

The **UCF** (Unified Competence Framework) and the problem of a **valid Assessment** procedure

Complex competencies cannot be assessed in isolation – they must always be **considered in context**.

It doesn't make sense to ask, in general terms, “After all my efforts, are my students now critical thinkers?”

We need to consider this question in context—within the framework of a **specific topic**.

The “**Mini-Unit Assessment Map**”

A "Mini-Unit Assessment Map" is a strategic blueprint that ensures your **teaching goals**, **student activities**, and **assessment methods** are perfectly **aligned**.

The blueprint follows a **simple 3-steps** procedure:

1. The Foundation: The "WHY" and "WHAT"

Before picking an assessment tool, define the problem being solved and the specific competence being targeted. What exactly is supposed to improve? **The Success Metric:** How big an increase or what level of performance will be deemed a success?

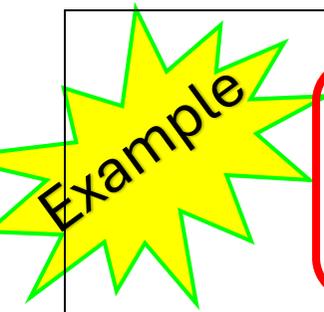
2. The Roadmap: The "WHEN" and "HOW"

Map out your assessment moments across the timeline of the unit.

Phase	Assessment Type	Method (The "HOW")	Goal of this Moment
Beginning	Diagnostic	Pre-Questions	To understand the learner's starting point.
Middle	Formative	Formative Assessment	To provide actionable feedback and adapt the learning path.
End	Summative	Portfolios or digital products.	To evaluate the development of intended skills and attitudes.

3. The Reality Check: "WHO" and "EVIDENCE"

Transparency: Are the rubrics and success criteria shared with students to build ownership?



Mini-Unit Assessment Map: **Copernicus Browser**

1. The Foundation: The "WHY" and "WHAT"

Defining the "WHY" (The Goal):

The Improvement: We want to see an increase in **digital competence** (navigating the tool) and **scientific reasoning** (interpreting satellite imagery).

The Success Metric: Success is defined as 80% of students being able to independently identify a specific environmental change (e.g., deforestation or urban sprawl) using time-lapse data.

2. The Roadmap: The "WHEN" and "HOW"

The Timeline:

Phase	Method (The "HOW")	Source Check
Diagnostic (Start)	Poll: "What can satellites see?"	Identifies the learner's starting point and prior knowledge.
Formative (Middle)	Interactive Direct Instruction: Students find their hometown and apply a "False Color" filter.	Provides immediate feedback to adapt the learning path.
Summative (End)	Performance Task: Create a "Satellite Storyboard" explaining a local environmental issue.	Assesses what students can <i>do</i> with what they know (Competence).

3. The Reality Check: "WHO" and "EVIDENCE"

Measuring Success: How do you know it worked?

Three layers of evidence:

Layer A: The Technical Metric (Did they learn the tool?)

- **The Proof:** Use a **Checklist:** Can they apply a False Color Filter? Can they compare two different dates?
- **Logic:** If they can't operate the browser, the "intervention" failed at the mechanical level.

Layer B: The Competence Metric (Did they learn the science?)

- **The Proof:** Use a **Rubric:** Move from "Identifying a forest" to "Explaining why the infrared signature changed over five years".
- **The Goal:** Success is when students move from "knowing that" (the browser exists) to "knowing how and when" (using specific layers to prove a point).

Layer C: The Transfer Check

- **The Proof:** Can students transfer what they have learned to a new topic? From deforestation to melting glaciers? Use a Likert scale: 0 (no transfer) – 1 (near transfer) – 2 (far transfer) learned to a new topic?

Summary Checklist for Success

- **Transparency:** Did you share the rubric with the students so they knew what "success" looked like?
- **Ownership:** Did students reflect on their own process? (e.g., "How did my understanding of this coastline change after seeing the satellite view?")
- **Validity:** Does your assessment actually capture "understanding," or just the ability to follow a tutorial?