

# *Scoring and Anchoring Performance Assessments*



*presented by*

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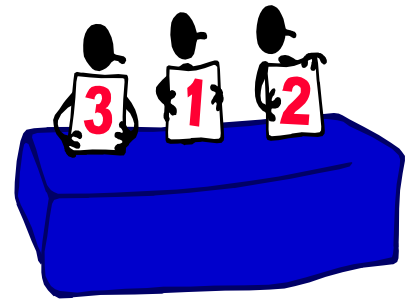
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# RUBRICS



## **Definition**

Rubrics are criterion-based evaluation tools used in conjunction with “open-ended” performance tasks and projects, which do not have a single, “correct” answer or solution process.

Two general types of rubrics – holistic and analytic – are widely used to judge student products and performances. A holistic rubric provides an overall impression of a student’s work. Holistic rubrics yield a *single* score or rating for a product or performance. An analytic rubric divides a product or performance into distinct traits or dimensions and judges each separately. Since an analytic rubric rates each of the identified traits independently, a separate score is provided for each.

A third type of rubric -- longitudinal -- describes growth along a fixed, novice-expert continuum, in which each level represents a key benchmark on the road to exit-level performance. These longitudinal rubrics provide a basis for designing backward from mastery performance so that teachers and learners at all levels know where they stand along a developmental continuum against exit-level performance goals. Longitudinal rubrics are not tied to any particular performance or assessment task. Rather, they enable teachers, parents, and learners to chart progress toward desired accomplishments.

## **Purpose**

*Effective rubrics:*

- clearly define criteria for judging student performance;
- promote more consistent evaluation of student performance;
- help clarify instructional goals and serve as teaching targets;
- provide specific feedback to learners and teachers;
- help students focus on the important dimensions of a product or performance;
- support criterion-based assessment

Note: The criteria within a rubric should be directly linked to the targeted outcomes in Stage 1, and not simply focus on the surface features of products or performances.

# Developing and Refining a Rubric by Evaluating and Categorizing Student Work

The following six-step process for identifying performance criteria and using them as a basis for designing a scoring rubric. The procedure begins with sorting student work and then proceeds by looking at sample performance criteria from other places.

**Step 1: Gather samples of student performance that illustrate the desired skill or understanding.**

Choose as large and diverse a set of samples as possible.

**Step 2: Sort student work into different stacks and write down the reasons.**

For example, place the samples of student work into three piles: strong, middle and weak. As the student work is sorted, write down reasons for placing pieces in the various stacks. If a piece is placed in the “sophisticated” pile, describe its distinguishing features. What cues you that the work is sophisticated? What are you saying to yourself as you place a piece of work into a pile? What might you say to a student as you return this work? The qualities (attributes) that you identify reveal criteria. Keep sorting work until you are not adding anything new to your list of attributes.

**Step 3: Cluster the reasons into traits or important dimensions of performance.**

The sorting process used thus far in this exercise is “holistic.” Participants in this process end up with a list of comments for high, medium and low performance; any single student product gets only one overall score. Usually, during the listing of comments someone will say something to the effect that, “I had trouble placing this paper into one stack or another because it was strong on one trait but weak on another.” This brings up the need for analytical trait scoring systems; i.e., evaluating each student’s product or performance on more than one dimension.

**Step 4: Write a definition of each trait.**

These definitions should be “value neutral” – they describe what the trait is about, not what good performance looks like. (Descriptions of good performance on the trait are left to the “high” rating.)

## Rubric Design/Refinement Process #3

(continued)

**Step 5: Find samples of student performance  
that illustrate each score point on each trait.**

Find samples of student work which are good examples of strong, weak and mid range performance on each trait. These can be used to illustrate to students what to do and what “good” looks like. It’s important to have more than a single example. If you show students only a single example of what a good performance looks like, they are likely to imitate or copy it.

**Step 6: Continuously Refine**

Criteria and rubrics evolve with use. Try them out. You’ll probably find some parts of the rubric that work fine and some that don’t. Add and modify descriptions so that they communicate more precisely. Choose better sample papers that illustrate what you mean. Revise traits if you need to. When appropriate, let students help—this is a tool for learning.

| Questions to consider when using a rubric to evaluate student work samples:   | Possible rubric refinements:  |
|---|---|
| • Have any important elements “fallen through the cracks”? Are important qualities that are evident in the best student work samples not specified in the rubric? | <i>If so...</i><br>Add the missing element(s). Make sure that it (they) appear(s) consistently throughout the scale.  |
| • Is it difficult for reviewers to distinguish between two score points in the rubric? Are the distinctions between score points unclear or indistinguishable?    | <i>If so...</i><br>Consider shrinking the scale (e.g., from 6 to 5 points) so that the distinctions between levels are significant and readily determined.    |
| • Are raters asking to use + or – symbols next to the score points for some samples?  | <i>If so...</i><br>Consider expanding the scale (e.g., from 3 to 4 points) to accommodate these “border dwellers.”  |
| • Are scores determined quantitatively; i.e., by “counting on fingers”?   | <i>If so...</i><br>Substitute qualitative descriptors for numbers so that differences in salient qualities are characterized within the various score points. |

Source: Arter, J. and McTighe, J. (2001). *Scoring Rubrics in the Classroom: Using Performance Criteria for Assessing and Improving Student Performance*. Thousand Oaks, CA: Corwin Press

## **Anchoring Performance Assessment Tasks**

Anchoring refers to the process of selecting examples of student work/responses to characterize each of the score points on a rubric scale. These examples, known as anchors, provide tangible and specific illustrations of various levels of performance or degrees of proficiency based upon established criteria. Anchors serve an important role in performance assessment by:

- ☐ assisting teachers in understanding and consistently applying the scoring criteria when judging student responses;
- ☐ providing teachers with student examples for instructional use;
- ☐ offering teachers and students clear targets and examples of excellent performance to motivate and guide their efforts; and
- ☐ helping students to understand and apply the criteria when evaluating their own work

### **Models for Anchoring**

There are two basic models for anchoring performance tasks. Model 1 is based upon the use of established scoring criteria contained in a scoring tool (rubric, rule, or key). In this model, student responses, products, or performances are evaluated according to the scoring criteria. Then, the scored responses are sorted into groups corresponding with the various score points on the scale (4's, 3's, etc.). Several responses, products, or performances are selected from each group to illustrate the criteria for that score point. These are the anchors.

Model 1 is appropriate when a performance task and accompanying scoring tool(s) have been validated through reviews, field testing, and revision.

Model 2 uses student responses, products, or performances as the basis for identifying or refining the scoring criteria. In this model, student responses are sorted into three (high, medium, low) or four (excellent, good, fair, poor) groups based upon general quality. Each group is then reviewed to determine the distinguishing characteristics of the responses. Specific criteria are then developed for each group, and several responses are selected as anchors to illustrate those criteria.

Model 2 is appropriate when a task has been used for the first time and when there is no scoring rubric or the tool is in draft form.

## Task Anchoring Process - Two Models

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graph TD; A[Task Anchoring Process - Two Models] --> B[Model 1  
Based on Scoring Criteria]; A --> C[Model 2  
Based on Student Responses];
```

### Model 1 Based on Scoring Criteria

- Review the scoring tool to become familiar with the range and criteria for each score point.
- Follow a consensus process to evaluate student responses using the scoring tool.
- Sort the scored responses into groups corresponding with the score points (4's, 3's, etc.).
- Select several responses that best illustrate the distinguishing characteristics for the top score point. These are the anchors.
- Repeat the process for the other score points.

#### Use Model 1 when...

- the task has been validated through reviews, field testing, and revision,

*and*

- the scoring tool (rubric, criterion list) has been validated.

### Model 2 Based on Student Responses

- Follow a consensus process to sort student responses into three groups – "high," "medium," or "low" quality .
- Decide on the distinguishing characteristics of the "high quality" responses.
- Use these characteristics to identify the criteria for the top score point of the scoring tool.
- Select several responses that best illustrate the distinguishing characteristics for the top score point. These are the anchors.
- Repeat the process for the other groups of student responses.

#### Use Model 2 when...

- the task and the scoring tool are being tried for the first time

*or*

- the scoring tool is in draft form and has not yet been validated.

## **An Anchoring Procedure – Model 1**

This procedure is intended for use in conjunction with an established scoring rubric to identify tangible examples (anchors) to illustrate the different levels of performance specified by the rubric scale.

Have teachers meet in role-alike groups (e.g., grade level or department groups) to evaluate a set of student responses, products, or performances on a common performance assessment task. A group size of 3 or 4 people is recommended. The group uses an established scoring rubric to evaluate student performance according to the following procedure:

1. Collect a full range of student responses for each assessment task. Whenever possible, these responses should be obtained from students of varying achievement levels in different classes.
2. Identify teams with three to four members to work on evaluating and anchoring.
3. Prior to scoring, review each task to become familiar with the identified content standards (or desired understandings) being assessed. Also, review the scoring rubric for each task to become familiar with the range (number of score points) of the scale and the criteria for each score point.
4. Work individually to score designated student responses. Use one of the corners of the Anchoring Form (Figure x.x) to record your score for each task. In other words, each group member privately writes an “H” (for High), an “M” (for Middle), or an “L” (for Low) and folds the corner down so that it can’t be seen. The paper and the accompanying form is then passed to the next rater.
5. Compare the individual scores within the group. Reach consensus through discussion. If necessary, request a “second opinion” from someone not within the group.
6. Once scoring has been completed for a given task, sort the student responses into groups according to their scores; e.g., ones, twos, threes, etc. Then arrange the responses hierarchically within the piles, looking for performance gradations.
7. Examine the responses in each group and look for common features. Select two or three examples of student responses that best illustrate each point on the scoring rubric. These examples will serve as “anchors” for the scoring system.



## **An Anchoring Procedure – Model 1**

*(continued)*

8. Complete the annotation section on the Anchoring Form for each example selected as an anchor. Be specific, using the language of the rubric to highlight the key features of the response. These annotations should describe why the response received its score so as to assist other teachers in applying the scoring rubric.

### **Tips/variations for this procedure**

☐ Individuals involved in evaluating and anchoring should be thoroughly familiar with the assessment task(s). Prior to scoring, it is beneficial to work with a partner/team to clarify precisely what students are being asked to do in the task (and its overall purpose) so that the most salient performance features are evaluated.

☐ It is important to discuss the meaning of each criteria in the scoring rubric so that evaluators will be looking at student performance through the same lens. Also, discuss the differences in the various score points in the scale (i.e., what distinguishes a “3” from a “2”?).

☐ Scoring and anchoring of performance assessments require the application of human judgment guided by specific criteria. Scoring reliability is strengthened when judgments are reached through a consensus process involving two or more scorers.

☐ Beware of the tendency to slip into “norm-referenced” evaluation when judging student performances. This can occur when responses are judged according to the best performance in the group rather than against the established scoring criteria.

☐ Avoid “double jeopardy” scoring. For example, if a student makes a computational error on a mathematics task, don’t let all subsequent responses be penalized because of an initial error, especially when the student demonstrates sound reasoning.

☐ The Anchoring process described above is appropriate when the performance task and the scoring rubric have been validated through reviews and field tests. The following variation is suggested when the performance task and/or the scoring rubric are being tried for the first time.

☐ Follow a consensus process to sort student performances into three groups – “high,” “medium,” or “low” quality.

☐ Agree on the distinguishing characteristics of the “high quality” (H) responses, products or performances.

☐ Use these characteristics to identify the criteria for the top score point of the scoring rubric.

☐ Select several responses that best illustrate the distinguishing characteristics for the top score point. These are the anchors.

☐ Repeat the process for the other groups of student performances to develop and flesh out the rubric descriptors and corresponding anchors for the other score points in the rubric scale.



## **An Anchoring Procedure – Model 2**

The following procedure is designed to guide groups in determining the characteristics of student work/responses responses to performance tasks according the various levels on a rubric and identifying anchor examples. This process also helps teams refine their tasks and associated scoring tools,

1. Each group member randomly selects five student responses to the same task.
2. Each of the four group members begins by reading the first activity (for tasks with multiple activities and scoring tools) or reads the entire task, if the task is to receive a single holistic score.
3. Each person reads the student response on the first paper and globally decides whether the response is closest to High, Middle, or Low quality.
4. In the upper left hand corner, each group member privately writes an “H” (for High), an “M” (for Middle), or an “L” (for Low) and folds the corner down so that it can’t be seen. The paper is then passed to the next rater.
5. Continue with the next paper and the next corner (upper right, etc.) until each paper in the stack has been rated by all.
6. As a group, discuss each paper in turn as the corners are folded open and come to a consensus as to whether papers are “High,” “Middle,” or “Low” quality.
7. Parcel out the "high quality" papers and decide on the distinguishing characteristics of a high quality response, and record them using as much detail as necessary on the sheet entitled, “Characteristics For High Quality Responses.”
8. Use these characteristics to identify the criteria for the top score point of the scoring tool.
9. Revise the scoring tool as necessary to incorporate these criteria.
10. Select several papers that best illustrate the distinguishing characteristics of a high quality response to serve as anchors for the top score point.
11. Repeat the process for the papers in the "middle" and "low" quality groups.

## Scoring and Anchoring Annotation Form

**Title of Task:** \_\_\_\_\_

**Date of Scoring and Anchoring:** \_\_\_\_\_

**Annotation:** This is an example of a \_\_\_\_\_ because:  
(score point)

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### Group Members:

Name

School/ Team

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**Group Leader(s):** \_\_\_\_\_

4

## Scoring and Anchoring Annotation Form

4

Title of Task: Take a Hike

Date of Scoring and Anchoring: 3/7/18

Annotation: This is an example of a 4 because:  
(score point)

- all computations are accurate
- problem solving strategies are effectively used
- sound mathematical reasoning is applied
- explanation of process is clear and complete
- mathematical language is used appropriately

### Group Members:

Name

School/ Team

1. Jerry Bruner John B. Goode Elem.

2. Mattie Hunter John B. Goode Elem.

3. Juan Dewey District Office

4. \_\_\_\_\_

5. \_\_\_\_\_

Group Leader(s): \_\_\_\_\_

4

2

## Scoring and Anchoring Annotation Form

2

Title of Task: Take a Hike

Date of Scoring and Anchoring: 3/7/18

Annotation: This is an example of a 2 because:  
(score point)

- computational errors are evident
- attempt to use problem solving strategies but not always effectively and/or efficiently
- sound mathematical reasoning is applied
- explanation is attempted but unclear
- minimal use of appropriate mathematical language

Group Members:

Name

School/ Team

- |                             |                            |
|-----------------------------|----------------------------|
| 1. <u>Jerry Bruner</u>      | <u>John B. Goode Elem.</u> |
| 2. <u>Mattie Hunter</u>     | <u>John B. Goode Elem.</u> |
| 3. <u>Hoda Hayes Jacobs</u> | <u>John B. Goode Elem.</u> |
| 4. <u>Juan Dewey</u>        | <u>District Office</u>     |
| 5. _____                    | _____                      |

Group Leader(s): \_\_\_\_\_

2

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# Cornerstone Assessments in Writing (6-12)

GREECE CENTRAL SCHOOL DISTRICT, NY

| <b>GRADE</b> | <b>Expository</b>  | <b>Persuasive</b>      | <b>Literary Analysis</b>               | <b>Creative/<br/>Expressive</b> |
|--------------|--------------------|------------------------|--|---------------------------------|
| Grade 6      | Research report    | Position paper         | Literary essay on setting or conflict  | Original myth                   |
| Grade 7      | Autobiography      | Policy evaluation      | Literary essay on character            | Persona writing                 |
| Grade 8      | Research report    | Problem/solution essay | Literary essay on symbolism            | Narrative fiction               |
| Grade 9      | Cause/effect essay | Editorial              | Analysis of multiple literary elements | Poetry                          |
| Grade 10     | Research report    | Social issue essay     | Critical Lens essay                    | Historical Persona              |
| Grade 11     | Definition essay   | Argumentative essay    | Comparative genre essay                | Parody/satire                   |
| Grade 12     | Research paper     | Position paper         | Response to literary criticism         | Irony                           |

ANNOTATED EXEMPLAR  
Persuasive

School is meant to be a place of learning, an opportunity to acquire knowledge and insight, and it was at Greece Olympia High School that I learned this lesson. It was one of those rainy day mornings when little could be heard above the squeak of wet rubber soles against the tile floor of the freshman hallway. I was heading into homeroom early; I thought I'd

*The writer engages the reader by establishing a context and using an appropriate tone*

*The writer's use of imagery helps to create a context for the reader.*

be the first to arrive. However, just as I was about to enter the room, I saw that a girl with vibrant brown hair, jeans, and a pink sweater had already gone into the room. Seemingly because her shoes had no texture, with a bottom as smooth as the complexion of her youth, she slipped, hung in the air for a moment, then crashed to the ground. I took a step backward to laugh out in the hall. When I peered back in the room, I expected that after such a fall she would be unable to move. However, she had already leapt to her feet. That's when I noticed her fervent glances. Left and right. Left then right. Her head quickly turned. Satisfied in her anonymity, she slowly, and I believe painfully, walked to her seat.

*The writer utilizes vivid and precise language.*

*The writer varies sentence patterns for effect.*

*The writer chooses and employs specific rhetorical devices to support assertions and strengthen persuasiveness of the argument (anecdote) based on the topic, audience and purpose.*

At that moment, I became consciously aware that people, including myself, seem to concern themselves more with the opinions and wants of others than with what they themselves think or desire. This girl had been so worried about what someone else might think that she didn't even stop to catch her breath. It's no wonder that a phrase like, "What will the neighbors think?" sounds cliché. For years people have been interested in owning a better house, buying a faster car and having a more attractive mate. Yet, are these things going to bring self-fulfillment? Is somehow having these items going to impress people, and, if so, why do we care what these people think? We are raised to do just that. From a young age, we are taught to please mostly our parents, then our teachers, coaches, and friends. From the moment we are born, others expect us to behave, think, and value in a certain way, and being the impressionable youths that we are, we usually unwittingly comply.

*The writer uses effective interpretation that offers insights.*

## Task Variables

*The following variables could be considered when designing learning and performance tasks. The desired results, nature and needs of the students, the teacher's style, available resources (time, supplies, equipment, funds) and classroom feasibility.*

**Student Choice** – To what extent will students have choices regarding the following?

- ☐ task topic                      ☐ task activities                      ☐ process for completing task  
☐ product(s)/performance(s)                      ☐ audience(s)

**Access to Resources** – Will all resources needed (information, supplies, equipment) be provided? To what extent will students be expected to gather information, provide their own supplies/equipment, etc.?

- ☐ all necessary information/ resources provided    ☐ other: \_\_\_\_\_

**Performance Mode** – How will students work?

- ☐ individually                      ☐ pair/group (optional)                      ☐ pair/group (required)

**Audience(s) for Student Product(s)/Performance(s)** – To whom will students present their products and performances?

- ☐ teacher    ☐ other school staff    ☐ expert(s)    ☐ parents/community  
☐ peers (in class)    ☐ other students                      ☐ other: \_\_\_\_\_

**Time Frame** – How long will students be involved in this task? Include time for presentations and evaluations.

- ☐ 1 – 2 class periods                      ☐ 3 – 5 periods                      ☐ other: \_\_\_\_\_

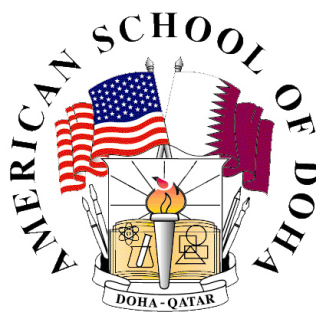
**Degree of Scaffolding** – To what degree will students be provided with instructional support (scaffolding) as they work on the task?

- ☐ no support                      ☐ some support, as needed                      ☐ extensive support

**Evaluation of Student Product(s)/Performance(s)** – Who will be involved in evaluating student products and performances?

- ☐ teacher    ☐ other staff    ☐ expert judge(s)                      ☐ external scorers  
☐ student (self evaluation)                      ☐ peers                      ☐ other: \_\_\_\_\_





## **Professional and Collaboration Time (PACT)**

### **Charge:**

We will use PACT to collaborate within various “Learning Communities” to grow professionally, and to collaborate together to enhance our planning, teaching and assessment with **a focus on student learning**. *PACT is not intended for departmental or team “housekeeping” or for individual teacher planning.*

### **Goals:**

- To improve curriculum quality and alignment
- To analyze “results” and student work
- To enhance instructional and assessment practices
- To increase professional conversations between ASD faculty members
- To better implement school improvement initiatives through collaboration

### **Schedule:**

- Tuesday 1:10 – 3:10 (1:10 – 2:10 = horizontal teams, 2:10 – 3:10 = vertical teams if needed)

### **Suggestions of collaborative tasks:**

- looking at student work
- analyzing data to improve student learning (e.g., NWEA scores, AP results, etc)
- evaluating and refining the quality of assessment tasks & rubrics
- planning among teachers who teach common courses
- coordinating among grade level teams (e.g., vertical alignment of curriculum)
- developing common assessments/rubrics (including moderation of assessments)
- planning for integration of units
- reviewing UbD Units and Atlas Rubicon Curriculum Maps
- discussing professional readings
- planning for implementation of new school/team programs
- participating in professional development

# Questions To Ask When Examining Student Work

*Use the following questions to guide the examination of student work.*

## **Describe**

- *What knowledge and skills are assessed?*
- *What kinds of thinking are required (e.g., recall, interpretation, evaluation)?*
- *Are these the results I (we) expected? Why or why not?*
- *In what areas did the student(s) perform best?*
- *What weaknesses are evident?*      • *What misconceptions are revealed?*
- *Are there any surprises?*      • *What anomalies exist?*
- *Is there evidence of improvement or decline? If so, what caused the changes?*

## **Evaluate**

- *By what criteria am I (are we) evaluating student work?*
- *Are these the most important criteria?*
- *How good is “good enough” (i.e., the performance standard)?*

## **Interpret**

- *What does this work reveal about student learning and performance?*
- *What patterns (e.g., strengths, weaknesses, misconceptions) are evident?*
- *What questions does this work raise?*
- *Is this work consistent with other achievement data?*
- *Are there different possible explanations for these results?*

## **Identify Improvement Actions**

- *What teacher action(s) are needed to improve learning and performance?*
- *What student action(s) are needed to improve learning and performance?*
- *What systemic action(s) at the school/district level are needed to improve learning and performance (e.g., changes in curriculum, schedule, grouping)?*

• Other: \_\_\_\_\_?

• Other: \_\_\_\_\_?

## Data-Driven Improvement Planning

Based on an analysis of achievement data and student work:

- What *patterns* of weakness are noted?
- What *specific* areas are most in need of improvement?

- problem solving and mathematical reasoning are generally weak
- students do not effectively explain their reasoning and their use of strategies
- appropriate mathematical language is not always used
- 



What *specific* improvement actions will we take?

- ☐ Increase our use of “non routine” problems that require mathematical reasoning.
- ☐ Explicitly teach (and regularly review) specific problem solving strategies.
- ☐ Develop a poster of problem solving strategies and post in each math classroom.
- ☐ Increase use of “think alouds” (by teacher & students) to model mathematical reasoning.
- ☐ Develop a “word wall” of key mathematical terms and use the terms regularly.
- ☐ Revise our problem solving rubric to emphasize explanation & use of mathematical language.

## Teaching Toward Authentic Performance: A General Instructional Approach

☐ Once the performance task has been identified, deconstruct the task to identify necessary concepts, knowledge and skills needed by the learners for a successful performance.

*Your thoughts...*

☐ Use pre-assessments to find out the entry level current knowledge and skill levels of the learners.

☐ Plan targeted lessons to develop the knowledge, skills and confidence needed to tackle the summative task.

☐ Differentiate this instruction as needed to address the learning variability among students.

☐ Use on-going formative assessments to check on the development of requisite skills, knowledge, and understandings.

☐ Engage learners with formative “mini tasks” — simplified or scaffolded versions of the summative task — and provide feedback to students as they work on the mini tasks.

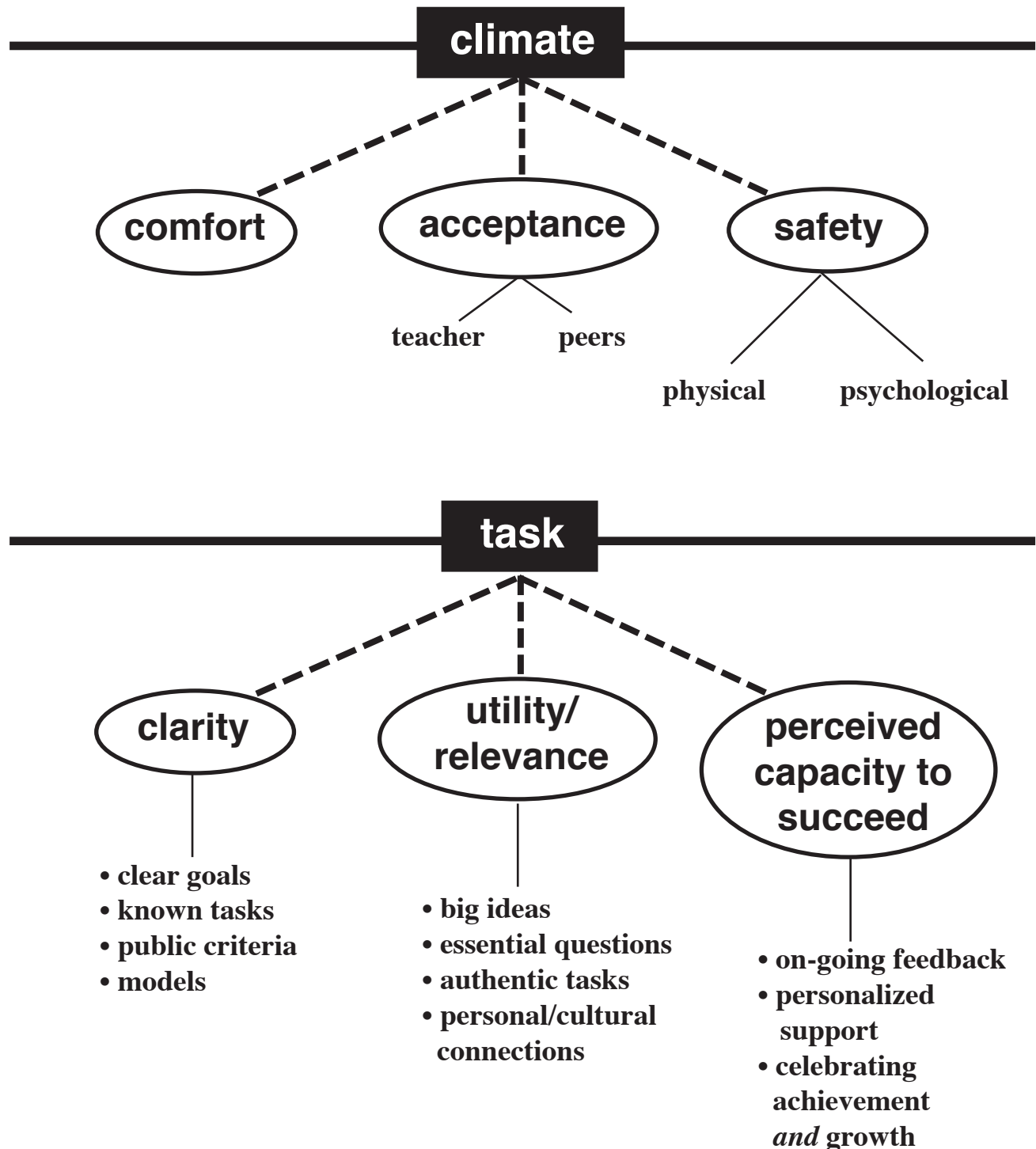
☐ Allow time for them to practice and/or make revisions based on the feedback.

*After the task is implemented...*

☐ Evaluate student performance using the established rubric(s).

☐ Examine student work to identify areas of weaknesses needing attention.

## Variables Influencing Learners' Motivation and Effort



## Students' Voices: What do the Learners Say?

Comments from High School students in response to the questions: What was the most interesting and engaging course you took this year? What made it so? Source: Authentic Education

- *In my Algebra 2 class, we had to do a final project. It was very free formed and actually a lot of fun. Our assignment was to find a real life example that involved some of the math ideas we had learned that year. Everyone did a different topic. I feel like I got more out of that project than I have in any other project. I did mine on roller coasters using functions and regression equations to find out the equations of the track. I also found the angles of descent using points on the graph. Anyways, this project really opened up my eyes and I actually enjoyed doing it.*
- *Essay for English because it was a clear rubric and I did very well on it because I knew the requirements and saw models of previous good grades on it.*
- *To make a Spanish cooking show! Any type of project where you can create a video to complete it makes it a lot of fun and worth my time.*
- *Earth science, when we were required to test the potential energy of a few substances (by lighting them on fire). and it was interesting because we got to do hands on stuff with fire.*
- *In health class we had to put together a project on a previous drug addict and it helped me learn more about the drugs we learned about in class along with it was interesting.*
- *In my sociology class we did a study where we went to all of the lunches that class period and just sat with different groups of people and study group behavior. Then we mapped out the whole lunch room with where different groups typically sat. It was interesting because I got to go out of my comfort zone and study people.*
- *Last year, in my art class, the most interesting piece I did was an eye project. We had to choose four different artists styles and paint one eye for each style. It was a challenge but it was fun.*
- *Problems of the week in math involved both the students having to come up with a problem of the week to pose to the other students, as well as posting it online. The rest of the class was then required to solve that problem, which was interesting in the fact that it was all student-oriented.*
- *We made a comic book in history class. I loved doing this because I like hands-on projects where I get to be creative, and it was a lot of fun.*
- *The labs in chemistry. They are very difficult, but to me they are very interesting and fun.*
- *Last year in math we applied a concept we learned during the year (log. functions) to a real life thing, being the career stats of basketball players. We used the stats to predict what young players would eventually end up being all stars in their careers.*

## Students' Voices: What do the Learners Say?

(continued)

- *While reading To Kill a Mockingbird, my English teacher had my class take a survey about some of our traits (eye color, hair color, skin color, height, # of immediate family members, and many others). The next day, she had students be separated into the “normal people” and the “slaves”. Throughout the class, the slaves had to do ANYTHING the teacher asked us to do for the other normal students, and she kept the separating trait a secret until the end of the class. This technique helped us really realize how much discrimination plays a role in our everyday lives.*
- *A journal that we had to keep in History class. We had to write a story about what it would be like if we were a certain character during the French Revolution, and we had certain topics to write about with each entry. There were 6 entry's total and each one had to be full of detail.*
- *Last year we did a midevil banquet. it was interesting because everyone had to be a person from midevil times and describe your self to everyone.*
- *The most interesting work I have done in the last year was when we had to write a story about a person based on a picture of a shoe of theirs.*
- *We performed our marching show at football games and at a band competition.*
- *A debate in history because it was interesting to hear other students ideas and also share my own.*
- *We did a lab in science where we used a bunch of toys and it was fun because we were doing hands on work-with toys!!!*
- *In history we did this activity where we were talking about the execution of King Louis XVI. We had a mock trial for him where we got to be lawyers and the jury and debated whether he really was guilty of the charges brought up against him. When he was found guilty, we drew his face on a carrot and chopped its head off in a guillotine. It got us engaged and was fun.*
- *Write about a person in a magazine based on their picture.*
- *I was asked to create a hypothetical budget for after college using an Excel spreadsheet. This was cool because I got to see first hand what it's like dealing with expenses after college.*
- *Last year in my Spanish class we were asked to make a movie trailer in Spanish, and our group was extremely engaged in the task. Most likely because we enjoyed filming our project using our own script, and not something too strict. We were allowed to expand our ideas and present them.*
- *In math, in lieu of taking a final, we had to do group projects which encompassed most of the math skills we learned throughout the year. It was interesting because we also had to connect it to real life, and it was very helpful as far as remembering the material goes.*