Evidence

Kanna Hudson, Title III Researcher
Ann Fillmore, Faculty Assessment Liaison, CTE Programs
Toby Peterson, Faculty Assessment Liaison, Transfer Programs

Clark College
March 15, 2013

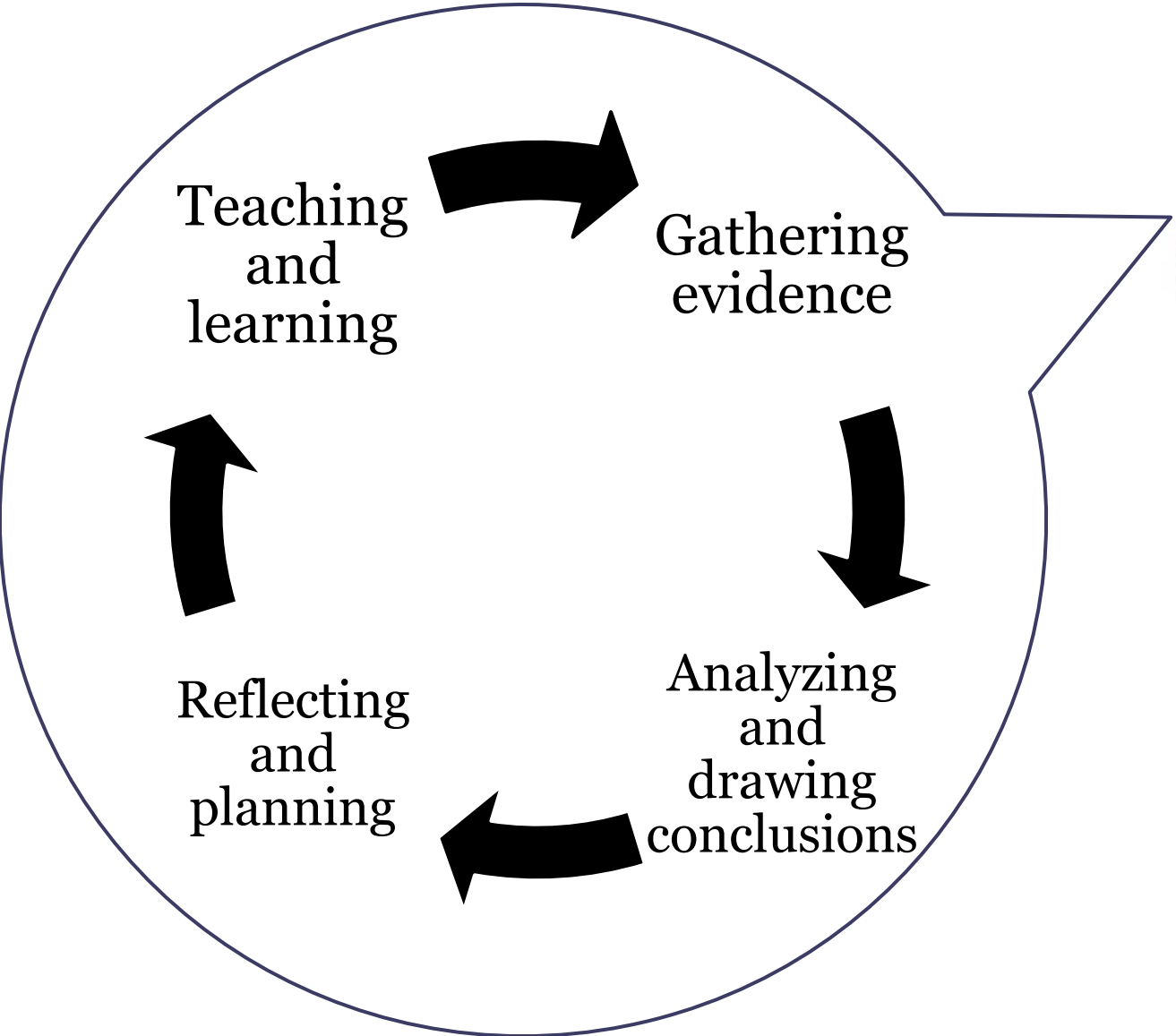
Today's participant outcomes…

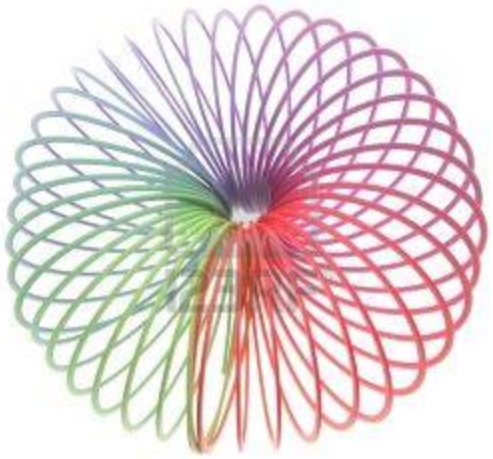
1. Describe the "spiral" of assessment
2. Explain the five considerations of what makes good evidence
3. Describe the 3 stages of Backwards Course Design
4. Design a course using Backwards Course Design

What is evidence?

- Information used to form a conclusion
- Good evidence is:
  1. Relevant
  2. Representative
  3. Actionable
  4. Trustworthy - i.e. reliable, valid, and verifiable
  5. Fits with your available resources
- In assessment, evidence is a means, not an end

Where does evidence fit?





What makes good evidence?

- Is it relevant?
- Is it representative?
- Is it actionable?
- Is it trustworthy? (reliable, valid, verifiable)
- Is it practical?

Adapted in part from Accrediting Commission for Community and Junior Colleges [ACCJC]. (2008). *Characteristics of Evidence. Guide to Evaluating Institutions*. Page 10. Author: Novato, CA.

Is it relevant?

- In other words: does your evidence answer your question?
- …and, is your question relevant to your practice?
- Example question:
  - By the last week of the term, do students in HDEV 102 meet the course learning outcome “Develop an educational plan”?

Is it representative?

- Sample size has been properly selected
- Students are represented
- Timing is appropriate

A quick interlude on sampling

- Typical sampling methods:
  - Census sample (entire population)
  - Random sample (simple or stratified)
  - Convenience sample (generally not recommended)
- Considerations for sampling:
  - Desired level of confidence/accuracy
  - Type and complexity of assignment
  - Number of students enrolled
  - Availability of funding and faculty time

Is it actionable?

- The evidence can be used to draw meaningful, useful conclusions
- The conclusions can be used to make positive, effective adjustments to teaching

Is it trustworthy? Part 1: **Validity**

- Is it measuring what it's supposed to measure?
- First you have to ask, what do you want to measure?
  - Specific content-related knowledge or abilities
  - Future behaviors or outcomes
  - Opportunities for improvement
- For content validity, subject-matter experts should develop the instrument
- Recommend conducting a test-run of the instrument

Is it trustworthy? Part 2: **Reliability**

- Is it repeatable?
- Does it yield the same results even if it is administered in different settings or by different people?

Is it trustworthy? Part 3: **Verifiability**

- Triangulation: observe something from more than one standpoint
- Evidence from multiple assessment strategies support the same conclusion

Practical

- Above all, the practical goal of your project is to ***strengthen teaching and learning*** (not to gather evidence for the sake of evidence)
- Use sound research methods, but consider your time and financial resources as you plan your methods

Summary: What makes good evidence?

- Is it relevant?
- Is it representative?
- Is it actionable?
- Is it trustworthy? (reliable, valid, verifiable)
- Is it practical?

Adapted in part from Accrediting Commission for Community and Junior Colleges [ACCJC]. (2008). *Characteristics of Evidence. Guide to Evaluating Institutions*. Page 10. Novato, CA.

Backwards Course Design

Backwards Course Design

1. Identify desired results
2. Determine acceptable evidence
3. Plan learning experiences

From Grant Wiggins and Jay McTighe's *Understanding by Design*.

Stage 1: Identify Desired Results

Clarity Priorities

- Consider your goals, examine established content standards (outcomes), and review curriculum expectations.

From Grant Wiggins and Jay McTighe's *Understanding by Design*.

Stage 2: Determine Acceptable Evidence

- Think about your course in terms of the collected assessment evidence needed to document and validate that the desired learning has been achieved, not simply as content to be covered or as a series of learning activities.

From Grant Wiggins and Jay McTighe's *Understanding by Design*.

Stage 3: Plan Learning Experiences & Instruction

- The specifics of instruction (content, teaching methods, materials) can be successfully completed *only after* identifying desired results and assessments and considering what they imply.
- Teaching is a means to an end. Having a clear goal helps to focus our planning and guide purposeful action toward the intended results.

From Grant Wiggins and Jay McTighe's *Understanding by Design*.

Typical “Error” in Design

From Grant Wiggins and Jay McTighe’s *Understanding by Design*.

Backwards Course Design

3 Stages of Backwards Design

From Grant Wiggins and Jay McTighe's *Understanding by Design*.

Activity: Designing a Course “Backwards”

- Use the template provided
- Design your course using Backwards Design
- If you did not bring your course outcomes/course plan, use the ones provided

Activity: Stage 1

Stage 1: Identify Desired Results

- What should students know, understand, and be able to do?

From Grant Wiggins and Jay McTighe's *Understanding by Design*.

Activity: Stage 2

Stage 2: Determine Acceptable Evidence

- How will it be determined if students have achieved results or met outcomes?
- What is acceptable evidence of student understanding and proficiency?

From Grant Wiggins and Jay McTighe's *Understanding by Design*.

Activity: Stage 3

Stage 3: Plan Learning Experiences & Instruction

- What must students know (knowledge & skills) to achieve desired results?
- What activities will equip students with the needed knowledge and skills?
- What content needs to be taught & how should it be taught?
- What materials and resources are best suited to accomplish desired results?

From Grant Wiggins and Jay McTighe's *Understanding by Design*.

Tips for Stage 3: Learning Experiences

- Build in opportunities for self-reflection evaluation (student and teacher)
- Address student differences in background knowledge and learning styles
- Accommodate various learning styles by providing multiple options to demonstrate understanding

From Grant Wiggins and Jay McTighe's *Understanding by Design*.

Contact us

- **Ann Fillmore**, Assessment Liaison (CTE)
  - afillmore@clark.edu / 992-2365
- **Toby Peterson**, Assessment Liaison (Transfer)
  - tpeterson@clark.edu / 992-2084
- **Kanna Hudson**, Planning and Effectiveness
  - khudson@clark.edu / 992-2265