Using Common Scoring Criteria & Task Models to Assess the Transferable Skills

Tom Alderman, Director, Secondary and Adult Division, AOE

Kate Gardoqui, Senior Associate, GSP

Mark Kostin, Associate Director, GSP

AGENDA

- Welcome and Introductions

- Bringing Transferable Skills to the Center

- Common Scoring Criteria and Task Models - Examples

- Brainstorm Task Model for Creative and Practical Problem Solving

GROUP NORMS

- Respect Time

- Assume good intentions

- Listen well

- Allow others sufficient "air time"

- Freely attend to personal needs

- Foster good humor

Vermont's Transferable Skill PBGRs:

Clear and Effective Communication

Self Direction

Creative and Practical Problem Solving

Responsible and Involved Citizenship

Informed and Integrative Thinking

Think of a task or experience that you have seen or run this year which gave students the chance to practice any of the following skills:

Discuss with a neighbor.

Transferable Skill 3: **Creative and Practical Problem Solving**

a. Observe and evaluate situations in order to define problems.

b. Frame questions, make predictions, and design data collection and analysis strategies.

c. Identify patterns, trends, and relationships that apply to solutions.

d. Analyze, evaluate, and synthesize evidence, arguments, claims, and beliefs.

e. Generate a variety of solutions, use evidence to build a case for best responses, critically evaluate the effectiveness of responses, and repeat the process to generate alternate solutions.

Current Practice - The National Research Council

"Typical classroom activities convey either a passive and narrow view of science learning or an activity-oriented approach devoid of question-probing and only loosely related to conceptual learning goals.

"Large science textbooks cover many topics with little depth, providing little guidance on how to place science in the context of meaningful problems. As teachers try to cover the broad curriculum, they give insufficient attention to students' understanding and instead focus on superficial recall-level questions."

"The patterns are similar to those observed in mathematics classrooms."

- National Research Council. Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century. Washington, DC: The National Academies Press, 2012. p. 129.

Note from a VT teacher:

"I recently participated in a Project Based Learning Project combining health and statistics courses that created public health campaigns by students. Skimming over this material I see a dozen opportunities for assessment that we missed as we concentrated on manipulating mathematics in student presentations. This is going to be fun. Thanks again."

Creative and Practical Problem Solving

a. Observe and evaluate situations in order to define problems.

b. Frame questions, make predictions, and design data collection and analysis strategies.

c. Identify patterns, trends, and relationships that apply to solutions.

d. Analyze, evaluate, and synthesize evidence, arguments, claims, and beliefs.

e. Generate a variety of solutions, use evidence to build a case for best responses, critically evaluate the effectiveness of responses, and

repeat the process to generate alternate solutions.

f. Identify opportunities for innovation and collaboration.

g. Use a range of tools, including technology, to solve problems.

h. Persist in solving challenging problems and learn from failure.

Using Common Scoring Criteria and Task Models to bring the Transferable Skills to the Center

- Common definition of proficiency in the Transferable Skills;

- Agreement on the features that tasks must have in order to elicit student work that will demand proficiency in the transferable skills.

Sample Scoring Criteria

Transferable Skill 1: Clear and Effective Communication

F. Use technology to further enhance and disseminate communication	Uses technology to communicate message through use of basic research and/or presentation tools such as bulleted lists, slides, or typed test.	Uses technology tools (e.g., textual, graphical, audio, visual, and interactive elements) in texts or presentations to interpret, infer, summarize, and/or further explain/exemplify information.	Uses technology tools (e.g., textual, graphical, audio, visual, and interactive elements) in texts or presentations to classify, distinguish important information, and/or show cause and effect relationship among ideas.	Uses technology tools (e.g., textual, graphical, audio, visual, and interactive elements) to integrate information, analyze, produce, critique, and present abstract concepts visually.
	communicate, list, type	interpret, infer, summarize, explain	classify, distinguish, show cause and effect	integrate, analyze, critique

Sample Scoring Criteria

Transferable Skill 3: Creative and Practical Problem Solving

A. Observe and evaluate situations in order to define problems.	I can make observations about situations.	I can make observations about situations identify relationships to make inferences about a problem. propose possibilities to define a problem.	I can categorize observations and information from multiple sources identify situational constraints and articulate the problem.	I can analyze situations to define complex problems and explain their relevance within the world.
	Make Observations	Identify Relationships, Make Inferences	Categorize, Use Multiple sources, Articulate	Analyze and Explain

Sample Scoring Criteria

Transferable Skill 5: Informed and Integrative Thinking

e. Develop and use models to explain phenomena.	I can use an existing model to identify the key components of a complex sequence or system.	I can use an existing model to explain a complex sequence or system, distinguish between relevant and irrelevant evidence, and identify patterns.	I can create and use an evidence-based model to: explain a complex sequence or system, analyze patterns, and explain limitations.	I can create, use and critique multiple models to predict outcomes, develop generalizations, show interrelationships between complex sequences or systems. I can apply models to new situations, and generate modifications for improvement.

Each set of scoring criteria can eventually become a line in a rubric for a project that assesses multiple performance indicators.

Functions of Scoring Criteria

- To provide clarification for the student about what the target is & what they need to do to demonstrate proficiency

- To provide clarification for the student about what they need to work on

- To guide instruction by defining the steps that a student will move through on the way to proficiency

- To guide the scoring of assessments

Designing Scoring Criteria
Process

Describe the **level of cognitive demand** that will be met at each level of proficiency within this indicator

Avoid Terms Focused on Frequency

FREQUENTLY

RELIABLY

RARELY

NEVER

Use **Terms** Focused on Cognitive Demand

CREATE

EXPLAIN

RECOGNIZE

DESCRIBE

What is a Task Model?

A description of the required features that an assessment needs in order to ensure that the student work will align to the scoring criteria.

What is a Task Model?

This list ensures that individual assessments created by teachers are closely aligned with the performance indicators and that a student who does well on this assessment will have demonstrated the proficiencies that we are looking for.

Transferable Skill 1: Task Model

Transferable Skill: **Clear and Effective Communication**

a. Demonstrate organized and purposeful communication.

b. Use evidence and logic appropriately in communication.

c. Integrate information gathered from active speaking and listening.

d. Adjust communication based on the audience, context, and purpose.

f. Use technology to further enhance and disseminate communication.

Transferable Skill 1: Task Model

The Performance Assessment for **Clear and Effective Communication** **must include these elements:**

- The student will engage with various types of text or other sources such as graphs, charts, pictures or video.

- The student will participate in collaborative discussion.

- The student will create a text or presentation that draws on information/ideas from that discussion, as well as from other sources, to provide evidence to support a claim.

- The student text or presentation must utilize technology in order to incorporate images, graphs, charts, audio, video or other effects into the support for the claim.

Task Model

How many of the Performance Indicators from Transferable Skill 3 can be assessed through a single task?

Transferable Skill 3: Task Model

Transferable Skill: **Creative and Practical Problem Solving**

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Review and discuss the scoring criteria with these questions in mind:

- What features must this assessment have in order to elicit work from the student that can be judged using these criteria

    - For example: what type of product must the student produce? What elements must this product include?

- Are there any specific types of information sources that should be included in this assessment (print, graphics, video etc…?)

- Select the features which would be essential for this assessment, and write these on your chart paper

    - Each group then hangs their chart paper on the wall.

Tour the room, looking at the criteria suggested by other groups.

After looking at the work done by all the other groups, **retrieve** your chart from the wall and **edit it** to **reflect any ideas** your group has gained from looking at the other groups' work

Task Model for Transferable Skill 3

The task must be open-ended & lend itself to many possible solutions

In their final product….
- The student defines the problem that they are addressing
- The student must explain their research questions and how they searched for/gathered information/data
- The student engages in his/her own research - observations, research, data collection
- The student must describe how they worked with real-world constraints/parameters
- The student must interpret, evaluate, and analyze data/information
- The student must evaluate the effectiveness of several solutions and support their evaluation with evidence
- The student must synthesize their findings to make a claim about their best proposed solution, and support their choice with evidence

Wrap-up and Next Steps

- We invite you to review the scoring criteria & task models we have drafted and to add comments or suggestions. If you are interested in providing feedback, please fill in your name and contact info on your exit ticket.

- We invite you to think about tasks that you could build for your students that would utilize these task models.

THANK YOU

Kate Gardoqui
Senior Associate
cell: 207.553.0163
kgardoqui@greatschoolspartnership.org

Tom Alderman
Director, Secondary and Adult Division, AOE
phone: (802) 479-1265
tom.Alderman@state.vt.us