

Design of a curriculum framework for raising awareness of game accessibility

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Game accessibility & the Communications and Video Accessibility Act (CVAA)

- 2015: CVAA for game consoles + platforms
- 2017: CVAA for game software

Problem

- While dedicated educators can create high-quality educational material for teaching about game accessibility, there is no framework explicating what knowledge is relevant for whom and in what order different topics should be introduced.

Motivations for solving the problem

- All game educators are not experts in game accessibility (GA)
- Professional game developers also need to learn about GA without attending a school
- Updating material requires collaboration to share work done by peers to be sustainable
- This in turn requires a structure for creating and sharing accessible Open Educational Resources

Questions

- How could a curriculum framework for game accessibility be designed?
- How could OERs for game accessibility be created and shared based on the framework?

Method

- Design science approach; requirements based upon research literature and online resources, UNESCO
- International online survey
- 100 researchers who published about GA 2011-2015
- Plus to e-mail lists of academia and industry
- Several countries in EU + USA, Brazil, Australia, Korea
- Mix of open and closed questions

Design of the curriculum framework

Broad Learning Objectives [13]	Structure [12]	Standards of Resources [13]
Knowledge Understanding Skills Values Attitudes	Introduced Transitional Emphasized	Repositories Formats Learner profiles Flexibility

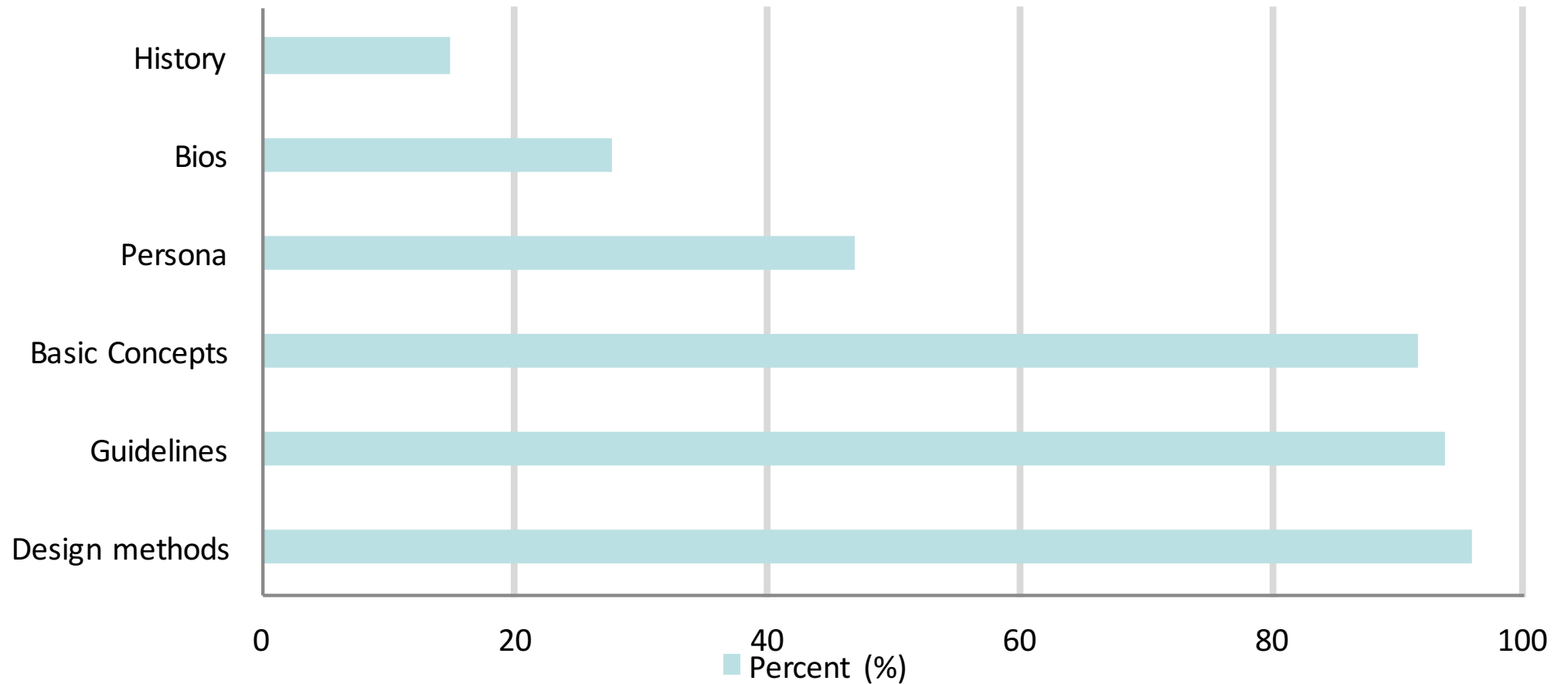
[13] UNESCO. (n.d., 2016-01-10). Curriculum Design. Activity 1: The structure of a curriculum framework.

[12] P. L. Maki, Assessing for learning: building a sustainable commitment across the institution

Survey results and analysis

- 49 persons completed survey
- 27 academics
- Europé 36,17%, USA 51,06%
- During 2 weeks

Weighted topics



Category	Example
Frame problem	Accessibility as important for all
Practice	"play the available accessible games" "[p]ractice underpinned by principles and motivations".
Empathy	"The simulation and background material about types of impairments need to be included upfront."
Attitudes	"Game developers should not be restricted (in any way). disabled [sic!] people should rather learn to help themselves if they want to consume a specific game."
Concepts	E.g. social model: "whether people are disabled when playing the game is entirely up to the designers and developers involved."

Category	Example
Implementation	Simple design choices can go a long way but some options are complex and time consuming Pseudo-code examples
Incentives for funders	Educating publishers about GA: allocate resources, larger target audiences, key issues, legal requirements
Learner profiles	Designers, engineers; professionals, students
History of GA	"if a history of games class is available then perhaps a history of game accessibility would fit well with the material of that course""
Teaching	20/27 academics did not teach GA at all, or just once (on a semester time basis)

Tentative curriculum framework

Learning outcomes	Basic level Designers	Basic level Engineers	Adv. level - for All
Understand basic concepts	E	E	N/A
Know needs of disabled	E	E	N/A
Able to apply design methods	E	T	E
Awareness of history	I	I	T
Know scope of issues	I	I	E
Awareness of legislation	I	I	T
Awareness of funding	I	I	T
Experience of disabilities	I	I	T
Know-how of solutions	T	E	E

Conclusions

- *A tentative* curriculum framework for GA
- We invite you all to participate to:
 - refine the framework
 - co-creating and sharing open edu resources
 - licensed with Creative Commons BY, NC, SA?
 - apply for research project funding together
- gacademy.blogs.dsv.su.se

ONE MORE THING...

Game Accessibility Workshop @ ICEC 2016

- Submission deadline: **July, 25th**
- Notification to authors: **August, 20th**
- Camera ready: **September, 1st**
- goo.gl/pniDrD

QUESTIONS?

Thank you for your attention.

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Workshop: goo.gl/pniDrD

Prototype framework website: gacademy.blogs.dsv.su.se