Teaching of UD and Accessibility in Course Content

(Note: this falls under “Presentations – Developing New” at <https://docs.google.com/spreadsheets/d/1nJb1_PNbT6bMEz0AuWA1HRj-w2LeujXMatvmajYS4is/edit#gid=0>)

## Purpose

* To create curriculum resources (specific lessons) for teaching UD and accessibility in course content for Computer Science, Web Design and Digital Media.

## Goal

* To increase the teaching and quality of teaching around UD and accessibility in college-level tech courses
* To increase the number of students graduating with tech, media and computer science degrees with a knowledge of accessibility and UD skills

## Audience

* Faculty of colleges and universities who wish to teach about UD and accessibility for the web. (Is this too narrow).

## Objective

* Create discrete lessons in specific topic areas of accessibility and UD that use WAI resources, when appropriate (see planned topics below)

## Scope

* These course components will be geared for use in primarily Computer Science, Web Design and Digital Media. It possible that these components could also be used by other programs – business, economics, humanities – to discuss issues related to accessibility and disability.

## Resources to provide for each topic area

* Clear learning objectives and outcomes
* Suggested readings (including multimedia resources) for students
* Resources for faculty to develop lecture and slides, including web pages, images, articles, etc.
* Point faculty to the existing slides in the topic area, such as WAI training slides, when appropriate
* Perhaps on rare occasions, the development of slides
* Lesson outline including suggested in-class student activities
* Suggested student assignments

## **From topics derived from “Who Teaches Faculty” study/article and the “D.7 Design for All – A major in an ICT Curriculum” in ACM IT 2017 curriculum recommendations**

## (Based on a Spanish major in a Computers and Telecommunications curriculum proposal – pg. 146)

### Design for all (D4All) and target user groups

* Demographics, user preferences and needs, benefits of *D4All.*
* Diversity of target groups; principles of *D4All* and user participation.
* Engage with individuals from diverse populations appropriately
* Evaluation of user interfaces in terms of D4All (usability and accessibility)

### Legislative Issues

* Understand legal accessibility regulations (e.g., Section 508, Americans with Disabilities Act, etc.), legal landscape based on recent rulings (i.e. Netflix, Winn Dixie, H&R Block, etc.)

### Evaluation of systems by users

* Methods for evaluating interfaces, automatically, by experts and by users.
* Be able to evaluate web pages by accessibility standards and heuristics (e.g., W3C, WCAG)

### Assistive Technologies

* Accessibility barriers for persons with disabilities, for AT and D4All.
* Appropriate AT in specific environments for people with concrete needs.
* In-depth understanding of the interoperability between AT and ICTs.

### Web applications

* principles and methods for building Web applications for All
* accessible and usable Web application design methods and guidelines.

## Secondary Topics

### Consumer electronics and games

* methods and techniques for implementing D4All and Universal Accessibility in consumer electronics and games.

### Back end technologies

* back-end technologies support for usability and accessibility of ICT services for end users.

## Miscellaneous Suggestions

(topics and actions to eventually incorporate into proposal)

Adina – internships for students – with development firms that practice good coding.

Suggest projects such as interviewing students with disabilities

Discuss Neurodiversity

Brent – need to see where the gaps are

Shawn – at least go through what we currently have in terms of resources so we know what’s there.

Big picture –

Eric - aim for small project that we can ship and then evaluate

## Next steps

* prioritize topic areas – which are most important to cover first
* more specific proposal with learning objectives and outcomes for each topic area mentioned above