#### NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS

#### **School of Science**

# Information Technologies in Medicine and Biology Direction: *Bioinformatics*

### Accessibility of Information Systems and the World Wide Web

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#### Assignment 4

## Practice in the principles and good practices of Universal Design for Learning

- 1. Read the article: "Design Educational Activities based on the principles of Universal Design for Learning" that you can find in e-class (Documents> Additional Training Materials> file: UDL Riviou, Kouroupetroglou, Oikonomidis 2105 IAKE.pdf)
- 2. Go to <a href="http://udlnet.di.uoa.gr">http://udlnet.di.uoa.gr</a>, choose the **Greek** language, then read "Myths and misconceptions about UDL»
- 3. In <a href="http://udlnet.di.uoa.gr">http://udlnet.di.uoa.gr</a> select Register and fill in all mandatory fields. Name, Surname and email should be exactly the same as the ones used in e-class. In the body field, insert: Master EKPA. Select a username and a password of your choice. 4. Select "Good Practices" and then at the language filter (left bottom) select only the Greek and click 'Apply'
- 5. Select Good Practice "Creating Accessible material using MS-Word".
- 6. Carefully read tabs: Overview, School Framework, UDL in action. In Multimedia Resources tab select and download to your computer the Short and the Detailed instructions corresponding to the version of the text editor you have.
- 7. Rate this Good Practice based on a scale with stars.
- 8. Question 1.1: Comment (with a text of at least 20 words) in which scale it does (or not) follow this good practice the UDL guidelines: "Providing Multi Media Representation" or how the information/instructions were presented in different ways of representation.
- 9. Question 1.2: Comment (with a text of at least 20 words) how this good practice implements (or not) the UDL guidelines: "Providing Multi Media Action & Expression" or how it is given to the trainees the opportunity to express what they know various ways.
- 10. Question 1.3: Comment (with a text of at least 20 words) how this good practice implements (or not) the UDL guidelines: "Providing Multi Media Jam" or how the trainees get involved and motivate themselves in different ways.
- 11. Select the tab Rating and write your positive or negative comments on this good practice (with a text of at least 15 words) about its objectives (as described in the **Overview** tab).

Your answers to questions 1.1, 1.2 and 1.3 should be submitted until 11.16.2016 in e-class platform as a single text file, in the beginning of which you should write your name and surname. For this assignment's grade there will be taken into account your answers to <a href="http://udlnet.di.uoa.gr">http://udlnet.di.uoa.gr</a>

#### **Assignment Description in Greek:**

Included as a separate file: 4η Εργασία.pdf

Most of people take the way they use a computer daily for granted. A keyboard, mouse and monitor seems necessary, even natural. Yet, many people must rely on other means of interacting with a computer. In this assignment, we were assigned to practice in the principles and good practices of Universal Design for Learning (UDL). To start with, we were asked to read an article published by the professor and instructor of this course, with Mr. Nikolaos Oikonomides and Ms. Katerina Riviou. This article (attached in github) was addressing to the designing of educational activities based on the principles of Universal Design for Learning and was describing the main background of UDL as well as it made a correlation to phycology and how people are really benefited by such a design. It indicated three main pylons of the UDL and gave emphasis in the fact that today's material is way from this design, while also addressed some reasons for this happening.

After that, we were asked to visit a website, read a section that was referring to the lack of knowledge that people have and their misbeliefs.

Then, we created an account to the website and were asked to choose one of the many "good practicing" tutorials, rate it, answer the Assignment's three questions (each for one pylon of the UDL) and make a review on the website in the particular tab form.

#### **Answer of Question 1.1:**

According to UDL, there should be provided multiple media representation tactics for adjusting the representation in readers demands, in an optic and an acoustic way. This is partially satisfied as there are provided two different (short and long) tutorials. The first one has good organised the information in bullets, different sections, with headers and different colours. The seconds one, has the same information more detailed with many specific images and descriptions, following an also good layout. The tutorial seems like a hands-on step by step tutorial which helps the users that like tutorial to go on with it by practising, satisfying that goal. So, finally the reason that there exist two tutorials is good, as it helps in:

- Finding easy the information users need (good layout with titles, bullets etc)
- Given instructions in visual form and sound
- Tutorial written for a hands-on practicing

#### Answer of Question 1.2:

According to UDL, there should be providing multiple different ways of expression, communication and alterations in execution functions. In this tutorial this is provided through the short and long versioning, the liberation of choosing every person which one of the two prefers (according also to his background using computers or MS-Word as an application). It can work as a mentoring tool, but also (like happened in my case) it gives you the ease to jump to the section that interests you. For us (students) it was also given as project assignments to learn how to use it, so for people with goal achieving personalities it works perfectly. Images and sound is also once again definitely helping for people who prefer multimedia instead of text, while also the contrary (well organised text) is also provided in short and long version. I think that the way the tutorial itself presents what a teacher can do, expect for doing

the job correctly, it also is a good example for teachers to copy and try to construct their content according to this tutorial. Images, sounds and text, well combined in an organised layout.

#### **Answer of Question 1.3:**

For this good practise the truth is that there are not many multimedia, except the images. There also could be some video tutorials showing someone in live creating a document. Many of the variations of images and design layouts or smart Art are not provided with this tutorial, but the truth is that they also don't fit to be in a tutorial. It would be nice though to explain how to use and include such multimedia. But, by all means, the tutorial is well organised and written, with a small lack in multimedia that are not even usable for the content of the experience in this document reading. So, for this content the media used are ok, but for other content made by teachers there should be considered to use more multimedia. The trainees can motivate themselves by exploring all the rest buttons and tabs included in this editor but not described in the tutorial.

Μy positive comments for this good that I wrote in the Rating tab were (in Greek): "Τα σχόλιά μου για την καλή πρακτική θα είναι θετικά, φυσικά... Όχι μόνο για τα άτομα με αναπηρία, αλλά και για τους κοινούς χρήστες η καλή πρακτική συγγραφής εγγράφων είναι πολύ βοηθητική για τους τελικούς αναγνώστες. Από εκεί και πέρα, πράγματι όσον αφορά την προσβασιμότητα αν για τους χωρίς-αναπηρία είναι 2-3x καλύτερα τέτοια κείμενα, για τα άτομα με-αναπηρία είναι 20-30x καλύτερα. Προσωπικά, γενικά εφαρμόζω τους κανόνες σχεδίασης, αλλά μέσα από αυτό το μάθημα διδάχθηκα κάποια επιπλέον πράγματα που από εδώ και στο εξής θα εφαρμόζω. Για παράδειγμα, οι τίτλοι, υπότιτλοι, κεφαλίδες σε κείμενο ή σε πίνακες ήταν γνωστά. Αλλά έμαθα και για το εναλλακτικό κείμενο που ενώ το εφάρμοζα στις ιστοσελίδες, δεν μου είχε πάει το μυαλό να το εφαρμόσω και στα απλά κείμενα. Ο τρόπος που περιεγράφηκε αυτό, και από τη σύντομη και από την αναλυτική περιγραφή μου φάνηκε πολύ σωστός, για έκαστη περίπτωση. Για μένα ο σύντομος αρκούσε, αλλά κρίνω ότι και ο αναλυτικός για κάποιον που δεν γνωρίζει είναι πολύ βοηθητικός και πλήρης και πολύ καλώς και υπάρχει.»

#### Links

http://udlnet.di.uoa.gr