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*Using Assessment to  
Identify and Remove  
Barriers to Critical Thinking*

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# Examples of Concerns, Lack of Concern, and of Students' Work

- The website Public Agenda noted in the report "Important, But Not for Me" that "[t]here is **growing consensus among the nation's leaders that unless schools do more** to nurture young Americans with strong skills in math, science and technology [and many of us could add critical thinking and additional disciplines to that list], U.S. leadership in the world economy is at risk. But our new research report ... concludes that Kansas and Missouri **parents and students didn't get the memo.... 70 percent think things 'are fine as they are now.'**"
- What does "fine as they are now" mean? [Examples of Students' Perceptions of Good and Bad Work](#)

[Quotations and Sources on Education and on Learning](#)

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# Hypothesis

- Societies get the behaviors they reward—even if they don't want those behaviors.
  - What seems to be happening: Some of our students have been rewarded with good grades
    - for plagiarizing
    - and for methods that **no** one, no matter how smart or persistent, could make work
    - and these methods create the proverbial vicious circle that keeps these students unable to learn, much less think critically
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# Same Hypothesis; New Solution

## Part 1: Why Change the Approach?

- ❑ Background on Assessments and Values
- ❑ Overview of Reasons for Looking for a New Solution
- ❑ Brief Activity

## Part 2: What Is the New Solution and What Is Available to You?

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# Background: Why Is Assessment the Key to This Solution?

- In a period of great competition in a global economy and what seems to be unmerited confidence in some of our students, quizzes can drive improvement for two reasons.
    - A quiz lets one teacher give many students individual feedback.
    - A quiz is ideal for students who have been previously exposed to content but may **not** have understood it or even remembered it correctly.
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# Background: How Does Assessment Help?

- Assessment can focus learning for students. Questions can show diverse students:
    1. What they know (and don't need to study)
    2. What they don't know (and must study)
    3. What they *think* they know and are wrong (and must unlearn before they can learn—the hardest task of all).
  - It is the 3rd issue that makes assessment valuable in removing barriers to critical thinking when what students *think* they know is wrong. A quiz shows students:
    - By their choices about examples, what they *think* is true
    - By the questions they miss, what the *world* beyond them thinks is true
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# Background: Vulnerability of Values

- From *The Ethics of American Youth*, the **numbers**:
  - 64% “cheated on a test in the past year” (was 60%), with 63% cheating reported by those “from religious schools”
  - 36% “used the Internet to plagiarize an assignment” (was 33%)
- The **self-image**: “Despite these **high levels of dishonesty**, the respondents have a **high self-image** when it comes to ethics. A whopping 93 percent said they were satisfied with their personal ethics and character and 77 percent said that when it comes to doing what is right, I am better than most people I know.”
- The **vulnerability**: Talking about values may not communicate to students who have “a high self-image” combined with “high levels of dishonesty.”

[Source and Complete Quotation](#)

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# Overview of Reasons for Looking for a New Solution

1. From the tally of Assessment results based on students' completed forms (example)
  2. From changes in students' work
    - ❑ A different type of misreading
    - ❑ A different type of useless paraphrasing
  3. From changes in students' statements when caught plagiarizing or misreading
  4. From my pretending to be a freshman student using commonly available instructions about plagiarism, paraphrasing, and evidence – This will be a group exercise.
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# The *Why* of the Exercise

- Some good students were very carefully doing things that were errors, and some weak students were irately sure that they knew about citation and plagiarism. In my search for an explanation, I decided to use information that covered these issues and was designed for students as though I were a student:
    - Who was trying to do the right thing
    - Who was completely new to the content
  - What I found surprised me and may surprise you as well. What I found were several areas where it would be easy for a well-intentioned student to *learn* errors. An accidental grade of an *A* for plagiarized work or for incorrectly cited work—something easy for any teacher to do—would be enough confirmation to make both good students and weak ones certain that they had understood.
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# The 1st Activity

1. Let's look together at an example of a college handbook.
2. Look under your chair for another example.
3. Raise your hand with you've found the 1st words that are plagiarized (used without the required quotation marks).

What's the trick?

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# The Remaining Activities

- Why would a good student think no citation is ever required with a fact?
  - Why would a good student think a comma always belongs before quotations from a source?
  - Why would a good student fail by using paraphrasing as a solution?
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# If the hypothesis is correct, what's the possible solution given the new data?

- Assessment
    - With practical examples as the questions so they reveal what students *think* they are supposed to *do*
    - With as few questions as possible per test
    - With layout—at least for the paper test for on-campus students—used to try to reduce cognitive costs
  - Process
    - Focusing on *their* responsibility and on these being *basic* college requirements
    - Creating, by *their* action, a written record of their results and a conspicuous event around that written record
    - Using a simple path (1 URL)—at least for on-campus students—for what *they* must do to remedy *their* problem (not what instructors do *for* them)
  - Remedies in 1 place (1 URL)
    - Letting them select information for the questions *they* missed—specific explanations and specific methods to prevent *their* problem
    - Sending *them* back to *their* college handbook for explanations
    - Offering optional, additional explanations, including a student's explanation of the rules
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# Details about Assessment

- With practical examples as the questions so they reveal what students *think* they are supposed to *do*
    - Student examples collected over time - [Example](#)
    - Language used - [Example](#)
  - With as few questions as possible per test
    - Based on [data from the tally](#) of Assessment results
    - Use of [versions of the test](#)
  - With layout—at least for the paper test for on-campus students—used to *try* to reduce the student's cognitive costs - [Example](#)
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# Details about Process

- Focusing on *their* responsibility and on these being *basic* college requirements – Examples at each stage of the process
  - Creating, by *their* action, a written record of their results and a conspicuous event around that written record - Example of completed form
  - Using a simple path (1 URL)—at least for on-campus students—for what *they* must do to remedy *their* problem (not what instructors do *for* them)
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# Details about Remedies in 1 Place (1 URL)

- Letting them select information for the questions *they* missed—specific explanations and specific methods to prevent *their* problem
    - [Example of completed form](#)
    - [URL including the form](#)
  - Sending *them* back to *their* college handbook for explanations
  - Offering optional, additional explanations, including a student's explanation of the rules
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# Part 2: What Is Available to You?

1. Your trial or permanent use of what already exists – If you want to do this
    - ❑ Paper copy of the test and its versions
    - ❑ Paper copy of the form students complete
    - ❑ URL of your choice of student remedies
      - With links to explanations and preventions
      - With links to explanations only
  2. Your creation of a customized test, form, and remedy URL for your discipline – If you want to do this
    - ❑ Example of page 1 of the current test
    - ❑ Example of page 1 of the customizable test
  3. FAQ, including updates to the Do It Yourself Guide to the *Follow Your Brain* Method
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