Students come to class with diverse learning styles, abilities, motivations, and levels of background knowledge. Designing courses with strategies that accommodate a wide range of learners enhances an inclusive atmosphere and decreases unnecessary hurdles in the learning process. According to the principles of Universal Design for Learning (UDL), there are flexible and multiple ways instructors can: 1) represent material, 2) provide students opportunities to demonstrate knowledge, and 3) engage and motivate students (CAST, 2011). The techniques below are just a few strategies instructors have used to incorporate universal design principles in their courses using technology.

1) Provide Options for Perceiving: Ways to Represent Information
- You can use presentation software to:
  - Present a visual representation of your lecture agenda, learning goals for the class, and/or an outline.
  - Provide visual organizational cues throughout the lecture.
  - Use visuals such as graphs, maps, cartoons, video, and other multimedia to illustrate concepts when possible.
  - Distribute a skeletal outline of the lecture before class.
- You can use an online course management system, such as Blackboard, to:
  - Post course materials beyond those required, include a section with basic background information and a section with more advanced topics for those who want to go further.
  - Share links to relevant websites.
  - Provide FAQs section and add to it regularly.
  - Compile and share a list of key words (useful for newcomers to the field and non-native English speakers).
  - Have students post their lecture notes; this may result in more intentional note taking and students and lecturers get to see the variety of ways the lecture material was interpreted and re-organized.
- Wear an assisted listening device without being asked, or use a microphone in larger rooms.
- Record lectures with lecture recording software; share videos, or make them available upon request.
- Provide a syllabus digitally with hyperlinks to relevant websites.

2) Provide Options for Expressing Learning: Ways Students Can Demonstrate their Knowledge
- For class participation points, allow for more than just in-class discussions to count; create online discussions to accommodate students who need more time to think before responding or prefer to engage in course material through writing and reflection.
- Consider how technology can enable various forms of assessment. For example, in large classes, student presentations might not be feasible with class time constraints, but it is possible for students to record videos of group or individual presentations for submission.
- Other technologies such as e-portfolios, wikis, blogs, or even the creation of a website enable students to demonstrate skills, knowledge, applications, or reflection.
- Use rubrics for students to give and receive feedback; consider creating electronic fillable forms (e.g. pdfs, Google docs).
- Incorporate classroom response tools, such as clickers or mobile devices, to have students apply knowledge anonymously or as a group; instant results allow instructors to quickly assess student progress and provide prompt feedback to the group.
- Ask students to find and post online multimedia that relates to course content; have students evaluate each other’s contributions.

3) Provide Options for Comprehending: Ways to Engage Students with Course Material
- Provide choices when possible; for example, allow students to choose between print or digital text books.
- Incorporate peer feedback by asking students to post responses on assignment drafts using blogs, for example.
- Support self-reflection and self-assessment through blogs or e-portfolios.
- Motivate students by using active learning techniques every so often in lectures. For example, ask students to work in pairs or small groups to find information online, or have students quickly respond in writing to a short video clip.

Universal Design for Learning (UDL) has some related concepts such as ‘Universal Instructional Design’ (UID), and ‘Universal Design for Instruction’ (UDI). All three advocate for accessible and inclusive instructional approaches that meet the needs and abilities of different learners.

For further information on this resource and more, please contact the CTE at:
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Steps for Incorporating Universal Design

1. Reflect on what you’re already doing
   • Know the strengths and weaknesses of current activities, instructional methods, and materials (including readings)
   • Consider your own strengths and preferences for teaching
   • Think about the diversity of students in your classroom

2. What are the strengths/weaknesses of the current curriculum?
   • Who would struggle with it?
   • Who would do really well with it?

3. Consider applying UD
   • How can you offer more choices?
   • What is essential about an assignment, and what can be changed?
   • How could technology be used to enable more ways to accomplish the same learning goals?

4. Evaluate any changes
   • How did it work for you?
   • How did students respond?
   • Did you address essential aspects of the course?


References and Selected Resources:


EnACT Ensuring access through collaboration and technology: partnerships, technology & dissemination (2012). Retrieved from: http://enact.sonoma.edu/udl


Notes and Ideas for My Course:

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