How IDEA Teaching Methods Measure Best Practice Teaching Philosophies

Students rate their observation of a number of Teaching Methods in IDEA instruments. These Teaching Methods are conceptually related to the major, best practice philosophies of college teaching today.

Active Learning

IDEA SRI Teaching Methods item(s)

- Found ways to help students answer their own questions
- Encouraged students to reflect on and evaluate what they have learned
- Encouraged students to use multiple resources (e.g., Internet, library holdings, outside experts) to improve understanding
- Created opportunities for students to apply course content outside the classroom
- Involved students in "hands-on" projects such as research, case studies, or real-life activities
- Gave projects, tests, or assignments that required original or creative thinking

Learner Centered Teaching

IDEA SRI Teaching Methods item(s)

- Found ways to help students answer their own questions
- Encouraged students to reflect on and evaluate what they have learned
- Encouraged students to use multiple resources (e.g., Internet, library holdings, outside experts) to improve understanding
- Created opportunities for students to apply course content outside the classroom
- Involved students in "hands-on" projects such as research, case studies, or real-life activities
- Inspired students to set and achieve goals which really challenged them
- Gave projects, tests, or assignments that required original or creative thinking

Collaborative/Cooperative Learning

IDEA SRI Teaching Methods item(s)

- Helped students to interpret subject matter from diverse perspectives
- Formed teams or discussion groups to facilitate learning
- Asked students to share ideas and experiences with others whose backgrounds and viewpoints differ from their own
- Asked students to help each other understand ideas or concepts

Promoting Critical thinking

IDEA SRI Teaching Methods item(s)

- Found ways to help students answer their own questions
- Helped students to interpret subject matter from diverse perspectives
- Encouraged students to reflect on and evaluate what they have learned
- Stimulated students to intellectual effort beyond that required by most courses
- Created opportunities for students to apply course content outside the classroom
- Involved students in “hands-on” projects such as research, case studies, or real-life activities
- Gave projects, tests, or assignments that required original or creative thinking

Seven Principles for Good Practice in Undergraduate Education	IDEA SRI Teaching Methods item(s)
1. Encourages contact between students and faculty	• Encouraged student-faculty interaction outside of class
2. Develops reciprocity and cooperation among students	• Helped students to interpret subject matter from diverse perspectives • Formed teams or discussion groups to facilitate learning • Asked students to share ideas and experiences with others whose backgrounds and viewpoints differ from their own • Asked students to help each other understand ideas or concepts
3. Encourages active learning	• Found ways to help students answer their own questions • Encouraged students to reflect on and evaluate what they have learned • Encouraged students to use multiple resources (e.g., Internet, library holdings, outside experts) to improve understanding • Created opportunities for students to apply course content outside the classroom • Involved students in "hands-on" projects such as research, case studies, or real-life activities • Gave projects, tests, or assignments that required original or creative thinking
4. Gives prompt feedback	• Provided meaningful feedback on students' academic performance

5. Emphasizes time on task	*See note below
6. Communicates high expectations	• Inspired students to set and achieve goals which really challenged them
7. Respects diverse talents and ways of learning	• Found ways to help students answer their own questions • Encouraged students to reflect on and evaluate what they have learned • Encouraged students to use multiple resources (e.g., Internet, library holdings, outside experts) to improve understanding

Chickering, A. W. and Gamson, Z, 1987. Seven principles of good practice in undergraduate education. American Association for Higher Education Bulletin, 39, 3-7.

*In older versions of Diagnostic Feedback, the item, “Scheduled course work (class activities, tests, projects) in ways which encouraged students to stay up to date in their work,” was included. This item was dropped in current instrument because it was not an important contributor to student progress on any of the 13 learning objectives. Institutions or individual faculty members may choose to include it as a custom question if they wish to collect data for this concept.

Brain-based Learning Principles	IDEA SRI Teaching Methods item(s)
Learning is about making connections	• Made it clear how each topic fit into the course • Helped students to interpret subject matter from diverse perspectives (e.g., different cultures, religions, genders, political views) • Related course material to real life situations • Asked students to share ideas and experiences with others whose backgrounds and viewpoints differ from their own
Frequent review increases retrieval paths	• Encouraged students to reflect on and evaluate what they have learned • Provided meaningful feedback on students' academic performance
Principle of repetition: "Use it or lose it"	• Encouraged students to use multiple resources (e.g., Internet, library holdings, outside experts) to improve understanding • Created opportunities for students to apply course content outside the classroom • Involved students in hands-on projects such as research, case studies, or real life activities • Asked students to help each other understand ideas or concepts

Positive emotional climate stimulates the brain	• Helped students to interpret subject matter from diverse perspectives (e.g., different cultures, religions, genders, political views) • Inspired students to set and achieve goals which really challenged them • Asked students to share ideas and experiences with others whose backgrounds and viewpoints differ from their own • Asked students to help each other understand ideas or concepts • Encouraged student-faculty interaction outside of class
Active, real-world learning experiences activate multiple brain systems	• Created opportunities for students to apply course content outside the classroom • Involved students in hands-on projects such as research, case studies, or real life activities
Physical movements may help thinking and remembering	• Involved students in hands-on projects such as research, case studies, or real life activities
Lack of clarity can create stress, which inhibits learning	• Explained course material clearly and concisely • Made it clear how each topic fits into the course
Making personal connection with students can create positive emotions, which enhance learning	• Encouraged student-faculty interaction outside of class (e.g., office visits, phone calls, email)

The brain searches for meaning in the sea of sensations it encounters	• Made it clear how each topic fit into the course • Demonstrated the importance and significance of the subject matter • Helped students to interpret subject matter from diverse perspectives (e.g., different cultures, religions, genders, political views)
Information is more memorable when it is well organized	• Made it clear how each topic fit into the course • Demonstrated the importance and significance of the subject matter • Explained course material clearly and concisely
The brain needs to perceive the "big picture."	• Made it clear how each topic fit into the course • Identifying relevant learning objectives can help create the "big picture."
Neurons that fire together wire together	• Introduced stimulating ideas about the subject • Involved students in hands-on projects such as research, case studies, or real life activities

Berninger, V.W., & Richards, T.L. (2002). *Brain literacy for educators and psychologists*. San Diego: Academic Press.
Educational Psychology Review (1998), vol. 10, nos. 3 and 4.

Hardiman, M.M. (2003). *Connecting brain research with effective teaching.* Lanham, MD: Scarecrow Education.

Restak, R. (2003). *The new brain.* Rodale.