



Microinteractions and a Gamification Framework for Capturing 21st Century Skills

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Learning Innovation

AN ENTERPRISE IRELAND
& IDA IRELAND INITIATIVE

Core Questions

- What are 21st Century Skills?
- *What learning innovations are being used to promote them?*
- What techniques/methodologies are being employed to assess them?
- *What technologies are being used to promote 21st Century Skills and their assessment?*

Project Objectives

- To create a **common framework** for how 21st Century Skills can be assessed
- *To be able to assess (and capture) informal learning and social activity from learners; in particular, to research **new methods of assessment** which can interpret, visualise and comparatively assess learning activity implicitly and continuously*
- To create a demonstrator in which **multiple methods** and approaches to assessment can take place
- *To **provide teachers with the tools** to visualise and assess actions, behaviours and skills of learners in relation to 21st Century Skills*

Application Overview

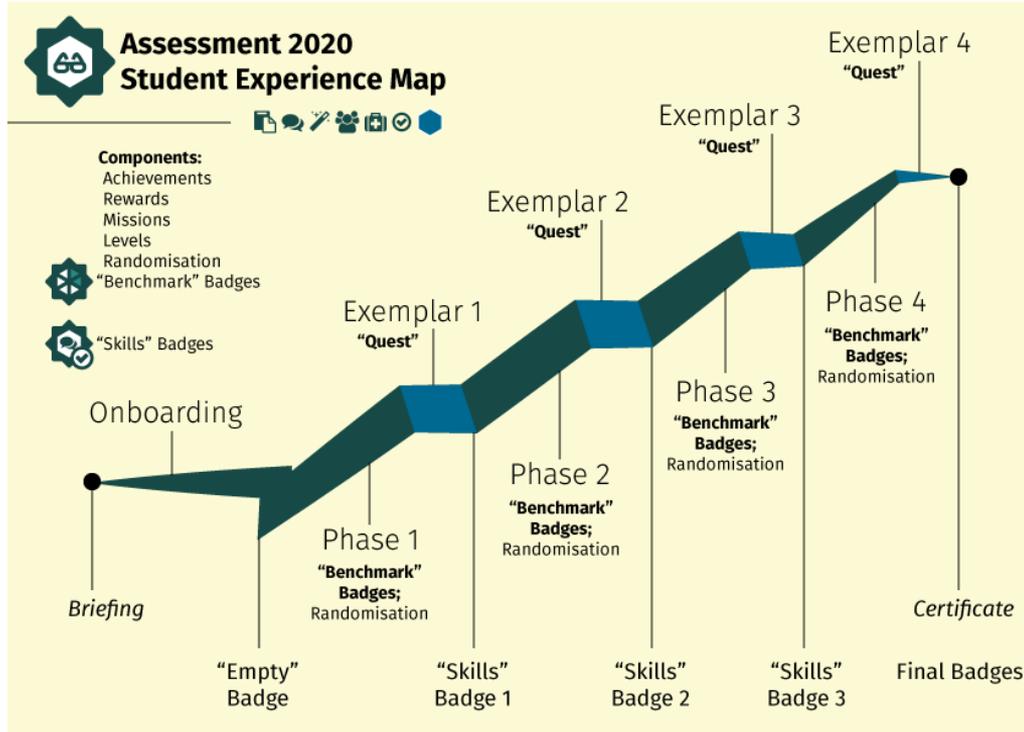
Pedagogical Design

- Vertical and horizontal mobility
- *Not activity specific*
- Authentic classroom dynamic
- *Activate student skill literacy*
- Experiential learning
- *Formative assessment*

- Baseline data
- *Foundation for future design*

- **SELF-ASSESSMENT**

Application Experience



Digital "tagging"

SkillTrack!

Home Notifications Library Badges

Welcome to SkillTrack!

0/3 complete

Creativity

Collaboration

Communication

Self-management

Information Management

Collaboration Exemplar!

Communication

Creativity

Information Management

Self-Management

Home Library

Home Notifications Library Badges

Phase 1 1/4 complete

Welcome to SkillTrack!

Showing and Sharing the best of you!

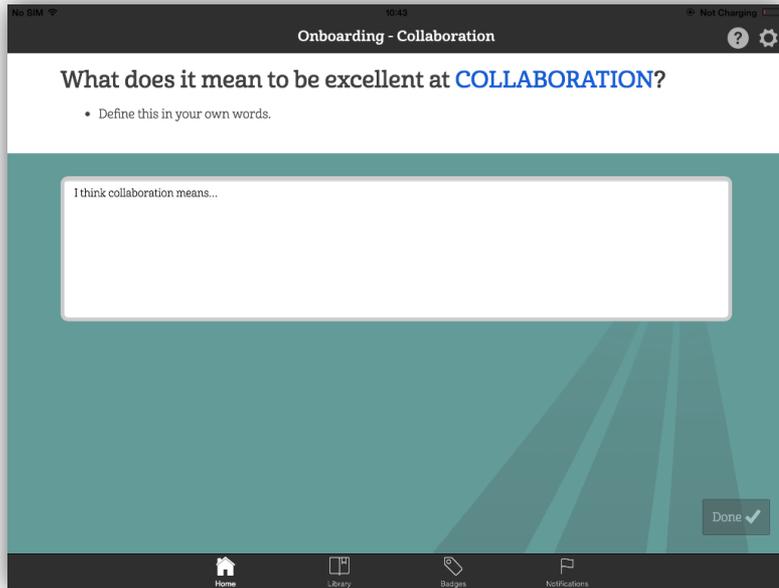
SkillTrack! lets you track your skills in Collaboration, Communication, Creativity, Self-Management and Information Management. As you track each skill you'll build your understanding of when you use these skills, what they are, what they look like in your life, how well you do them and how you can grow in every single one of them.

Home Library Badges Notifications

"Communication tagged!"

"Creativity Tagged!"

Benchmarks & Exemplars



Pedagogical & Usability Evaluation

Student Feedback

I liked how when we got to the exemplar stage we'd have to upload a picture of the work we did in class so I think that was very helpful and it makes you feel like you have a sense of achievement and done.

I liked getting the badges and [was] proud when I got past the different levels

Made you realize what you were using...you aren't really thinking until you go in to SkillTrack! and you realized 'oh, I was using creativity or collaboration...

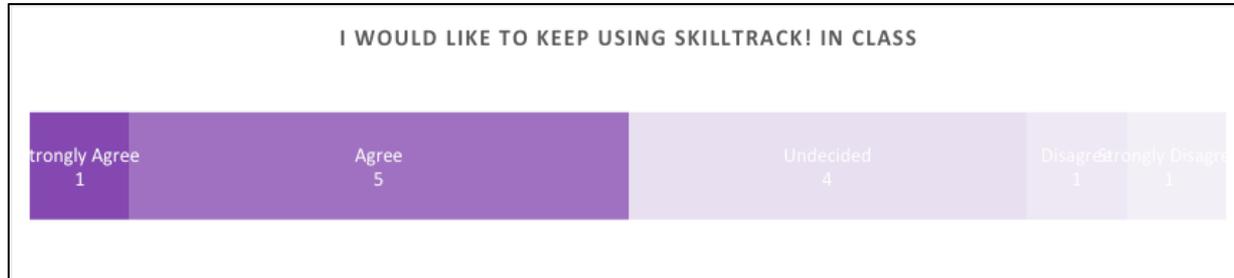
Teacher Feedback

*The other really good thing about it is how minimal it is in interfering in the class work... they literally just have to touch it and **it doesn't interrupt the lesson** so I have no problem suggesting to teachers to encourage them to use it in their lesson.*

So I think the language was too hard for our age group. It would have been ideal for 5th years, which is three years ahead of us.

*And then I love the uploading of **an exemplar** piece of work because it is really important that they make a judgement call on a piece of work surrounding that particular skill that they seemed to have followed to that level*

UI/UX – Perceived Usability



UI/UX – Perceived Usability

“How would you make SkillTrack! better?”

“I wouldn't because I really like it because its easy to use and we get to recognize what skill we are doing”

“I think that some of the language/ sentences/wordswere a bit complicated and a bit hard to understand.”

“... use less cumbersome words”

Preliminary Findings



Activate Student Literacy, Experiential Learning, Formative Assessment, Onboarding, Exemplar



Integration into Authentic Classroom Dynamic, Benchmarking Tasks



Vertical/Horizontal Mobility, Transformative Technology
(not due to design, due to execution)



Not Activity Specific, Skill Tagging, Self-Assessment
(Ongoing trial with Claregalway, TCD Uni of Dublin to start 2017)

Conclusions

- *Activate Student Literacy, Experiential Learning, Formative Assessment, Onboarding, Exemplars*
- “Stealth” Interactions: digitally “tagging” physical learning activities into a Mixed Reality
- *Integration into Authentic Classroom. Dynamic, Benchmarking Tasks*
- High level of interest
 - Ongoing trial with Claregalway, TCD Uni of Dublin to start 2017, Reimagine Education Awards 2015 Shortlisted

SkillTrack! Capturing 21st Ce. Skills

- Thank you!
- Questions?

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