Project PACE
Faculty Resources for Teaching Students with Disabilities

Application of Universal Design Principles to Postsecondary Instruction

A course that is designed with Universal Design Principles in mind meets the following criteria.

- The essential components of the course are clearly defined.
- Prerequisite courses, knowledge and skills are identified.
- Expectations are communicated clearly.
- The physical environment is accessible and conducive to learning.
- The climate encourages and supports interaction.
- Instructional methods recognize student diversity.
- Technology enhances instruction and increases accessibility.
- A variety of mechanisms for demonstrating knowledge are available.
- Feedback is clear, prompt, and frequent.
- Good study habits are encouraged and supported.

(Adapted from the "Principles for Applying Universal Instructional Design" developed by the Curriculum Transformation and Disability, University of Minnesota, Funded by the U.S. Department of Education, Project #P333A990015.)

Tips for Applying the Principles of Universal Design

1) The essential components of the course are clearly defined.

- Identify the specific skills you want the students to master and the knowledge you want the student to demonstrate upon completion of the course.
- Consider the course objectives and requirements in terms of the function they serve.
- Refer back to these essential components throughout the process of developing the course.

2) Prerequisite courses, knowledge and skills are identified.

- Identify the skills or abilities that are assumed when students enter this course.
- Identify courses that would help students attain those skills and abilities.

This handout was prepared by Project PACE, University of Arkansas at Little Rock, funded by the U.S. Department of Education, Office of Postsecondary Education, #P333A990056-01. Permission is granted for duplication.

3) Expectations are communicated clearly.

Designing the Course Syllabus

- Develop a syllabus that reflects the essential components of the course and outlines the necessary prerequisite knowledge and skills.
- Have the syllabus available for students to obtain early if requested.
- Post the syllabus on your departmental website.
- Examine your syllabus in terms of its effectiveness to:
  - Provide a "contract" between you and the student.
  - Provide the necessary information to help a student make an informed decision about whether this course is a good match for him or her.

Providing Examples

- Develop a collection of good papers and projects to keep on file as examples for students to follow.
- Provide examples of good answers to essay questions.
- If you are teaching online, post these examples to your course site.

Developing your grading system

- Consider using a grading rubric to communicate how overall performance in the course and performance on specific assignments translates to a letter or numerical grade.
- Develop a simple grading strategy that allows students to track their own progress.
  - Keep the need for conversions to a minimum when assigning point values to assignments and exams.
  - Provide a chart that allows students to plug in their points to figure their grade at different times in the semester.
- Keep records up to date so students can track their grades accurately.

4) The physical environment is accessible and conducive to learning.

- Make sure the room has good lighting and that there is not a light source behind you.
- Make sure there are not a lot of competing noises.
- Remove physical barriers that block students' line of sight.
- Make sure lab activities and equipment are accessible to students with a wide range of physical abilities.

5) The class climate encourages and supports interaction.

- Encourage student-to-student and student-to-faculty interaction through discussion, questions, group work, field trips, and course list serves.
- Learn students' names if feasible and use their names when you call upon them in class.
- Seek student input on components of the course that you are still developing or would like to improve.

This handout was prepared by Project PACE, University of Arkansas at Little Rock, funded by the U.S. Department of Education, Office of Postsecondary Education, #P333A990056-01. Permission is granted for duplication.

6) Instructional methods recognize student diversity.

- Use teaching techniques that appeal to both visual and auditory learners.
  - Use visual aids such as overheads, handouts, multimedia presentations and models to support the spoken lecture.
  - Incorporate charts, graphs, and diagrams into multimedia presentations and visual aids.
  - Describe verbally what you present visually in overheads and other visual media.

- Incorporate hands-on activities for kinesthetic and active learners.
  - Provide demonstrations and involve students in these demonstrations whenever possible.
  - Have tangible models and objects available.
  - When discussing concepts and theories, provide analogies to tangible items.
  - Utilize interactive software applications.
  - Incorporate group discussions and cooperative learning activities into your course.
  - Emphasize active listening and participation.
  - Provide notes, an outline or guided notes for each lecture so that students may attend and participate more actively.

- Provide a balance of theory and application.
  - Provide examples of how theories apply to real situations within the students' realm of experience.
  - If your course requires a lot of memorization and attention to detail, provide connections to the whole and theories that relate to the detailed information.
  - Provide connections to other courses within your discipline and to other disciplines.

- Allow time for formulating questions and responses.
  - Pause a few seconds after asking a question.
  - Utilize an email list serve for some discussions.

- Organize class time in a predictable format.
  - Begin each class period with a review of where the discussion was ended in the previous lecture and/or a description of what will be covered. End each class period with a summary of the important points.

7) Technology enhances instruction and increases accessibility.

- Put materials on-line and facilitate the use of Web resources.
- Provide notes and handouts on diskettes or post them on your website.
- Select videos that are captioned.
- Select textbooks that are available in digital or electronic text format.
- Encourage and support the use of adaptive technology.
- Create websites that are accessible to students using adaptive technology.
- Choose software applications that are accessible to students using adaptive technology.

This handout was prepared by Project PACE, University of Arkansas at Little Rock, funded by the U.S. Department of Education, Office of Postsecondary Education, #P333A990056-01. Permission is granted for duplication.

8) A variety of mechanisms for demonstrating knowledge are available.

- Referring back to the essential components of the course, develop a variety of possibilities for students to demonstrate their knowledge and skills.
- Provide students with alternatives (i.e. tests, papers, projects, etc.).
- Consider a criterion-referenced approach to testing so that students are assigned grades based on level of mastery instead of how they compare to their peers.

9) Feedback is clear, prompt, and frequent.

- Provide feedback supporting the grade assigned to papers and exams.
- Include suggestions for improvement.
- For multiple choice and short answer exams, develop keys that provide correct answers and brief explanations as to why those answers are correct.
- Allow or better yet encourage students to turn in early drafts of papers so that you may redirect them if necessary.

10) Good study habits are encouraged and supported.

- Provide study guides and review sessions for exams.
- Encourage the formation of study groups and/or arrange for help sessions with you or an upper level student.
- Provide students with a list of technical vocabulary for the course.
- Include definitions, pronunciation cues, and an example of how the term is used in context.
- Provide tips for succeeding in your course based on previous students who have been successful.
- Encourage the use of on-campus academic support services.

This handout was prepared by Project PACE, University of Arkansas at Little Rock, funded by the U.S. Department of Education, Office of Postsecondary Education, #P333A990056-01.