

**DIGITAL BADGES: AN INTERACTIVE
LOGBOOK EQUIVALENT TO FACILITATE
STUDENT ENGAGEMENT AND
MOTIVATION IN A PSYCHIATRY
MODULE**



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FACTS



Year	Internet Users**	Penetration (% of Pop)	World Population
2016*	3,424,971,237	46.1 %	7,432,663,275
2015*	3,185,996,155	43.4 %	7,349,472,099
2014	2,956,385,569	40.7 %	7,265,785,946
2013	2,728,428,107	38 %	7,181,715,139
2012	2,494,736,248	35.1 %	7,097,500,453
2011	2,231,957,359	31.8 %	7,013,427,052
2010	2,023,202,974	29.2 %	6,929,725,043

58% of **Americans** play video games

<http://www.internetlivestats.com/internet-users/>

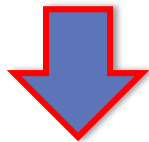
http://www.isfe.eu/sites/isfe.eu/files/attachments/esa_ef_2013.pdf



GAMIFICATION

Gamification derives all the fun and engaging elements found in games and applying them to real-world or productive activities.

It's a design process that optimizes for human motivation in a system
Yukai Chou



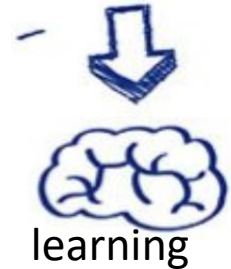
GAMIFICATION IN EDUCATION



goal



skill



learning



achievement



challenge



reward



engagement

DIGITAL BADGES – EXAMPLE OF GAMIFICATION



introduced in 2010 at a conference sponsored by the Mozilla Foundation in Spain

Function in Higher Education

- To recognise a student's participation in a learning activity,
- To help students explicitly and visually capture progress made on learning tasks,
- To recognise the achievement of skills and competencies,
- To serve as a means of certifying these achievements



Digital badges are **symbols of achievement** (portable network graphics) with **embedded metadata** about the achievement. They can be displayed and shared in online platforms.

This is a relatively new area of research in Higher Education especially in Teaching of Medicine.

OUR STUDY: AIMS/METHODS



We introduced internal digital badges in Psychiatry in UCD in Spring 2017 using the Achievements tool in Blackboard Learn. We piloted them as an online interactive alternative to a logbook/portfolio.

We wanted to hear Students opinion on Digital Badges – could they

- enhance students' engagement with the module?
- enhance their motivation to complete clinical tasks set for them?
- facilitate learning through the structure provided by the badges and how they are acquired?

Data:

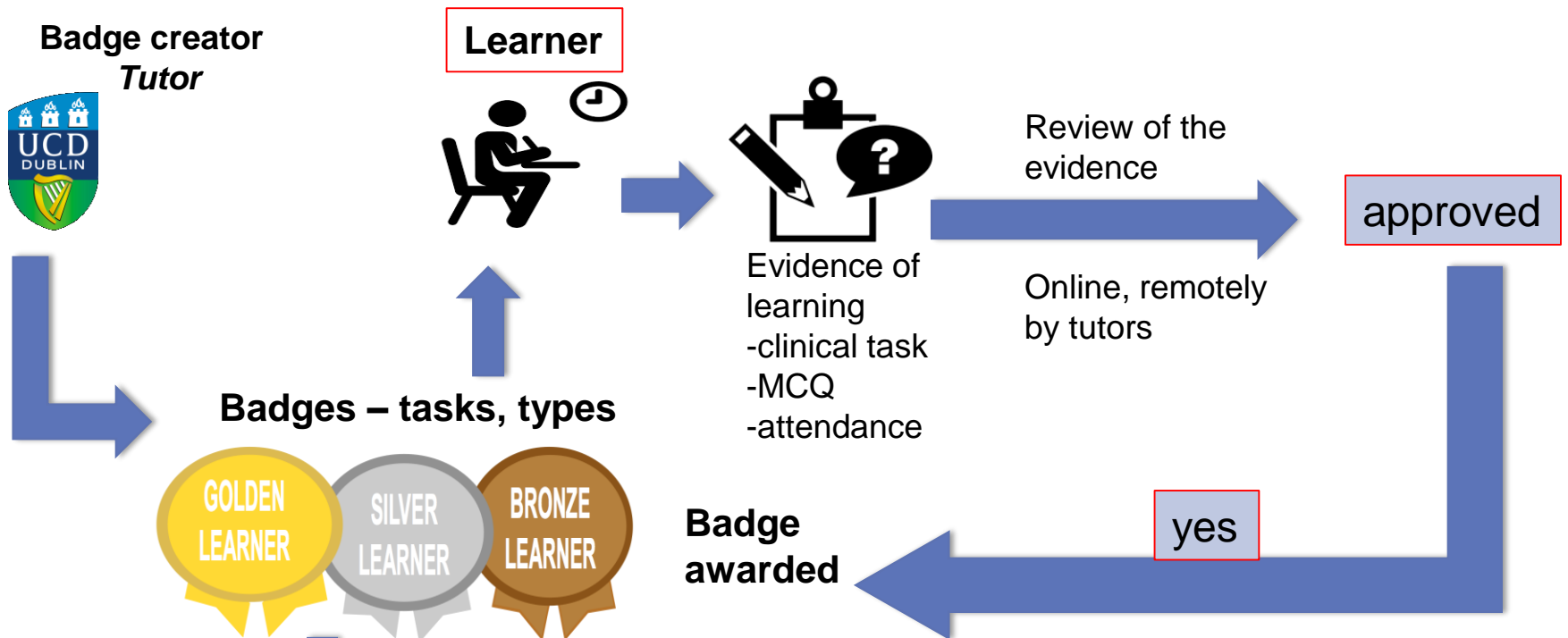
-a blend from 2 validated questionnaires
-collected at the end of module

**GOLDEN
LEARNER**

**SILVER
LEARNER**

**BRONZE
LEARNER**

OUR STUDY: DIGITAL BADGE SYSTEM



5 badges awarded over 5 weeks. In total they counted for 1% of the module continuous assessment

RESULTS: DEMOGRAPHICS



161 out of 237 students
completed questionnaire



Response
rate of 68%

Out of 71 (we have added
demographics for the 2 out of 4
groups):



25



46

group	No.	%
Undergrad female	34	48
Undergrad male	11	15
Postgrad female	12	17
Postgrad male	14	20

RESULTS: ENGAGEMENT, MOTIVATION



Q13 → Earning badges made the assignments more significant to me.

Agree	Neutral	Disagree
45% (8+ 12+ 25)	15%	39%(16+11+12)

Q23 → The digital badges made me want to keep on working

Agree	Neutral	Disagree
45% (4+14+27)	25%	29% (14+6+9)

Q3 → I felt motivated to complete the module because I was earning digital badges

Agree	neutral	Disagree
50% (6+17+27)	16%	33% (8+12+ 13)



RESULTS: STRUCTURE



Q6 → The digital badges helped me to achieve the learning outcomes for this module.

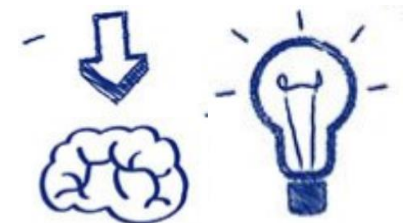
Agree	Neutral	Disagree
64% (9+ 17+ 38)	15%	21% (11+ 4+6)

Q16 → The digital badges helped me to meet the assessment requirements of this module.

Agree	Neutral	Disagree
68% (6+20+ 42)	12%	19% (9+6+4)

Q21 → The badges increased my overall level of satisfaction with completing the continuous assessment requirements

Agree	Neutral	Disagree
59% (9+17+33)	11%	28% (13+ 6+ 9)



RESULTS: RELEVANCE, FEEDBACK



Q8 → The digital badges helped me to understand the content of this module

Agree	Neutral	Disagree
68% (7+18+43)	13%	18% (6+ 5+ 7)

Q10 → I was more aware of the module continuous assessment requirements because I would be earning digital badges.

Agree	Neutral	Disagree
78% (16+30+32)	7%	15% (6+ 4+5)

Q19 → The digital badges helped me to understand my progress through the module

Agree	Neutral	Disagree
61% (7+16+38)	16%	21% (9+ 6+6)



RESULTS: SOCIAL CONTEXT



Q26 → I talked to others about the badges I earned

Agree	Neutral	Disagree
42% (9+14+19)	12%	44% (9+12+23)

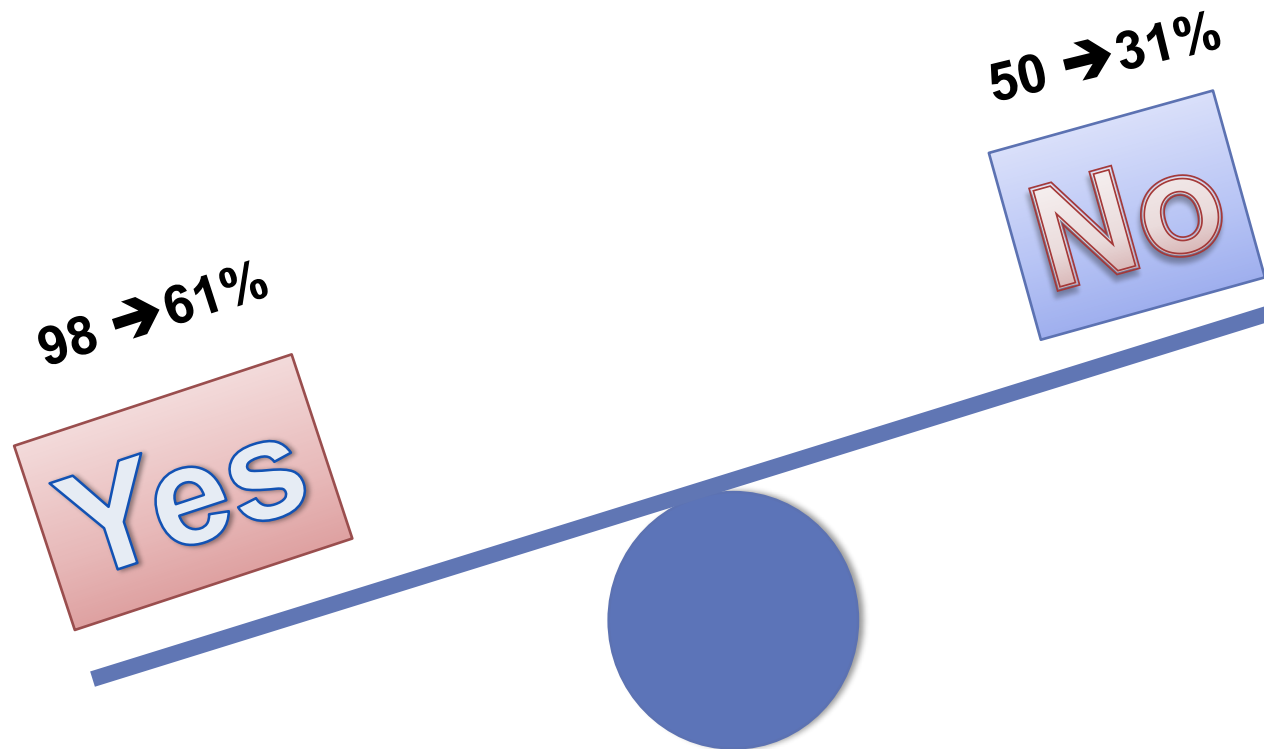
Q28 → The potential to earn digital badges at gold, silver and bronze levels made me feel competitive.

Agree	Neutral	Disagree
49% (7+16+26)	11%	39% (12+ 8+19)



RESULTS

Q31: I think the badges are helpful and should be used in the coming years



STUDENTS OPINIONS

the badges give an idea of the learning outcome, add a buzz to the module

no difference between a gold, silver or bronze → there was little point in trying harder to achieve a gold badge

The badges give indication of progress

good idea to give an impression of progress in continuous assessment

More weight should be given towards the badges

I don't think they make any difference, continuous assessment is good & wish it was in more our modules.



DID WE REACH OUR AIMS?



Majority of students felt that Digital Badges:

- **provided feedback on their progress**
- **enhanced their engagement with the module**
- **enhanced their motivation to complete clinical tasks set for them**
- **facilitated learning through the structure provided by the badges and how they are acquired**

SUCCESS



LOADING...

WHAT NEXT?

Our findings are in-keeping with the literature → further evaluation is required

the use of Badges as an educational tool are promising

f.ex. Can we make badges more significant? Can we give more value to the badges?





REFERENCES

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THANK YOU

