



DigiCulture

O4.2 - Design and integration of Open Badges v0.2 DRAFT

Outcome O4 Activity 2 Design and integration of Open Badges			
Document submission and review information			
Date of deliverable			
Organisation name of lead author	Aalborg Universitet		
Revision date			
Author and reviewer information			
Name of the author	Bastian Ilsø Hougaard		
Organisation / affiliation of the author	Aalborg Universitet		
Name of the reviewer			
Organisation / affiliation of the reviewer			

Copyright licence: This work is licensed under a Free Culture Licence Creative Commons Attribution-ShareAlike 4.0 International License.

The creation of these resources has been (partially) funded by the ERASMUS+ grant program of the European Union under grant no. 2018-1-RO01-KA204-049368. Neither the European Commission nor the project's national funding agency ANPCDEFP are responsible for the content or liable for any losses or damage resulting of the use of these resources.

Imprint

This publication is O4 of the DigiCulture Erasmus+ strategic partnership founded by the European Commission 2018 - 2020 under 2018-1-RO01-KA204-049368 | www.digiculture.eu

PDF download

A full-text PDF of this report is available as a free download from: www.digiculture.eu/<location>





Social media

Find us on Twitter: @digiculture

Find us on Facebook: DigiCulture Erasmus+ Project

Find us on Instagram: digiculture_erasmus

Give us your feedback on any social media platform using the hashtag: #digiculture

Suggested citation

Hougaard, B. I. Knoche, H. (2020). Design and integration of Open Badges

Corresponding author

Bastian Ilsø Hougaard, Hendrik Knoche

Aalborg Universitet

Frederik Bajers Vej 7K, 9220 Aalborg Ø

biho@create.aau.dk; hk@create.aau.dk

Contributors

Aalborg Universitet





Table of Contents

lm	mprint		
PD	DF download [Final Draft Only]		
So	cial m	nedia	2
Su	ggeste	ed citation	2
Со	rrespo	onding author	2
Ta	able of Contents [Final Draft Only]		
Ex	xecutive Summary		
Oje	jectives of this document		
Wl	/ho is this document for?		
Wl	What topics are addressed in this document		4
Со	Contrbutors		4
Ac	Acknowledgements		4
1	Aim	ns and Scope	4
2	Bac	ckground and rationale	4
	2.1	Introduction	4
	2.2	Design Based Research	4
3	Me	ethodology	5
	3.1	Outline	5
	3.2	DigiCulture QAF Process	5
	3.3	Instruments	6
4	Ехр	pected results	7
5	Nex	xt steps / Discussion	8
6	Conclusions		8
7	Ref	erences	8





Executive Summary

This report shows the work done so far for the O4.2 Design and integration of Open Badges. It covers the work performed from October 2019 to January 2020 on badges for the DigiCulture MOOC (Massive Open Online Courses). During this period, the DigiCulture project has defined how badges should be issued, what badges should represent and how the badges should relate to digital skill. A set of initial design proposals have been developed using Badge Design Canvas and Visual Design templates. For the next step, the team shifts into development mode for implementation and integration of Open Badges into the DigiCulture MOOC.

Objectives of this document

This document is divided into three sections. First, it defines what badges are and aim to do in context of the MOOC (*Background and Rationale*). Second, the methods used are documented for starting the design process (*Methodology*) and initial iterations of Open Badges design are shown (*Preliminary Results*). Third, the document covers the plan for the future and remainder of O4.2 (*Next Steps*).

Who is this document for?

This document for the DigiCulture partners who will have designs and definitions available of how Open Badges will work in the DigiCulture MOOC. Secondly, researchers who work in the field of gamification and education, can make use of this document to understand the scientific underpinnings of badges. Finally, the creative industry sector who work wish to create online training platforms can benefit from this document through an understanding how open badges and stickers can be used to gamify course content.

What topics are addressed in this document

The document addresses the following topics:

- Definition of Open Badges
- What does Open Badges represent when rewarded to adult learners.
- Differentiating Open Badges from Stickers.
- Methodological Approach to designing Open Badges.
- Next Steps for Integration and development of Open Badges.

Contributors

This document was developed collaboratively by AAU (leading O4) with input from all partners.

Acknowledgements

Aalborg University is the author of this document. The DigiCulture project partners provided valuable feedback to the process through the transnational meetings and have carried out interviews with learners across country.

<u>www.digiculture.eu</u> @DigiCulture O4.1 v0.1 DRAFT





1 Aims and Scope

AAU is leading the design of DigiCulture's open badges (O4.2). The aim of this draft is to present the digital culture issue arising from this study, specifically define badges and test the badges with cultural stakeholders, as part of testing the e-assessment tool (O4.1). Specifically, we want to test whether the proposed course certificate (external badges) seem trustworthy to potential employers and adult learners in the creative industry.

2 Background and rationale

Open Badges specify an establishing infrastructure for digital badges which can represent skills and accomplishments in learning contexts (Tharindu R. Liyanagunawardena, 2017). Badges are one of the key mechanics identified as central for gamification, which can be used to increase user engagement (Helmefalk, 2019). The Virtual Learning Hub uses Moodle as a platform, which is a learning management system capable of using Open Badges. As of Moodle v. 3.7, it is possible to connect Moodle student accounts to Badgr, which is a digital badge ecosystem providing students with a *backpack* from where they can share their badges via the badges digital secure code.

For learning management systems, badges are conceptually dual-purpose - they serve both users as rewards and simultaneously will be displayed to potential employers. We therefore distinguish between gamification badges (which are "stickers" for internal use) and certificate badges (the actual open badges, which are for external use) (Hougaard & Knoche, 2019)^[IN PRESS]. The remainder of this document will use this terminology, to describe the design process of open badges.

Open badges (for certification)

Open badges work similar to "certificates" which are awarded upon completion of a course. The open badges prove that the student has acquired the skills introduced by the course. The open badges consists of an image, a title, a description and date acquired.

Goals

- Open badges should accurately indicate the course they represent.
- Open badges should be presentable to potential employers.
- Open badges should be verifiable.

Constraints

- We need to maintain a consistent visual design across open badges, so they clearly seem to stem from the same platform (origin).
- The certifying entity should be clearly indicated on the badge (DigiCulture) and in the badge description.
- Each open badge should clearly communicate the course they are from, so as to be distinguishable from other achieved open badges.

<u>www.digiculture.eu</u> @DigiCulture O4.1 v0.1 DRAFT





 Badge text and visuals should be readable from the size the VLH displays it in (see Badge Visibility section below).

When to issue badges

During the Graz Meeting there was a long discussion of the behaviour of badges in the DigiCulture MOOCs. It was agreed that badges are not issued *directly* per competence and cannot represent specific competences as defined by DigComp 2.0, because doing so would go beyond the scope of what is possible in the frame of the courses. Instead, it was agreed that badges should be issued per course, as an indication that the adult learner have completed the course's material. The badges are only issued for courses, if the learner passes a course examination (further details can be found in the *O4.1 Digital Skills E-Assessment Tool Interrim Report*). Open badges are not issued for individual course activities – but courses may internally make use of stickers, which are only visible internally in the DigiCulture MOOC to provide gamification.

The open badges will reflect that they indicate completion of a digiculture course through their image and their badge description. The badge description will furthermore describe the contents of the courses, which were designed based on the digital competences.

Badges Visibility

Once the Adult learner have received an open badge, the badge will be displayed in Moodle on users' profiles and on the Badgr badge management platform. The final open badge visual design should respect the size requirements by the different platforms which the badges will be visible on, described below.

Moodle

Open badges will be visible on the user's Moodle profile and should be readable at 100x100 pixels (the dark grey square indicate badge size).

Badgr

Open badges will be visible on the user's Badgr profile and should be readable at 80x80 pixels (backpack) and 192x192 pixels (single badge).

Sharing on Social Media

When sharing on Social media, the open badges will have thumbnails with varying size: 80x80, 138x72 (cropped, only middle visible) and 158x158px respectively.

3 Methodology, tools and research

The visual designs of open badges were undertaken, using critical and creative investigations similar to those undertaken by visual artists (see *Art Practice as Research* (Sullivan, 2010)) and from the conceptual

www.digiculture.eu @DigiCulture 04.1 v0.1 DRAFT





guidelines from O1. Apart from the concrete badge design, this investigation also resulted in a visual overview of how open badges typically are represented (see (Hougaard & Knoche, 2019)).

After the visual designs of open badges had been established, two *visual design templates* were formed to make sure there was a visual distinction between stickers and open badges. Using the Badge Design Canvas by DigitalMe (Digitalme, 2018), AAU and partners then proceeded to create badges for the respective courses.

Several internet searches were performed to collect various types of badges and to create a digital *collage* of inspiration. The end result was a large digital canvas. Using the assets collected in this collage, it was possible to extract how other projects had chosen to visually map information.

4 Intermediate results

Open Badge Design

Based on the exploration of older iterations, a final design was created from lessons learned:

- Use a Badge Shape which is either square or circular, so we make optimal use of the square space.
- Make use of the identified blue/white main colors of the DigiCulture logo, to align the badges visually with DigiCulture branding.
- Use the rounded geometric shapes from the DigiCulture font, to inspire the badge style.
- Include the DigiCulture logo, and use the Roboto font for any text, which need to be readable.
- Be readable from 80x80 and up to 192x192 pixel sizes.

Open badges are awarded upon successful course completion. The open badge is a certification which is displayed to verifying authorities and potential employers.

The current design options being evaluated are being shown below:

ALTERNATE VERSION A



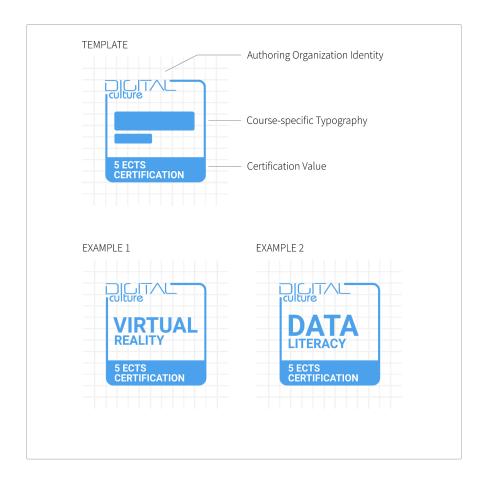
ALTERNATE VERSION B



ALTERNATE VERSION C







5 Next steps / Discussion

The proposed visual design templates will be tested with cultural stakeholders (potential employers and adult learners). In particular we wish to:

- 1. Verify whether the distinct visual difference in gamification and certification badges are clear to stakeholders.
- 2. Verify whether certification badges are perceived as trustworthy certificates representing skill.
- 3. Let cultural stakeholders indicate their preference amongst the proposed visual badge designs.

Next Step: Shift to Development Mode for Open Badges

For O4.2, we are now shifting into development mode, which will implement the Open Badges into the DigiCulture MOOC for all partner courses. Partners are asked to adapt the badge design template to partner courses, based on the existing provided examples produced by AAU.

<u>www.digiculture.eu</u> @DigiCulture O4.1 v0.1 DRAFT





6 Conclusions

The O4.2 Design and Integrations is an ongoing process, which so far has covered the design and definition of open badges. The project partners should utilize the badge designs to create their own badges and prepare to develop the technical implementation of the badges into their respective courses.

7 References

- Digitalme. (2018). *Badge Design Canvas Digital Me*. Retrieved from www.digitalme.co.uk/assets/pdf/DigitalMe-Badge-Design-Canvas.pdf
- Helmefalk, M. (2019). An interdisciplinary perspective on gamification: Mechanics, psychological mediators and outcomes. *International Journal of Serious Games 6*, 3–26.
- Knoche, B. I. (2019). Stars, Crests and Medals: Guiding the Design of Badges to Gamify and Certify Online Learning. In Press.
- Norman, D. A. (2004). Emotional design: why we love (or hate) everyday things. New York: BasicBooks.
- Sullivan, G. (2010). Art practice as research: inquiry in visual arts. Thousand Oaks, Calif.: Sage Publications.
- Tharindu R. Liyanagunawardena, S. S. (2017). Open Badges: A Systematic Review of Peer-Reviewed Published Literature (2011-2015). *European Journal of Open, Distance and E-Learning 20*, 1–16.

Attachments

None.