

Teaching and Learning at NWIC

The Connection Between
Active Learning
and
Student Success

How People Learn

People *construct* their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences. When we encounter something new, we have to reconcile it with our previous ideas and experience, maybe changing what we believe, or maybe discarding the new information as irrelevant. In any case, we are active creators of our own knowledge. To do this, we must ask questions, explore, and assess what we know.

Gaining Knowledge through Instruction - Instructivism

Construction of Knowledge – Constructivism

Instructionism refers to educational practices that are teacher-focused, skill-based, product-oriented, non-interactive, and highly prescribed. The focus is on the process of teaching. Examples include lecture and worksheets and multiple choice exams.

Constructivism refers to educational practices that are student-focused, meaning-based, process-oriented, interactive, and responsive to student interest. The focus is on the process of learning. Examples include case studies, real world projects, cooperative activities.

The Constructivist Learning Environment

- Teachers facilitate the learning environment rather than teach so that students can formulate and test their own ideas, draw conclusions and inferences, and convey their knowledge in a collaborative learning environment.
- Teacher must understand students' preexisting conceptions and guide the activities to address this knowledge and then build on the knowledge they already have.
- Teachers encourage students to assess how the activity is helping them gain understanding. By questioning themselves and their strategies, students become expert learners as they learn how to learn. The students then have the tools necessary to become life-long learners.

In the constructivist learning environment, Learning is

- ✓ Constructed
- ✓ Active
- ✓ Reflective
- ✓ Collaborative
- ✓ Inquiry- or Problem-Based
- ✓ Evolving

Active vs. Passive Learning

How People Learn

After 2 Weeks

We tend to remember ...

10% of what we read

Reading

20% of what we hear

Hearing Words

30% of what we see

Looking at Pictures

Watching a Movie/DVD

Looking at an Exhibit

**50% of what we see
and hear**

Watching a Demonstration

Seeing it Done on Location

**70% of what
we say**

Participating in a Discussion

Giving a Talk

**90% of what
we say and
do**

Doing a Dramatic Presentation

Simulating the Real Experience

Doing the Real Thing

PASSIVE

ACTIVE

Examples of Active Learning

- Case studies
- Pair and share
- Collaborative/Cooperative learning – in class, out of class
- Simulations and Games
- Projects, internships, service learning, work experience – put knowledge into practice
- Peer teaching and mentorship
- Apprenticeships
- Portfolios

Current Examples of Active Learning at NWIC

- Case Studies – writing and teaching case studies – Evergreen State College
- Service Learning, Internships, Work Experience – Native Environmental Science, Information Technology, Chemical Dependency Studies, Early Childhood Education
- Critical thinking methodologies – Read around the room and discuss, critical association, landmarks and student self-assessment
- Use of student blogs to share ideas - Math
- Reflective writing and journaling – Writing Courses, BIOL 104
- Round table discussions – BIOL 104
- Seminar – First Year seminar and NES seminar
- Place-based field activities – NES program
- Student discussion in online courses
- Native Language instruction integrated with cultural restoration

Plans and the Future

- The teaching and learning toolkit
- The teaching and learning websites
- Action-based research in teaching and learning – developing a culture of scholarship in teaching and learning at NWIC
- Cultural integration in teaching and learning