relating to students' abilities to comprehend and interpret literature and to their ability to create persuasive arguments.
- 2 Based on these standards, Cindy identifies these four purposes:

Know: Students need to know the characters' names and motivations to be able to summarize the plot.

Attitudes: Students will learn that:
 a) not all arguments are bad
 b) you can get better at making an argument

Understand: Students need to understand that people use both effective and ineffective strategies in arguments.

Skills: Students need to summarize and use evidence more effectively.
- 3 Next, Cindy creates one task in each of the four styles:

Mastery: Read the argument between Sam and his father on page 12 about whether the colonists should fight against the British. Then summarize each person's argument.

Understanding: Collect evidence from the argument to support or refute these statements:
 1. Sam is effective at making an argument.
 2. Sam's father is better at arguing than Sam.

Self-Expressive: Based on this argument, create two similes, one for Sam and one for his father.
 Sam is like _____ because...
 Sam's father is like _____ because...
 Be sure to explain your similes.

Interpersonal: Think about a time when you changed someone's mind. What strategies did you use? Think about a time when someone changed your mind. What strategies did the person use?
- 4 To hook students into the content and skill embedded in the Task Rotation (argument), Cindy designs two questions for discussion:
 1. What's the difference between a good argument and a bad argument?
 2. What's the difference between someone who is good at arguing and someone who is not?
- 5 Cindy focuses her criteria for evaluation in these areas: ability to concisely summarize an argument; ability to determine the qualities of a good argument; and ability to relate the concept (argument) to a new context through metaphorical comparison.
- 6 Cindy has students complete all four tasks. She begins with the Interpersonal task so that students can relate their own experience with arguments to those in the novel. Next, she rotates the remaining tasks: develop a summary (Mastery), support and refute (Understanding), and create two similes (Self-Expressive).

PLANNING ROTATIONS: SIX STEPS IN THE CIRCLE

SOCIAL STUDIES, HIGH SCHOOL - PRE-AMERICAN REVOLUTION

The Steps

- 1 **Collect** your standards and write them out in student-friendly language.
- 2 **Identify** your purposes:
 What do I want my students to know?
 What do I want my students to understand?
 What skills do I want my students to develop or improve?
 What attitudes do I want to foster in my students?
- 3 **Rotate** tasks to reach all 4 learning styles.

MASTERY TASKS
 Recall
 Summarize
 Sequence

INTERPERSONAL TASKS
 Describe feelings or values
 Empathize
 Make connections

UNDERSTANDING TASKS
 Compare
 Prove
 Explain cause or effect

SELF-EXPRESSIVE TASKS
 What if?
 Create
 Think metaphorically
- 4 **Create** a scenario and a hook to arouse interest and create meaning.
 (How will I connect this topic to my students' interests and experience?)
- 5 **Look** for criteria that unite all four tasks.
 (What standards will I use to evaluate my students' work?)
- 6 **Establish** a work plan.
 (Ask students to choose one or more tasks or to complete all four.)

An Example

- 1 Haylee Rodman uses Task Rotation regularly as a way to provide her students with a menu of authentic assessment tasks. She is reviewing her state's history standards as she prepares a Task Rotation on the events leading up to the Revolutionary War.
- 2 Haylee determines her four purposes as follows:

Know: The key events leading up to the American Revolution.

Attitudes:
 - Appreciating the complexity of history.
 - Learning how to look at history from multiple viewpoints.

Understand: The significance of each of these events, with a special emphasis on the skirmish at Lexington.

Skills:
 Communicating about history in various genres or media including:
 charts & visuals • newspaper articles
 interior monologues
 personal opinion essays
- 3 Haylee then creates her Task Rotation:

Mastery: Prepare a chart showing the major events from the end of the French and Indian War leading up to the first shot fired at Lexington. Identify the reactions of both the colonists and British to each event.

Understanding: You are a reporter covering the skirmish at Lexington on April 18, 1775. You want the article to be fair, complete, and exciting. Before you write your article, ask yourself: Who are you interviewing? What background information do you need? What sketches do you want for the front page of the newspaper?

Self-Expressive: Create a reenactment of the skirmish at Lexington. Write two interior monologues that explain what is going on in the mind of a colonial militia member and a British trooper as they confront each other. What is each one thinking as the first shot is fired? Be creative.

Interpersonal: If you are angry with the government, what means do you have to bring about change? Under what circumstances would you consider armed rebellion an acceptable option? Write a personal opinion essay explaining your position.
- 4 Before introducing the Task Rotation to students, Haylee presents them with the following scenario:
*Our studies in American history have brought us to a breaking point: the colonies are about to go to war with the most potent military force in all the world—the British Army. Before we explore this ostensive military mismatch, let's take some time to reflect backwards on the recent events that have brought the colonies to this uncertain and potentially lethal moment in their brief history. **Review the four tasks and select two to complete. But this time there's a twist: one of the tasks you select must be in the style that you have chosen least so far.***
- 5 For each of the four tasks in the Task Rotation, Haylee develops a simple three-point rubric at four levels of proficiency: novice, apprentice, journeyman, master.
- 6 Students are asked to select two tasks to complete. Because Haylee has thoroughly integrated learning styles into her classroom, she is able to take the choice concept one step further by asking students to complete a task that they would normally avoid.

STRATEGIC PRACTICE

TASK ROTATION – NOTE SHEET

Now that you have tried a Task Rotation lesson in your own classroom, or have had the opportunity to visit another teacher who was working with the strategy, take some time to reflect on how this strategy affected the students you taught or observed.

How was the lesson introduced?

How did students respond to the introduction?

What kinds of tasks were provided?

How did students react to the tasks?

Working through the tasks

What tasks did students choose? (or in what order did they approach the tasks?)

What aspects of the tasks attracted student interest?

How did students approach planning for the tasks?

How did students make use of the criteria for success?

Reflecting on the tasks: Student discussion

What did students say about what they had learned about the topic?

How did the students discuss their own thinking?

What did students say about themselves as learners?

STRATEGIC PRACTICE

TASK ROTATION – NOTE SHEET

Now that you have experienced the Task Rotation strategy, ask yourself:

What? So What? Now What?

WHAT HAPPENED?

Looking back, what are your general thoughts about the lesson? What feelings, questions, or ideas emerged for you?

SO WHAT?

What did you learn from this experience? What are the implications of this strategy for you?

What are the implications of this strategy for your students?

NOW WHAT?

Where do you go from here? What lessons have you learned and how will you apply them?

EXAMINING STUDENT WORK

TASK ROTATIONS – NOTE SHEET

Examining student work can provide us with unique insights into what our students know and understand, how they think, and how they approach the task of creating high-quality products and higher-order answers.

Select some samples of student work from a Task Rotation lesson. You might want to collect a few samples from students who usually perform very well, some from students whose work generally tends to fall in the middle range, and some from students who struggle. As you look through your students' work, as well as the work your colleagues have collected, ask yourself the following questions:

Content:

What does this work suggest about students' understanding of key content ideas and details?

What parts of the content are firmly in their grasp? What ideas and details are slipping through the cracks?

Process:

What am I learning from this work about the nature and styles of student thinking?

What styles of thinking seem to come easily?

What styles of thinking might be presenting problems?

Product:

What do I think about the overall quality of the products or answers my students have created?

What signs are there that they are reaching towards excellence?

What communication skills need more work or instruction?

Next Steps – Taking your students' work into account:

Content – What will you do next to extend your students' understanding of key ideas and concepts?

Thinking – What will you do next to extend your students' thinking abilities and learning styles?

Process – What will you do next to improve your students' communication skills?

NOTES

[illegible][illegible]

APPENDIX:

TASK ROTATION: TWO DOZEN WAYS TO MAKE IT HAPPEN

Below is a menu of 24 brief task descriptions organized by style. As you design your Task Rotation, refer to this menu to help you select appropriate tasks for each style quadrant of your lesson or assessment.

MASTERY TASKS

Charts, Maps, and Timelines: Students display complex ideas, information, or data in visual formats that highlight important relationships between key ideas and details.

Reporting: Students perform tasks that demonstrate a persistent ability to organize and store information for recall or easy access.

Construction: Students assemble and build a three-dimensional structure by following directions or consulting illustrations. Or students look at an already assembled object and design a set of directions to make it.

Retellings: Students construct summaries, retellings, or outlines.

Routines and Procedures: Students use routine and basic skills (e.g., computation and grammar) to arrive at short answers.

Definitions: Students select important words or concepts. They develop their own definitions by using examples, non-examples, and key characteristics.

UNDERSTANDING TASKS

Comparison: Students identify two important dates, episodes, organisms, poems, or other concepts or documents. They establish a set of comparative criteria and use the criteria to identify important similarities and differences between the two items they have selected.

Argument: Students identify an issue about which there is uncertainty or controversy. They take a position on the issue and develop an argument that is well-supported (and that takes the arguments of the alternative into account).

Inquiry: Students explore a topic, event, or phenomenon and identify a question that puzzles them. They develop hypotheses, research their topic further, and report their findings.

Analysis: Students identify an object, event, poem, painting, or system. They identify its parts, their purpose, and a plan for its improvement.

Classification: Students investigate a complex topic (e.g., rain forests, Romantic poetry, people in our community) and develop a classification system that identifies and describes important patterns and relationships.

Repair and Debugging: Students study a physical system (e.g., light bulb) and repair it, improve it, or change its function by applying principles or concepts that they have learned.

SELF-EXPRESSIVE TASKS

Speculation: Students investigate an existing state of affairs and speculate on how things might be different if some factor(s) were changed. Their work should clarify the existing state and display imagination and consistency in exploring changes and their implications.

Metaphor and Analogy: Students identify and develop a metaphor or analogy for one or more ideas, events, or phenomena that they are investigating.

Imaginative Expression: Students use an artistic form of expression to evoke a feeling from an audience or to express their own feelings.

Invention and Design: Students create a visual or three-dimensional representation of a solution to a current economic, social, or technological problem.

Interpretation: Students investigate a text, poem, story, painting, film, treaty, or any collection of these items and develop a statement about its meaning and significance.

Evaluation: Students judge the value of an idea, text, event, or policy by developing a set of criteria for exploring their object of study.

INTERPERSONAL TASKS

Community Service Projects: Students work together to identify a community need. They can develop and implement a plan to meet that need.

Community Self-Study: Students use interviews and assessment instruments to collect and organize information on important aspects of their community's past, present, or future. They report their findings back to the community.

Empathy Work: Students create diaries, logs, letters, and other documents to express their thoughts and feelings about people who are significantly different from themselves.

Relating: Students build visual representations of the connections between their lives and something that they have learned in school.

Decision Making: Students investigate an issue of concern to them, explore alternative ways of addressing that concern, and use criteria to help them decide which solution to implement.

Intrapersonal Reflections: Students identify a goal that is important to them, explore alternative ways of achieving their goal, and reflect on their experiences as they work toward the realization of their goal.



Silver Strong & Associates • Thoughtful Education Press

800.962.4432 • www.ThoughtfulEd.com • 227 First Street • Ho-Ho-Kus, NJ 07423

IMPORTANT COPYRIGHT NOTICE AND PERMISSION INFORMATION

SELECTED PAGES WITHIN THIS PUBLICATION ARE INDICATED AS REPRODUCIBLE FOR USE BY THE INDIVIDUAL USER OF THIS PORTFOLIO. PERMISSION IS NOT GRANTED FOR MASS OR ELECTRONIC REPRODUCTION AND DISTRIBUTION, INCLUDING DISTRIBUTION ON THE INTERNET, WITHOUT THE WRITTEN PERMISSION OF THOUGHTFUL EDUCATION PRESS, LLC.

© 2005 Thoughtful Education Press, LLC. All Rights Reserved.