

Part 1 – Definitions of Design Pattern Attributes

Instructions for Part 1 – Use the following chart to record the definitions and descriptions of *design pattern* attributes as they are discussed during the workshop.

| Design Pattern (DP) Attribute | Definition/Description |
|---|-------------------------------|
| Focal Knowledge, Skills, and Abilities | |
| Additional Knowledge, Skills, and Abilities | |
| Potential Observations | |
| Potential Work Products | |
| Characteristic Features | |
| Variable Features | |
| Narrative Structure | |
| Other notes: | |

Part 2 – Matching DP Attributes with Messick’s Assessment Argument

Instructions for Part 2 – Select the generic *design pattern* attributes (on the left) that match with each of the components of Messick’s assessment argument (on the right). Explain why you selected the particular attributes.

| Generic Design Pattern Attributes | Messick’s Assessment Argument |
|--|---|
| <input type="checkbox"/> Focal Knowledge, Skills, and Abilities <input type="checkbox"/> Additional Knowledge, Skills, and Abilities <input type="checkbox"/> Potential Observations <input type="checkbox"/> Potential Work Products <input type="checkbox"/> Characteristic Features <input type="checkbox"/> Variable Features <input type="checkbox"/> Narrative Structure | <p>Student Model/Claim</p> <p>“What construct (complex of student attributes) should be assessed?”</p> |
| <p>Why did you select these particular attributes?</p> | |
| <input type="checkbox"/> Focal Knowledge, Skills, and Abilities <input type="checkbox"/> Additional Knowledge, Skills, and Abilities <input type="checkbox"/> Potential Observations <input type="checkbox"/> Potential Work Products <input type="checkbox"/> Characteristic Features <input type="checkbox"/> Variable Features <input type="checkbox"/> Narrative Structure | <p>Evidence Model/Actions</p> <p>“What behaviors should reveal the construct?”</p> |
| <p>Why did you select these particular attributes?</p> | |
| <input type="checkbox"/> Focal Knowledge, Skills, and Abilities <input type="checkbox"/> Additional Knowledge, Skills, and Abilities <input type="checkbox"/> Potential Observations <input type="checkbox"/> Potential Work Products <input type="checkbox"/> Characteristic Features <input type="checkbox"/> Variable Features <input type="checkbox"/> Narrative Structure | <p>Task Model/Situation</p> <p>“What tasks should elicit those behaviors?”</p> |
| <p>Why did you select these particular attributes?</p> | |

Part 3 – Working with Design Pattern Attributes

Instructions for Part 3 – The major *design pattern* attributes we will keep referring to in the workshop appear in the left column of the chart on the following page. In the right column are excerpts taken from attribute entries in a *design pattern* on “**Experimental Investigation**”. Match each example with the *design pattern* attribute that is the best fit by drawing a line between them.

Part 3 – Working with Design Pattern Attributes

Example – The attribute “Additional Knowledge, Skills, and Abilities” matches with the excerpt “Prerequisite knowledge from earlier grades”

**DESIGN PATTERN (DP)
ATTRIBUTES**

**ATTRIBUTE EXCERPTS FROM EXPERIMENTAL
INVESTIGATION DP**

1. Focal Knowledge, Skills, and Abilities (KSAs)

Plausibility of hypothesis as being testable by simple experiment

2. Additional Knowledge, Skills, and Abilities (KSAs)



Prerequisite knowledge from earlier grades

3. Potential Observations

Cause and effect: An event, phenomenon, or system is altered by internal or external events

4. Potential Work Products

Ease or difficulty with which the treatment (independent) variable can be manipulated

5. Characteristic Features

Generate or identify data pattern from results in a simple experiment

6. Variable Features

Ability to plan and conduct a simple experiment step-by-step given a prediction or hypothesis

7. Narrative Structure

Presentation of situation requiring the design or conduct of a controlled experiment