Common Formative Assessments for Career Technical Education

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Career Pathways Conference

Herb Smith, ROP Instructor,
Graphic Arts, Glendale Unified School District
Sarah Vielma, Consultant,
Business Occupations, LACOROP
Karen Nelson, Assistant Director,
Curriculum & Instruction, LACOROP

Accountability Pressures

- Increased accountability
- NCLB
- “One more thing to do”
- Connection

The large-scale external assessment is an assessment of the students’ learning that is summative, whereas the classroom internal assessment is an assessment for the students’ learning that is formative.

-Stiggins, Arter, Chappuis, & Chappuis, 2004

Impact

Large Scale Assessment
- Minimal impact on student academic growth
- Late received results
- Broad curriculum change

Common Formative Assessment
- Assesses student understanding of a particular standard at that time
- Assessment scored and analyzed collaboratively
- Assessment informs instruction

Workshop Objectives

What are common formative assessments?
How do they connect to other powerful instruction and assessment practices?
What are the components of a quality common formative assessment?
What are the benefits of using common formative assessments to both teachers and students?

What are Common Formative Assessments?
- Periodic or interim assessments
- Collaboratively designed
- Administered within a CTE course
- Matches pre- and post- assessments
- Intentionally created and aligned
- Reflect a blend of items
- Analyzed by a group of educators
- Provides predictive value
How do they connect to other powerful instruction and assessment practices?

- What are Priority Standards?
- Unwrapping a Standard
- Determining the Big Idea
- Writing Essential Questions

Manufacturing and Product Development Industry Sector

Graphic Arts Technology Career Pathway

Standard
A2.0 Students understand graphic arts functions and copy preparation, including applications of desktop publishing and electronic imaging software.

Performance Indicators

A2.3 Know desktop publishing and electronic imaging software principles and processes used to prepare graphic arts products.

A2.4 Produce a printed product using desktop publishing and electronic imaging software.

Understanding Priority Standards as a Foundation

- What are Priority Standards?
- Unwrapping a Standard
- Determining the Big Idea
- Writing Essential Questions

Example: Medical Treatment Plan

E3.0 Students understand the purpose and components of a treatment plan.
E3.1 Understand the roles and responsibilities, within their scope of practice, that contribute to the design and implementation of a treatment plan.
E3.2 Understand the process of prioritizing and organizing work in accordance with the patients’ and clients’ treatment plans.
E3.3 Determine the resources available for the effective implementation of treatment plans for patients and clients.
E3.5 Know the process for the documentation of actions in accordance with the facility’s protocol and regulatory guidelines.

Graphic Organizer

Concepts: Need to KNOW about Medical Treatment Plans
(1) UNDERSTAND [identify, define] (roles and responsibilities)
(5) UNDERSTAND [prioritize, evaluate] (process of prioritizing and organizing work)
(4) DETERMINE (resources)
(2) KNOW [demonstrate] (process)

Roles and responsibilities
Within scope of practice
Contribute to design of a treatment plan
Contribute to implementation of a treatment plan

Work process
Prioritizing
Organizing
New Bloom’s Taxonomy

Example: Leadership

5.3: USE critical thinking skills to MAKE informed decisions and SOLVE problems.

9.1: UNDERSTAND the characteristics and benefits of teamwork, leadership, and citizenship in the school, community, and workplace settings.

9.3: UNDERSTAND how to organize and structure work individually and in teams for effective performance and attainment of goals.

Graphic Organizer

3. Use (critical thinking skills to make decisions and solve problems)
4. Understand (characteristics and benefits of teamwork, leadership, and citizenship) – level 4 is distinguish
5. Understand (organization and structure of work) – level 5 is justify, support, evaluate

Unwrapped Standard: Graphic Arts

A2.3 Know desktop publishing and electronic imaging software principles and processes used to prepare graphic arts products.

A2.4 Produce a printed product using desktop publishing and electronic imaging software.

Unwrapped Standard

Know (Know what?)
- desktop publishing
- electronic imaging software principles
- processes used
Prepare/Produce (Prepare what?)
- graphic arts products
- printed product
Use (Use what?)
- desktop publishing principles
- electronic imaging software principles
Instructional Tasks

- Know
- Prepare/Produce
- Use

Understanding Priority Standards as a Foundation

- What are Priority Standards?
- Unwrapping a Standard
- Determining the Big Idea
- Writing Essential Questions

Example: Medical Treatment Plan

STANDARD
E3.1 Understand the roles and responsibilities, within their scope of practice, that contribute to the design and implementation of a treatment plan.

BIG IDEA
The appropriate staff is essential in providing a proper treatment plan.

BIG IDEAS
2. Implementing a treatment plan by importance and in order is efficient for the patient.
3. There are many things available in effectively implementing a treatment plan.
4. Documentation is important for keeping the patient alive and you out of jail.

BIG IDEA: Graphic Arts

You can do effective work when you know the goals of the work you want to produce.

Understanding Priority Standards as a Foundation

- What are Priority Standards?
- Unwrapping a Standard
- Determining the Big Idea
- Writing Essential Questions
Example: Medical Treatment Plan

STANDARD
E3.1 Understand the roles and responsibilities, within their scope of practice, that contribute to the design and implementation of a treatment plan.

UNWRAPPED
(1) UNDERSTAND [identify, define] (roles and responsibilities)

BIG IDEA
The appropriate staff is essential in providing a proper treatment plan.

ESSENTIAL QUESTION
Who is involved with a patient and why is it important?

Example: Medical Treatment Plan

Implementing a treatment plan by importance and in order is efficient for the patient.

ESSENTIAL QUESTION
How do you determine what comes first in patient treatment?

Documentation is important for keeping the patient alive and you out of jail.

ESSENTIAL QUESTION
What are the rules of documentation and why are they important?

Essential Question: Graphic Arts

What good does a flyer do? Why would anyone need to use one?

How can you get people to notice your flyer first?

Assessment Writing and Scoring Guides

- Assessment Formats
- Item Writing Guidelines
- Creating Scoring Guides

When (teachers) ... know and understand principles of sound assessment, know how to translate those principles into sound assessments and quality information about students...a range of benefits will accrue to all.

"Stiggins, 1997"

Types of Assessment

- Large-scale or external assessments
- Small-scale or internal assessments
- Norm-referenced assessment
- Criterion-referenced assessment
- Selected-response assessment
- Constructed-response assessment
- Performance assessment
What are the **components** of a quality common formative assessment?

1. Identify Priority Standards
2. Identify Interdisciplinary Standards
3. Unwrap Standards
4. Determine Big Ideas
5. Write Essential Questions
6. Review Assessments Types & Formats
7. Select those that will provide the most credible evidence of student achievement

8. Administer pre-assessment
9. Plan learning activities
10. Teach
11. Administer post-assessment

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**Selected-Response**

> Example: Medical Treatment Plan

1. UNDERSTAND [identify, define] (roles and responsibilities)
   Which of the following is the responsibility of the Nursing Assistant?
   
   a. transcribes information from the treatment plan to their worksheet.
   b. carries out all patient care duties as prescribed in the treatment plan.
   c. transcribes information from the patient’s chart to the treatment plan.
   d. contacts other departments to schedule tests and procedures.

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**Selected-Response**

> Example: Leadership

As a manager you will need to make many informed decisions throughout the day, which of the following will allow you to make the best decision:

- past experience
- critical thinking skills
- analysis of options

In the workplace there is diversity, differing opinions, many ideas and points of view. This represents the power of:

- teamwork
- racial tension
- gender differences
- leadership
Selected-Response
Example: Medical Treatment Plan
(5) UNDERSTAND [prioritize, evaluate] (process of prioritizing and organizing work)
What would be the first procedure a CNA would provide to a bed-ridden patient?
  a. Vital signs
  b. Skin care
  c. Feed
  d. Change clothes

True/False
Write several questions
Entirely true or entirely false
Write so students must think
Write items in pairs
Equal number T and F
Equal item length
Avoid negative language
Use A for True and B for False

Example: True/False
Level 4 – DRAW (inferences, conclusions, generalizations) ➡️
_____ The little frog knew the milk would turn into butter if he kept paddling.
_____ The little frog hoped that if he kept paddling, he would live.

Example: Matching
Select the appropriate branch of government for each function below. Write your response in the blank next to the number. You will use an answer more than once.
  1. Ratifies foreign treaties
  2. Creates laws
  3. Has veto power
  4. Decides if laws are working fairly
  5. Represents US in the world
  a. Executive
  b. Legislative
  c. Judicial

Example: Fill-In with Answer Choices Provided
Which word or phrase could best provide a transition that would unify its ideas with the previous sentence?
A. After that
B. For example
C. In addition
D. To accomplish this

Short Constructed-Response
Recall and understanding
Good source of common errors
Easy to score
Ask direct question
Example:
Soil Composition & Management
1. What are the four major characteristics and one use for each of the soil types?
2. What are four major soil categories detailed on a soil map and explain how each characteristic influences best-use decisions?
3. What are the three major soil sections and components of each section?

Extended Constructed-Response Example: Medical Treatment Plan
(1) UNDERSTAND [identify, define] (roles and responsibilities)
(5) UNDERSTAND [prioritize, evaluate] (process of prioritizing and organizing work)
(4) DETERMINE (resources)
(2) KNOW [demonstrate] (process)  
As a CNA, you are given a bed-ridden patient and her/his treatment plan. Fill-in your worksheet identifying the care you need to provide on the AM shift. List the tasks in order, identify the resources needed, and explain the need for each resource. Evaluate and document the patient’s response to your care.

Assessment Writing and Scoring Guides
Understanding Scoring Guides and Rubrics
Writing Rubrics

Example: Medical Treatment Plans
As a CNA, you are given a bed-ridden patient and their treatment plan. Fill-in your worksheet identifying the care you need to provide on the AM shift. List the tasks in order, identify the resources needed, and explain the need for each resource. Document the patient’s response to your care.

Proficient Level
✓ Worksheet includes all CNA AM care.
✓ All AM duties listed
✓ Duties prioritized
✓ All resources identified
✓ Purpose of each resource explained
✓ Response is documented for each task
✓ Spelling counts!

Exemplary
All “Proficient” criteria plus:
Identifies the duties of the RN related to AM care.
Orally discusses personal interpretation of each patient response with charge nurse

Proficient
Worksheet includes all CNA AM care.
All AM duties listed
Duties prioritized
All resources identified
Purpose of each resource explained
Response is documented for each task
Spelling counts!

Progressing
Meets 5 of the “Proficient” criteria

Beginning
Meets fewer than 5 of the “Proficient” criteria
Task to be repeated after re-teaching
Using Data

1. Collect and chart data and results

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<th># Stud.</th>
<th># Prof. +</th>
<th># Prof. -</th>
<th>% Prof. +</th>
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</tr>
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</table>

Data

2. Analyze results
3. Write S.M.A.R.T. goal
4. Select effective teaching strategies
5. Results indicators

What are the benefits of using common formative assessments to both teachers and students?

Putting the Pieces Together

- Schools are busy places
- Decisions are student-centered
- Meet student needs
- Gain confidence

Information on Training

MakingStandardsWork.com

Center for Leadership and Learning
Englewood, Colorado

Resources to Ponder

- Ainsworth, Larry and Viegut, Donald, “Common Formative Assessments: How to Connect Standards-Based Instruction and Assessment,” Corwin Press, 2006
- Pollock, Jane E. and Ford, Sharon M., “Improving Student Learning One Principal at a Time,” Association for Supervision and Curriculum Development, 2009
Thank You!!

hsmith@gusd.net
vielma_sarah@lacoe.edu
nelson_karen@lacoe.edu