College of Arts & Sciences

Assessment Workshop

April 20, 2004

In other words, NCA and other constituents are looking for:

- Evidence of broad participation by faculty and students in the development of Assessment Student Learning (ASL) programs.
- Evidence that we are clear about expectations for learning outcomes and that we are communicating that to students.
- Evidence that students (as a group) are learning from those learning opportunities.
- Evidence that we are using the results of our ASL activities to improve student learning.

Common Reactions to Assessment Initiatives

- Ignoring it
- Bribing someone else to do it
- Complaining about it
- Losing sleep over it
- Sitting down and writing it

Hatfield, 2004

Big Mistakes in Assessment

- Assuming that it will go away
- Trying to do too much, too soon
- Expecting to get it right the first time
- Not considering implementation issues when creating plans

Hatfield, 2004

Big Mistakes in Assessment

- Borrowing plans and methods without acculturation
- Demanding statistical research standards
- Doing it for accreditation instead of improvement

Hatfield, 2004

Big Mistakes in Assessment

- Confusing institutional effectiveness with student learning
- Making assessment the responsibility of one individual
- Assuming collecting data is Doing Assessment

Hatfield, 2004

Student Learning Outcomes

Student Learning Outcomes

- Student Learning Outcomes
  - The knowledge, skills/abilities, and attributes we want our students to be able to demonstrate.
    - From their learning experiences both curricular and co-curricular activities.

Characteristics of Student Learning Outcomes

They are:

- Learner Centered
- Specific
- Action oriented
- Cognitively Appropriate

Hatfield, 2004

Student Learning Outcomes

Basic Format:

- Students will be able to
  <<action verb>> <<something>>

Example:

- Students will be able to apply research methodologies to examine issues within the discipline.

Hatfield, 2004

KNOWLEDGE

Cite
Count
Define
Draw
Identify
List
Name
Point
Quote
Read
Recite
Record
Repeat
Select
State
Tabulate
Tell
Trace
Underline

COMPREHENSION

Associate
Classify
Compare
Compute
Contrast
Differentiate
Discuss
Distinguish
Estimate
Explain
Express
Extrapolate
Interpolate
Locate
Predict
Report
Restate
Review
Tell
Translate

APPLICATION

Apply
Calculate
Classify
Demonstrate
Determine
Dramatize
Employ
Examine
Illustrate
Interpret
Locate
Operate
Order
Practice
Report
Restructure
Schedule
Sketch
Solve
Translate
Use
Write

ANALYSIS

Analyze
Appraise
Calculate
Categorize
Classify
Compare
Debate
Diagram
Differentiate
Distinguish
Examine
Experiment
Identify
Inspect
Inventory
Question
Separate
Summarize
Test

SYNTHESIS

Arrange
Assemble
Collect
Compose
Construct
Create
Design
Formulate
Integrate
Manage
Organize
Plan
Prepare
Prescribe
Produce
Propose
Specify
Synthesize
Write

EVALUATION

Appraise
Assess
Choose
Compare
Criticize
Determine
Estimate
Evaluate
Grade
Judge
Measure
Rank
Rate
Recommend
Revise
Score
Select
Standardize
Test
Validate

Hatfield, 2004 (adapted from Bloom's Taxonomy)

Example #1

Gather factual information and apply it to a given problem in a manner that is relevant, clear, comprehensive, and conscious of possible bias in the information selected

BETTER: Students will be able to apply factual information to a problem.

COMPONENTS:

- Relevance
- Clarity
- Comprehensiveness
- Aware of Bias

Hatfield, 2004

Hands-on Exercise #2

Students will be able to:

Imagine and seek out a variety of possible goals, assumptions, interpretations, or perspectives which can give alternative meanings or solutions to given situations or problems.

Hatfield, 2004

Worksheet for Exercise #2

- Better (rephrasing):

Key Components:

Possible Answer

BETTER: Students will be able to provide alternative solutions to situations or problems.

COMPONENTS:

- Assumptions
- Perspectives
- Interpretations
- Analysis of comparative advantage

Hatfield, 2004

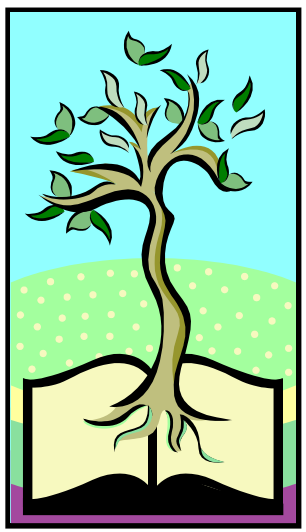
Lessons Learned/ Learning Outcome Rules

- Use **one** cognitive level
- Focus on outcomes, not processes (focus on **what**, not on **how**)
- List **single** accomplishments
- Do not indicate level of quality (effective)

Hatfield, 2004

Accreditation reviewers praise institutions' assessment programs that "have clearly linked their assessment activities to their own statements of purpose and goals, and to their objectives for student learning, and in which all of these are reflective of relevant portions of the Institution's Mission and Goals statement and its published educational purposes." (Lopez, 1996.)

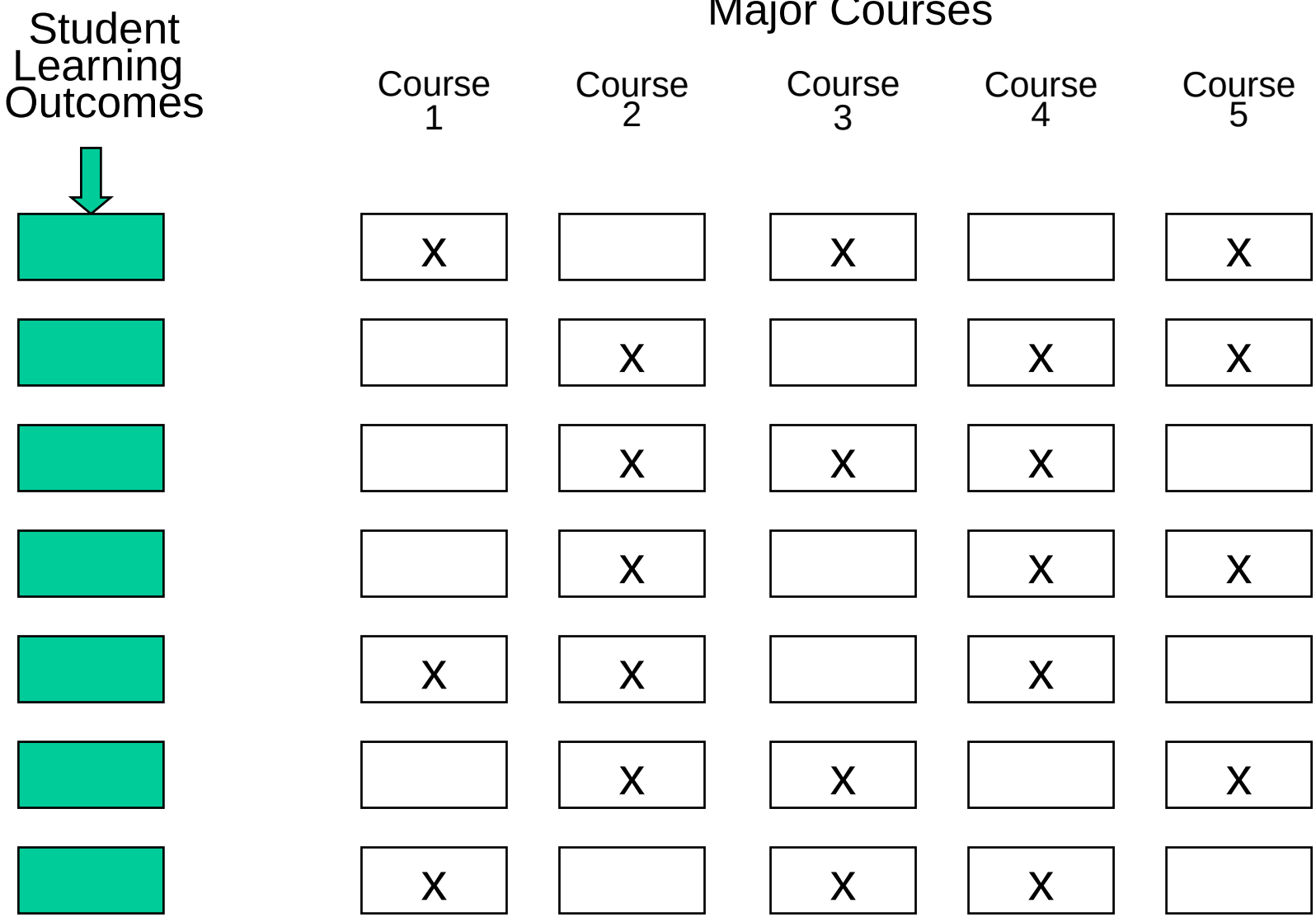
- **Identify the Assessment Points in the Curriculum**



- **Where do you want to target your assessment efforts?**

Hatfield, 2004

Example 1

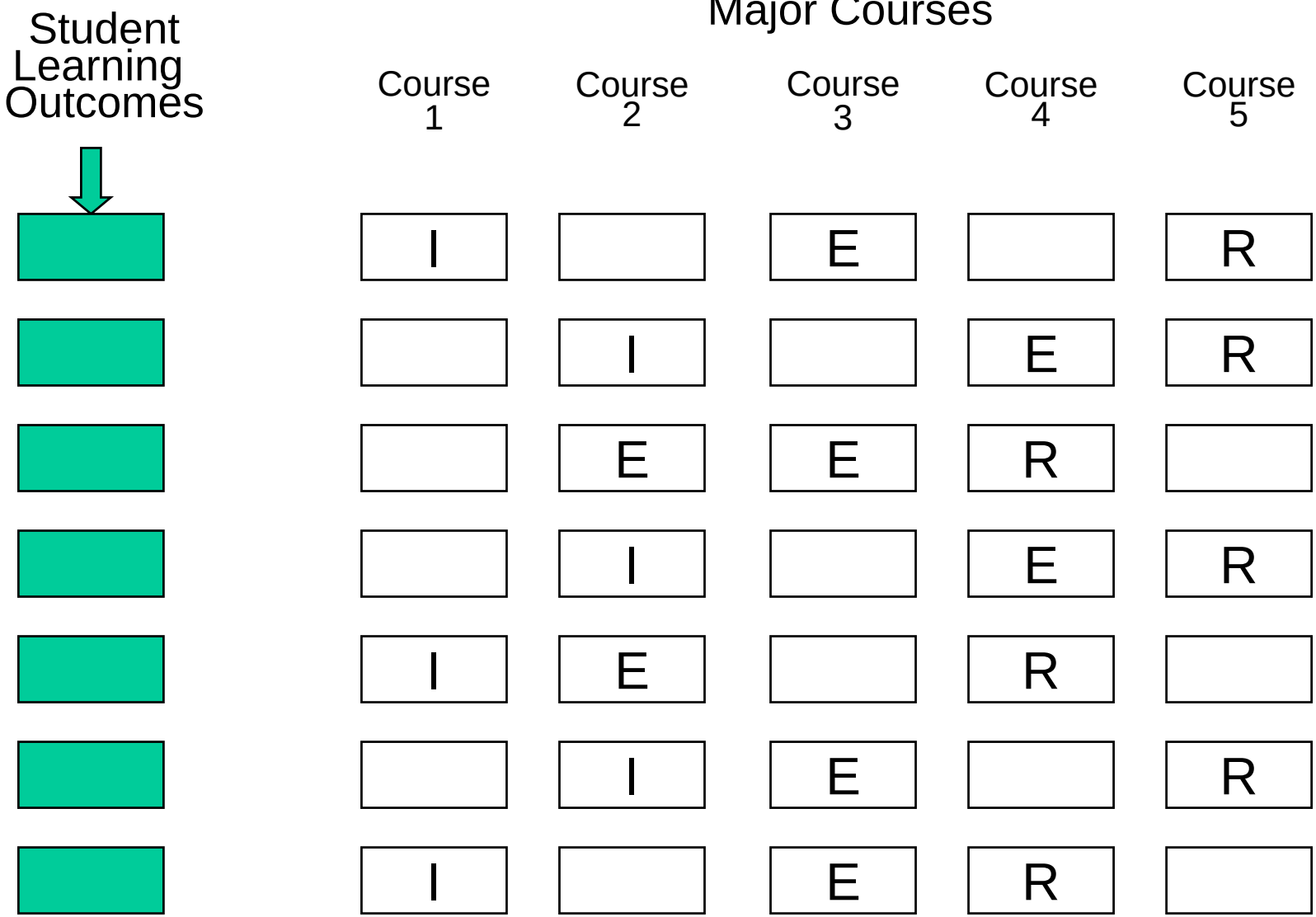


Legend: x = outcome addressed in the course

We can identify where in the curriculum the student learning outcomes are developed.

Adapted from Hatfield, 2004

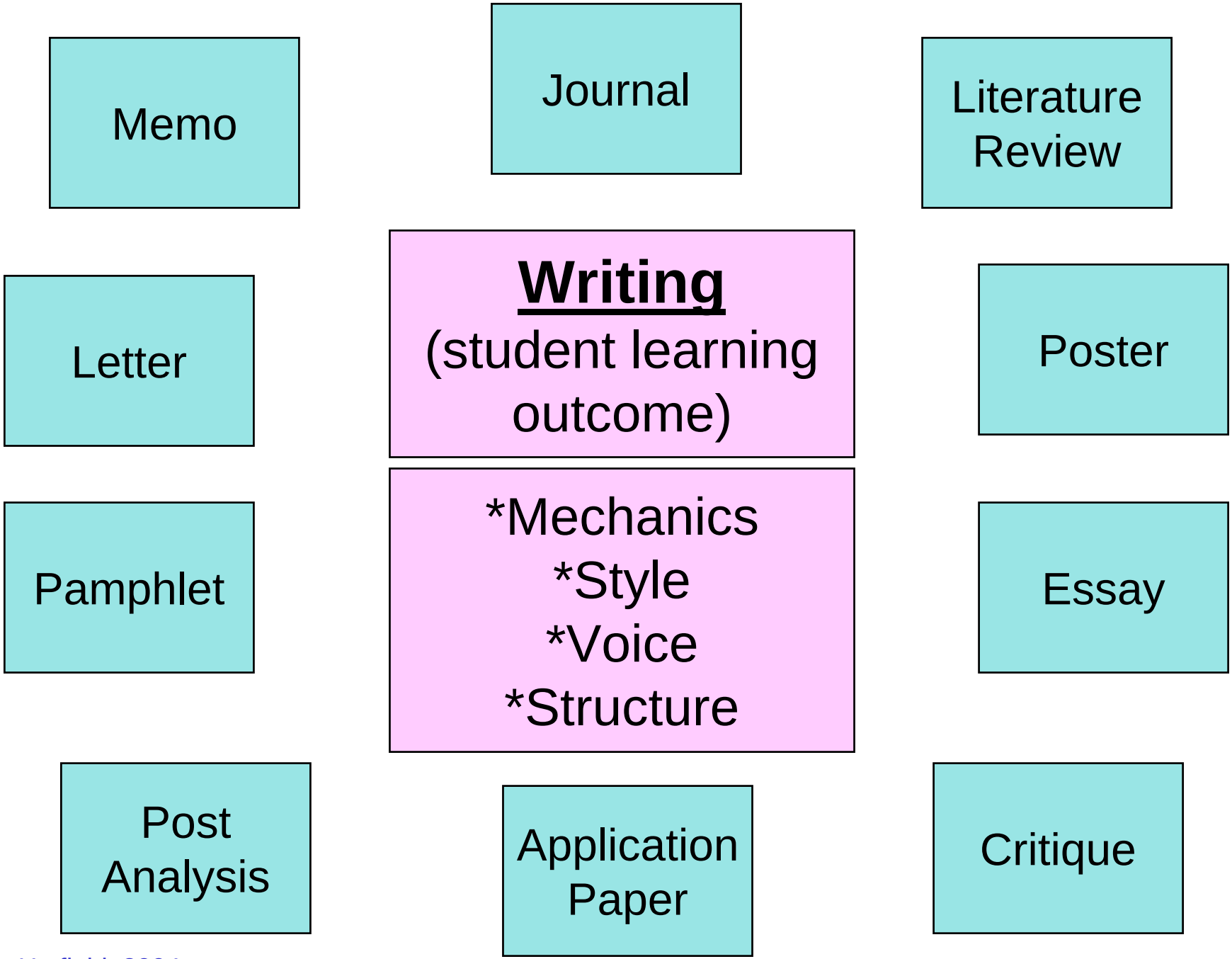
Example 2



Legend: I - Introduce
E - Emphasis
R - Reinforced

We can identify where in the curriculum the student learning outcomes are introduced, emphasized or reinforced.

Adapted from Hatfield, 2004



Hatfield, 2004

Questions?

Materials for Module #2

Stages

1. Developing Assessment Plans
2. Developing Implementation Strategies
3. Collecting Data
4. Implementing Change as the result of assessment

Hatfield, 2004

Understanding Assessment

- **Effective assessments use multiple measures and data sources**

Hatfield, 2004

Understanding Assessment

- **Measure what you value then value what you measure**

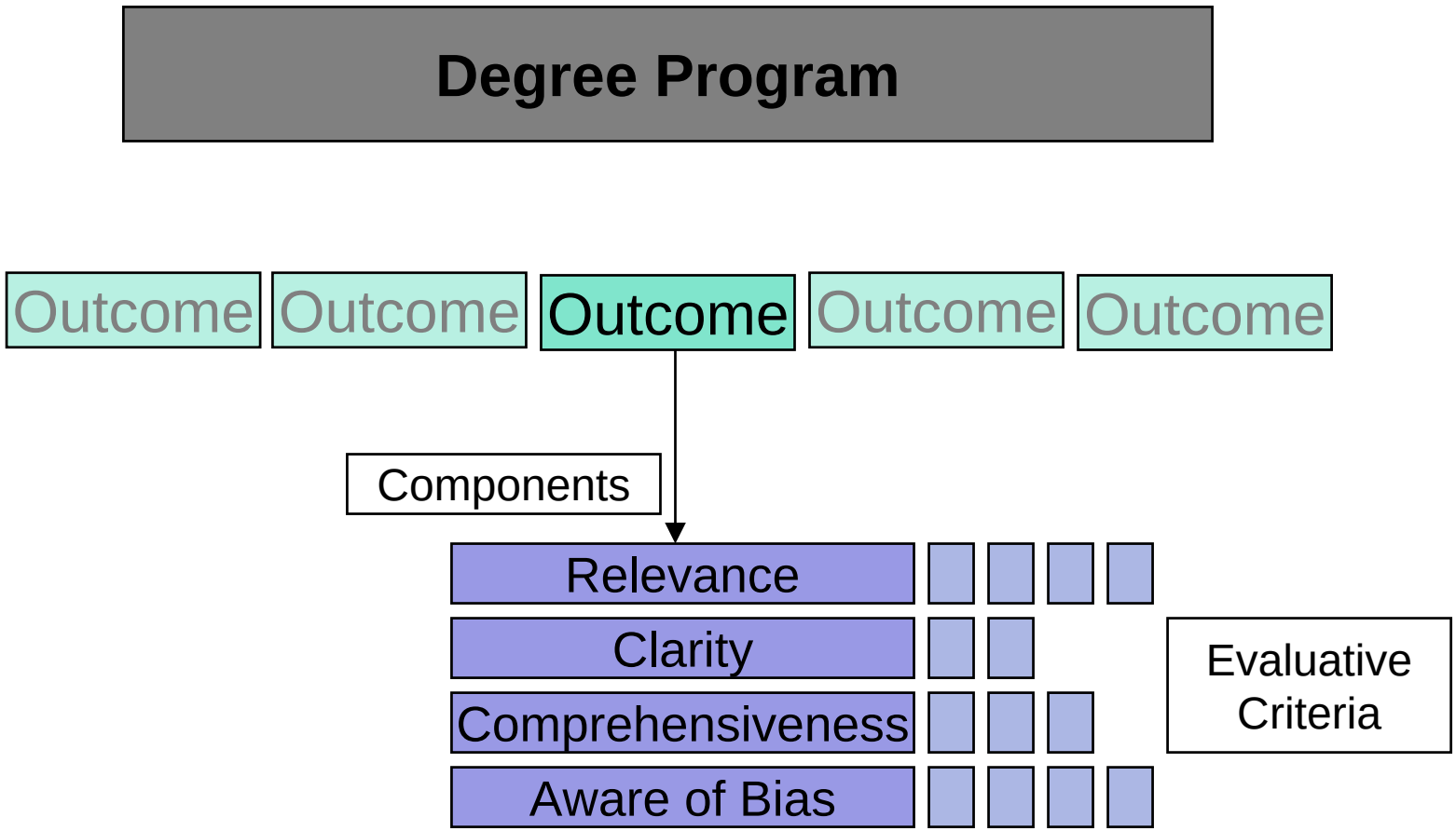
Hatfield, 2004

Language of Assessment

- A. Specific accomplishments to be achieved
  OUTCOMES
- B. The key elements related to the
  accomplishment COMPONENTS
- C. Data indicating degree of achievement
  EVALUATIVE CRITERIA
- D. The objects of analysis: OBJECTS
  (e.g., assignment, performances, speeches, etc.)

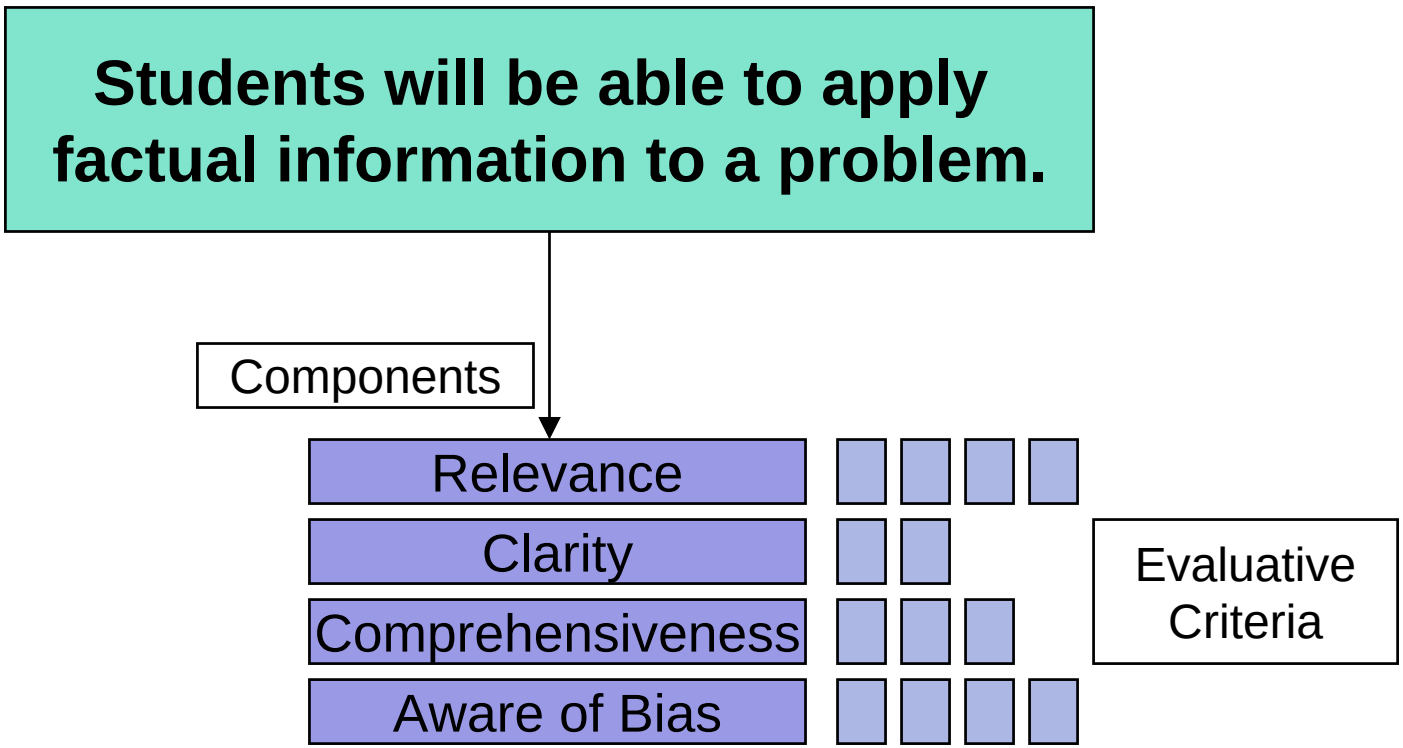
Hatfield, 2004

Components



Hatfield, 2004

Example



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Degree Program

Write (Written Communication)	Relate (Interpersonal Communication)	Speak (Verbal Communication)	Listen (Listening Skills)	Participate (Engaged & active Participation)
Component	Component	Component	Component	Component
Component	Component	Component	Component	Component
Component	Component		Component	Component
Component				

Adapted from Hatfield, 2004

Examples of Components

- Organization, Structure
- Level of understanding
- Complexity of ideas
- Support for ideas
- Coherence of presentation
- Knowledge of material
- Awareness of audience
- Mechanics: Writing, Language, Style
- Problem Identification

Please refer to handout for more examples

Hatfield, 2004

Hands-on Exercise #1

- Select one of your degree program student learning outcomes and identify its key components.
  - Utilize the list of example "components" (in your handout).

- Feel free to work on a second learning outcome, if time permits.

Degree Program

Student Learning Outcomes of the Degree Program

Write (Written Communication)	**Relate** (Interpersonal Communication)	**Speech** (Verbal Communication)	**Listen** (Listening Skills)	**Participate** (Engaged & active Participation)
Component	Component	Component	Component	Component
Component	Component	Component	Component	Component
Component	Component		Component	Component
Component				

Select the learning outcomes you plan to address, *then* identify the key components for those outcomes. You do not need to identify all components at the same time.

Adapted from Hatfield, 2004

Evaluative Criteria

- Once the components of the student learning outcomes have been identified, the next step is to **identify the evaluative criteria.**

Adapted from Hatfield, 2004

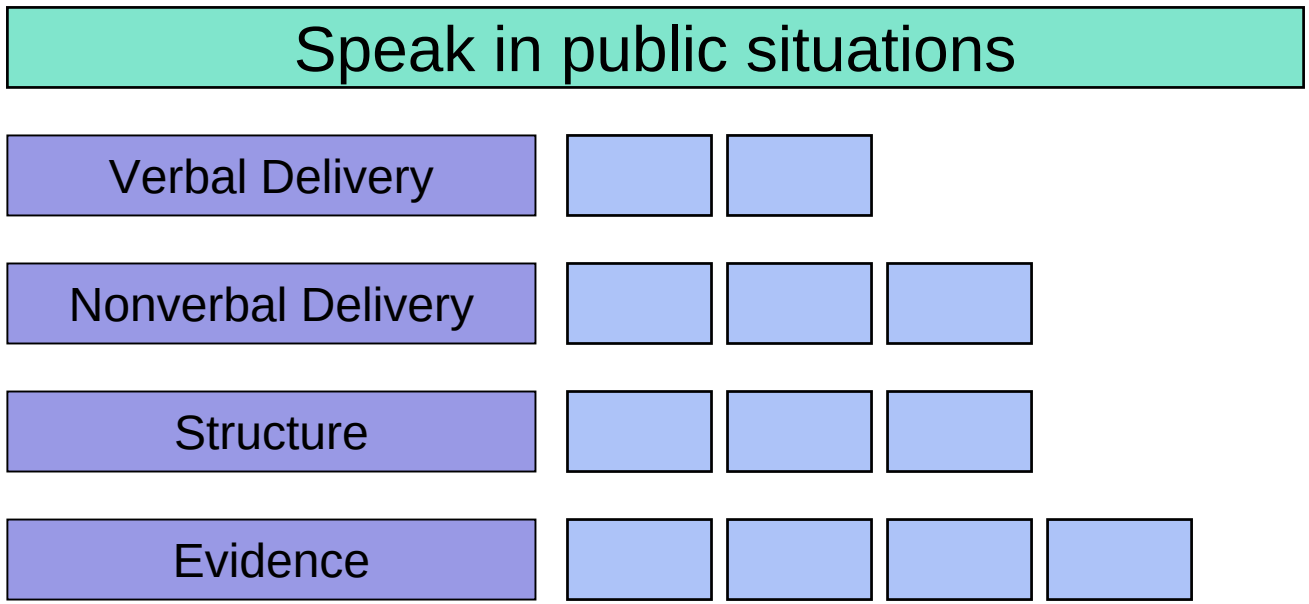
Evaluative Criteria

- Are the scale items or descriptions for assessing each of the components.

- Two to Five-point scales for each component are typical. Each department will determine the appropriate performance range for their programs.

Adapted from Hatfield, 2004

Example Layout



Hatfield, 2004

Speak in public situations

Verbal Delivery	1 Several	2 Some	3 Few fluency problems		
Nonverbal Delivery	1 Distracting	2	3	4	5 Enhancing
Structure	1 Disconnected	2 Connected	3 Integrated		
Evidence	Doesn't support	Sometimes	Always supports		

Evaluative criteria may be numerical, descriptive, or both.

Adapted from Hatfield, 2004

Example Scales for Evaluative Criteria

- Missing - Included
- Inappropriate - Appropriate
- Incomplete - Complete
- Incorrect - Partially Correct - Correct
- Vague - Emergent - Clear
- Marginal - Acceptable - Exemplary
- Distracting - Neutral - Enhancing
- Usual - Unexpected - Imaginative
- Ordinary - Interesting - Challenging

Please refer to handout for more examples

Hatfield, 2004

Example Scales for Evaluative Criteria

- Simple - More fully developed - Complex
- Reports - Interprets - Analyzes
- Basic - Expected - Advanced
- Few - Some - Several - Many
- Isolated - Related - Connected - Integrated
- Less than satisfactory - satisfactory - more than satisfactory - outstanding
- Never - Infrequently - Usually - Always

Hatfield, 2004

Hands-on Exercise #2

Evaluative Criteria

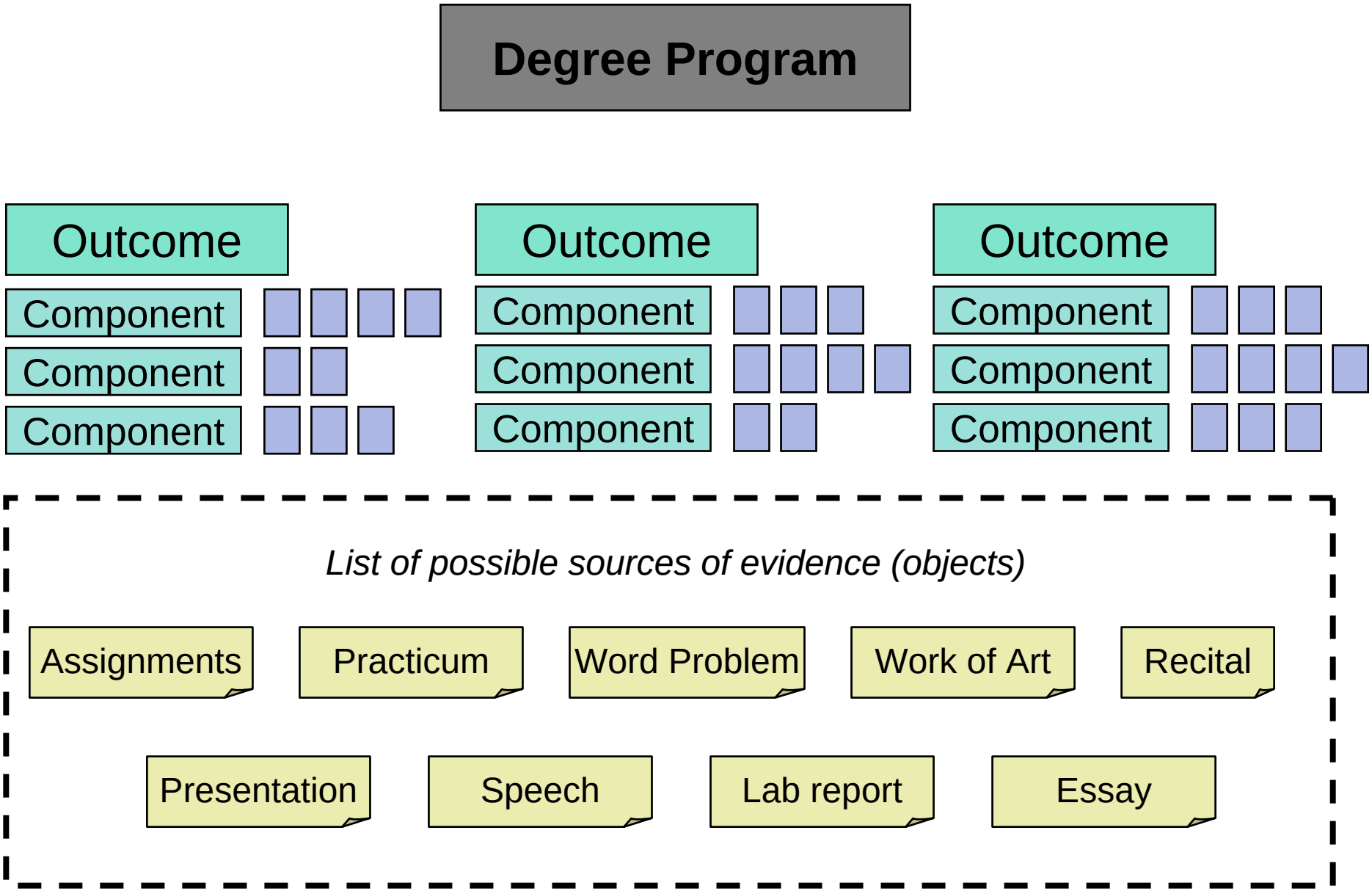
- Once the components of the student learning outcome(s) have been identified, then identify at least **two** evaluative criteria.

- **Characteristics or criteria of the effective, accurate, successful, or levels that demonstrated what was learned.**

Learning Objects

- **After identifying key components and evaluative criteria, the next step is to identify the learning objects.**
  - **Learning objects are the assignments, activities, and performances that promote achievement of each learning outcome.**

Hatfield, 2004



Hatfield, 2004

Learning Objects

- There are multiple objects (e.g., assignments, competitions, licensing exams) that can demonstrate student learning.

- Utilize the forms of evidence that already exist in your programs (curriculum) or modify what you are currently doing in your curriculum.

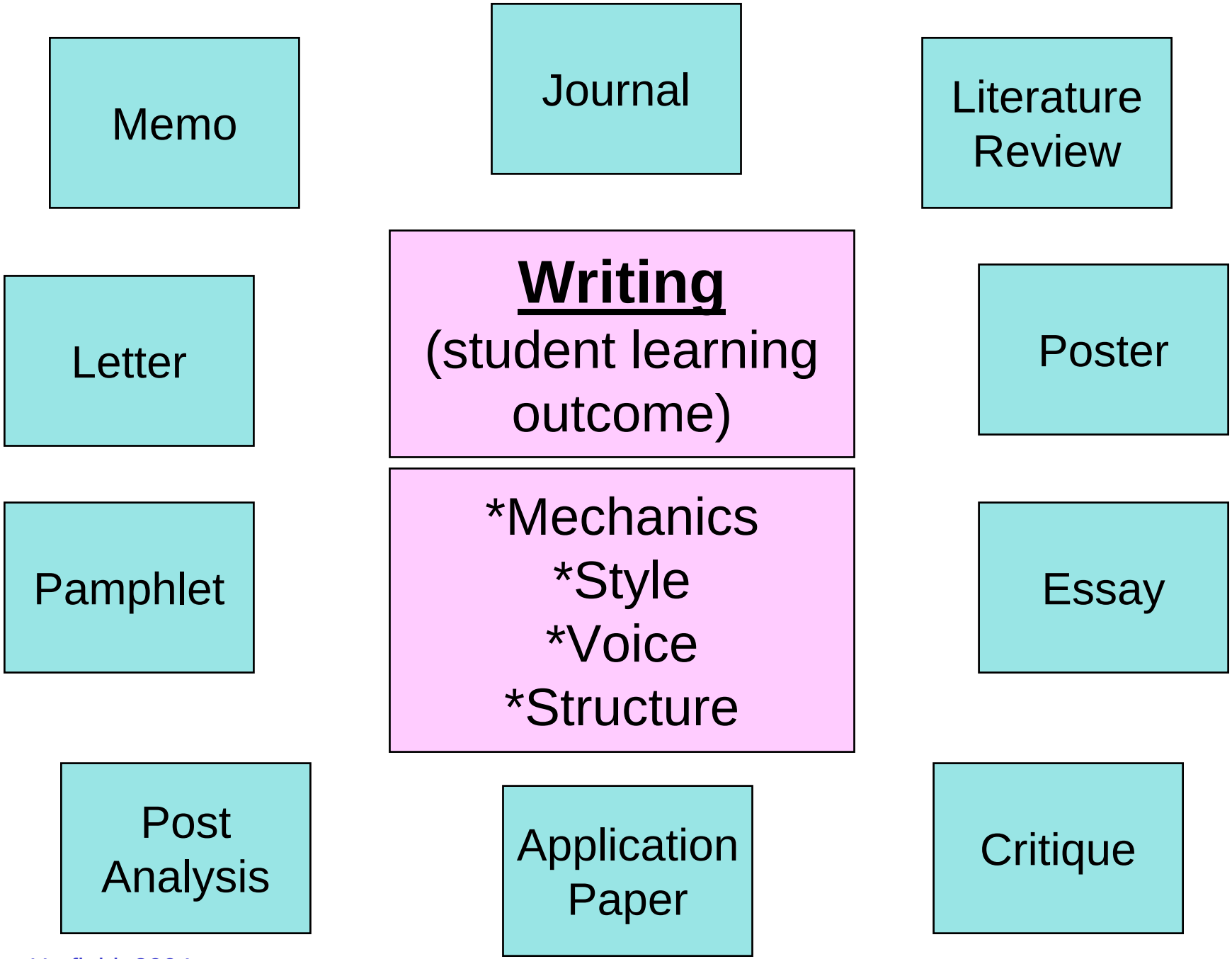
Please refer to handout for examples.

Adapted from Hatfield, 2004

Learning Objects

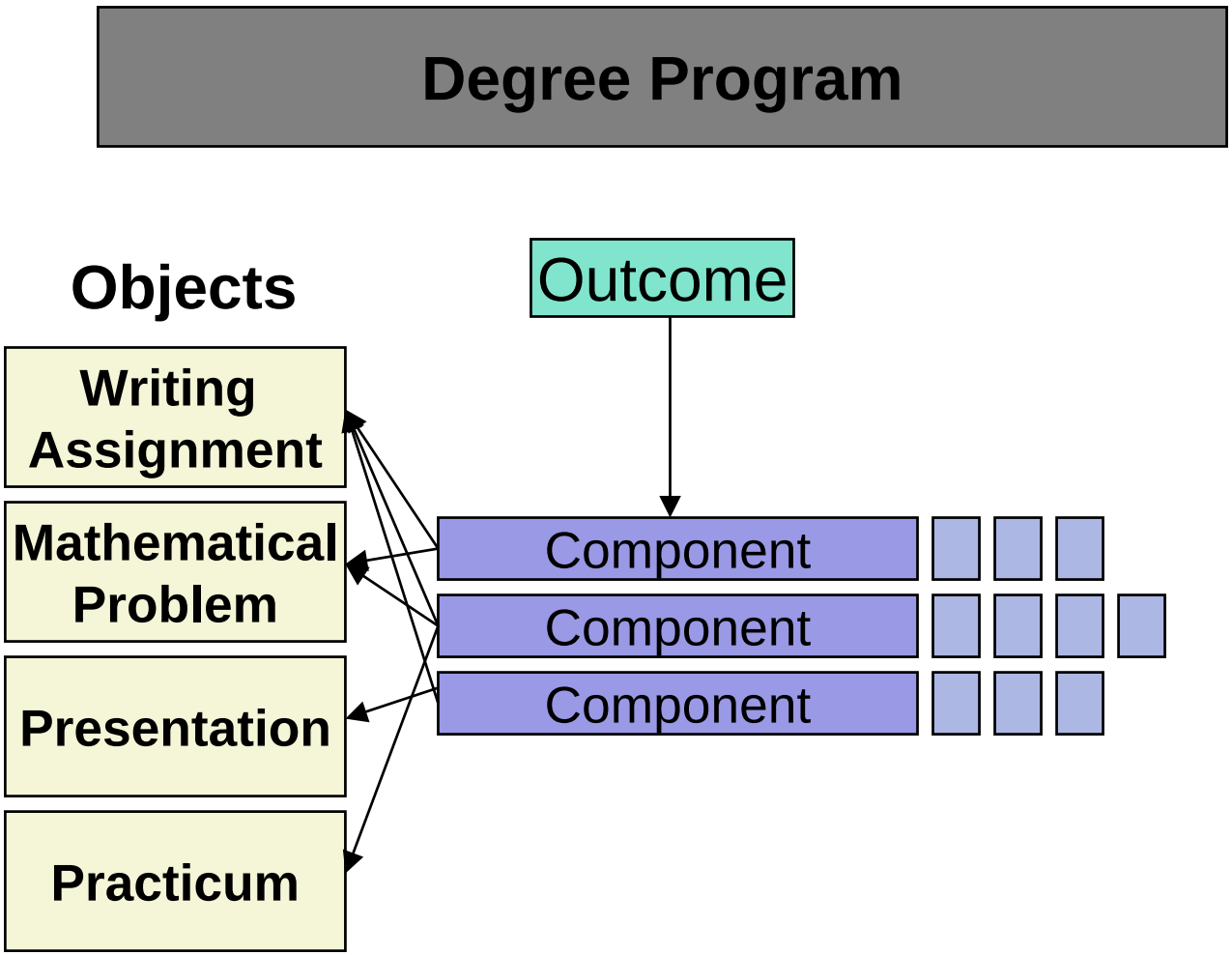
- Abstract, advertisement, annotated bibliography, biography, briefing, brochure, budget, care plan, case analysis, chart, cognitive map, court brief, debate, definition, description, diagram, dialogue, diary, essay, executive summary, flow chart, group discussion, instruction manual, inventory, lab notes, letter to the editor, matching test, mathematical problem, memo, micro theme, multiple choice test, narrative, news story, notes, oral report, outline, performance review, plan, precis, presentation, process analysis, proposal, regulation, research proposal, review of literature, taxonomy, technical report, term paper, thesis, word problem, work of art. (Walvoord / Anderson 1998).

Hatfield, 2004



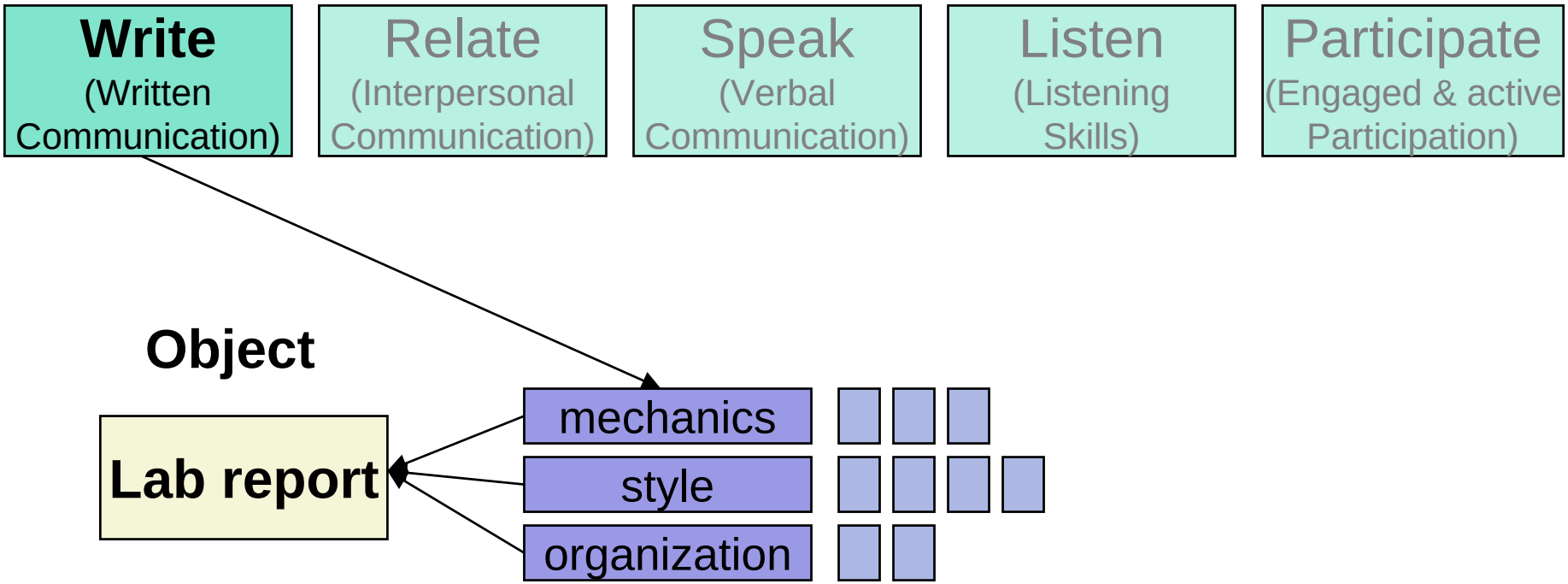
Hatfield, 2004

Learning Objects



Adapted from Hatfield, 2004

Example

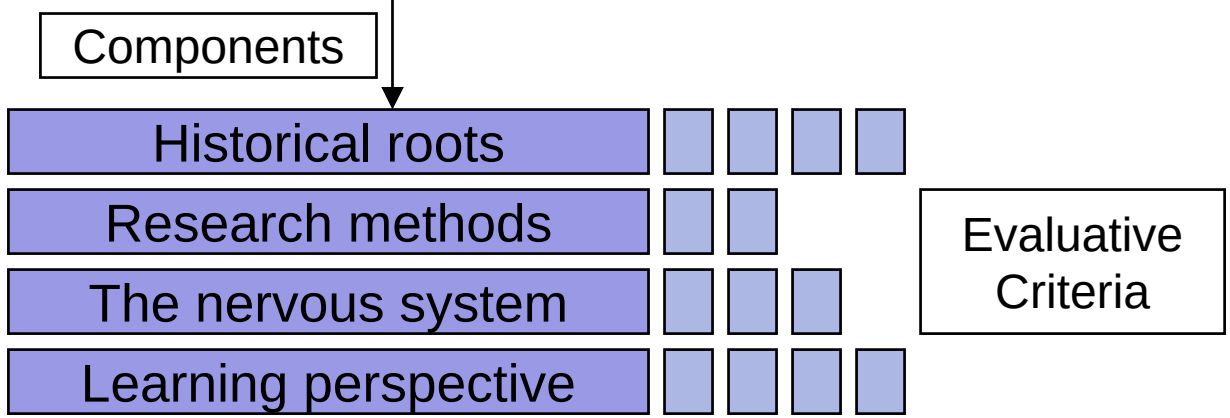


Adapted from Hatfield, 2004

Example

Psychology
(at another institution)

Students will be able to demonstrate their knowledge of the different areas in psychology.



Adapted from Hatfield, 2004

Example

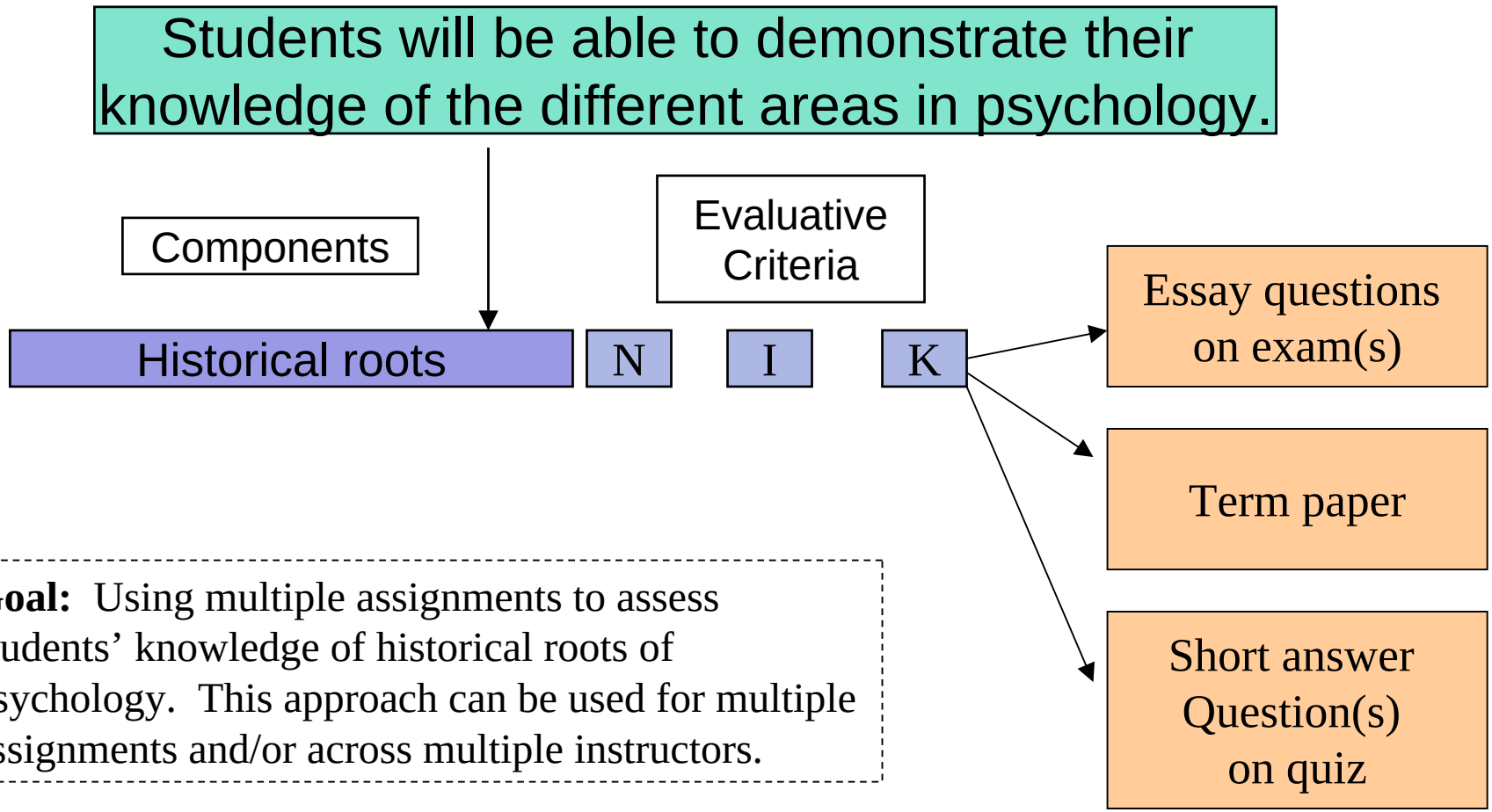
Degree Program

Students will be able to demonstrate their knowledge of the different areas in psychology.

Components	Evaluative Criteria		
Historical roots	Novice	Intermediate	Knowledgeable
Research methods	Basics	Intermediate	Advanced
The nervous system	Novice	Intermediate	Advanced
Learning perspective	Novice	Intermediate	Knowledgeable

Adapted from Hatfield, 2004

Example



Goal: Using multiple assignments to assess students' knowledge of historical roots of psychology. This approach can be used for multiple assignments and/or across multiple instructors.

Take-home Exercise #1

Learning Objects

- Once the evaluative criteria of the components have been identified, then identify at least **two** learning objects.

Examples of Learning Objects

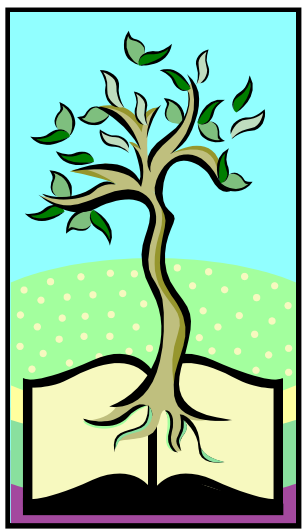
Write (Written Communication)	Relate (Interpersonal Communication)	**Speak** (Verbal Communication)	Listen (Listening Skills)	**Participate** (Engaged & active Participation)
Lab report		**Speech**		**Group Presentation**
Essay		**Group Presentation**		**Debate**
		Debate		**Practicum**

Learning Objects

- It is possible to use course or instructor-specific Objects to assess an outcome, but the components of the Object being assessed must remain constant.

  - NOTE: Data from multiple courses and instructors will need to be aggregated, interpreted, reported, and utilized in decision making. Thus, it is recommended that a set of components be assessed across multiple courses, assignments, and/ or instructors.

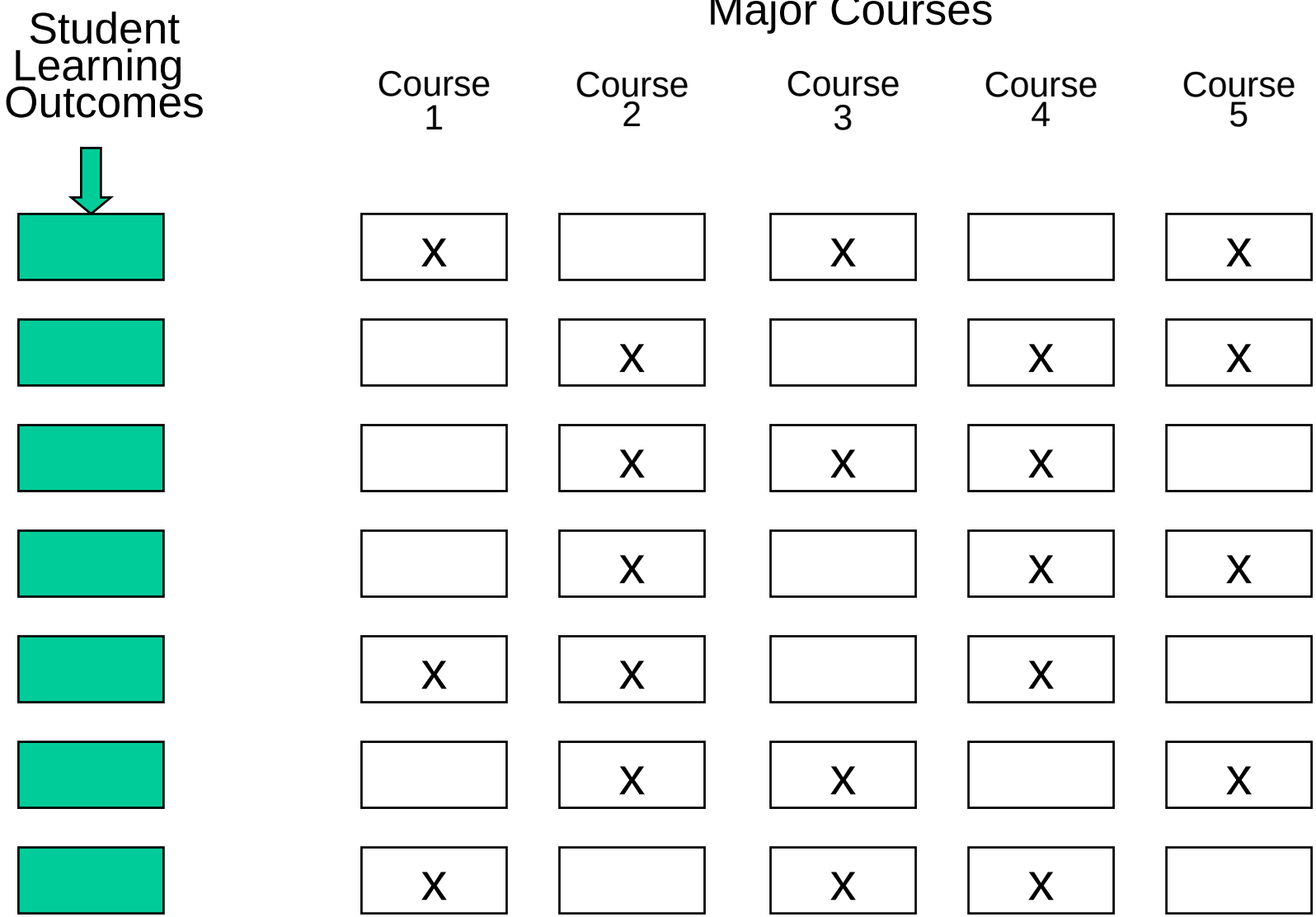
- **Identify the Assessment Points in the Curriculum**



- **Where do you want to target your assessment efforts?**

Hatfield, 2004

Example 1



Legend: x = outcome addressed in the course

We can identify where in the curriculum the student learning outcomes are developed.

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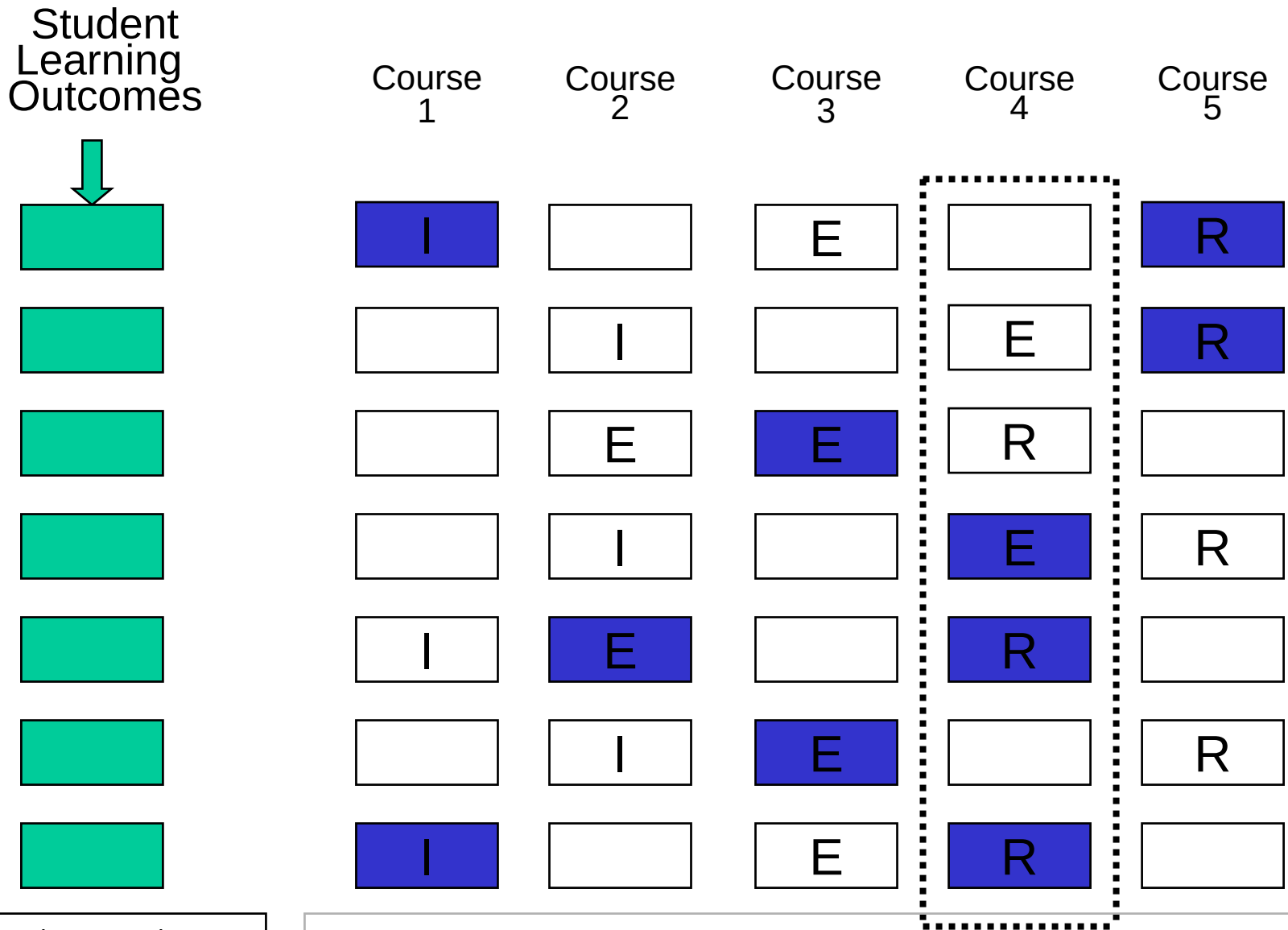


Adapted from Hatfield, 2004

Take-home Exercise #2

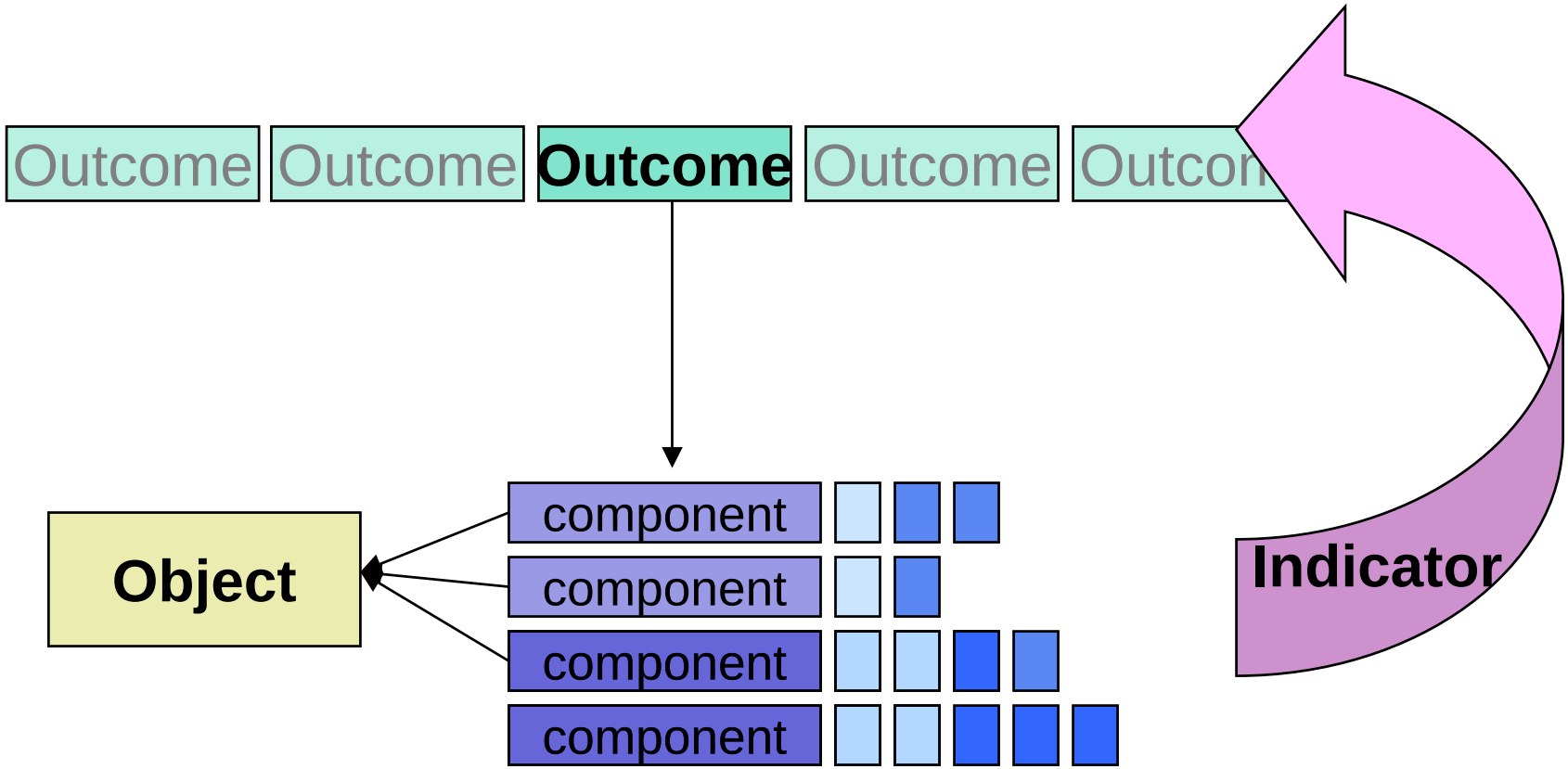
Identifying Assessment Points

- Refer to at least **two** student learning outcomes in your degree program.
- Identify where in the curriculum these outcomes are developed.
- Recommend where in the curriculum these outcomes can be assessed.

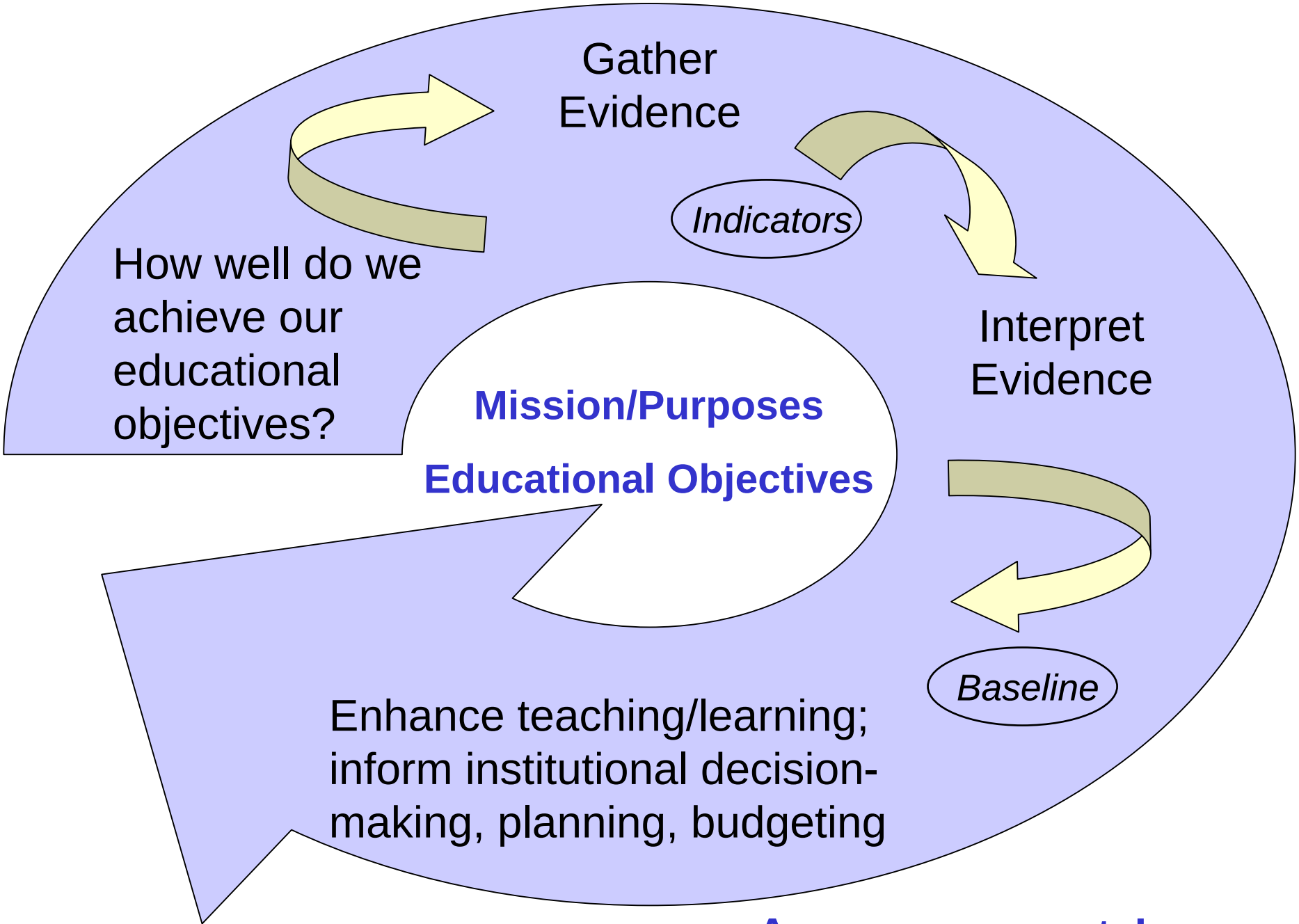
Developing an Assessment Plan

- **Identify Assessment Measures (part of Workshop 3)**

Assessment Measures



Hatfield, 2004



Source: Peggy Maki, *2002 AAHE Assessment Forum*; NCA Higher Education Learning Commission

Assessment Loop

Questions?