gamLA Brainstorm

A brainstorm on the main opportunities and threats in the field of gamification and learning analytics

INSTRUCTIONS

0 INTRODUCTION | GETTING TO KNOW EACH OTHER AND MURAL

Add a sticky note on the geographical location you are currently at.
Check out the board, wait for the instructions (led by Vero).

PEOPLE
15-25

TIME
2 min

1 INTRODUCTION | GETTING TO YOUR TEAM

First, add your first name to a sticky note one of the three groups, balance it out so there are more or less an equivalent number of partipants in each of the three groups (Pink - Green- Blue). Choose a nice shape and color of sticky note.

Second, look for the draw tool (pen icon on the left in the toolbox. Take turns (start from left to right based on the sticky notes) and draw the outline of the country of your nationality, and the logo of your affiliation (university or company).
The others should try to guess your country of origin and were you currently reside and your affiliation. When done, briefly summarize your research field.

PEOPLE
5 - 10

TIME
10-12 min

2 BRAINSTORM part 1 | How can learning analytics can contribute to the research field of gamification?

First, individually, take 3 minutes to think of different ways in which learning analytics can contribute to gamification. Write each of these down on different sticiky notes [3 min].

As a second step, in group, run over the different ideas and place them on the brainstorm board. Cluster those that belong tog [7 min]

As a final step, think of different labels for the clusters (the avenues) [5 min]

PEOPLE
5 - 10

TIME
15 min

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PEOPLE
5 - 10

TIME
15 min

0 INTRODUCTION | GETTING TO KNOW EACH OTHER AND MURAL

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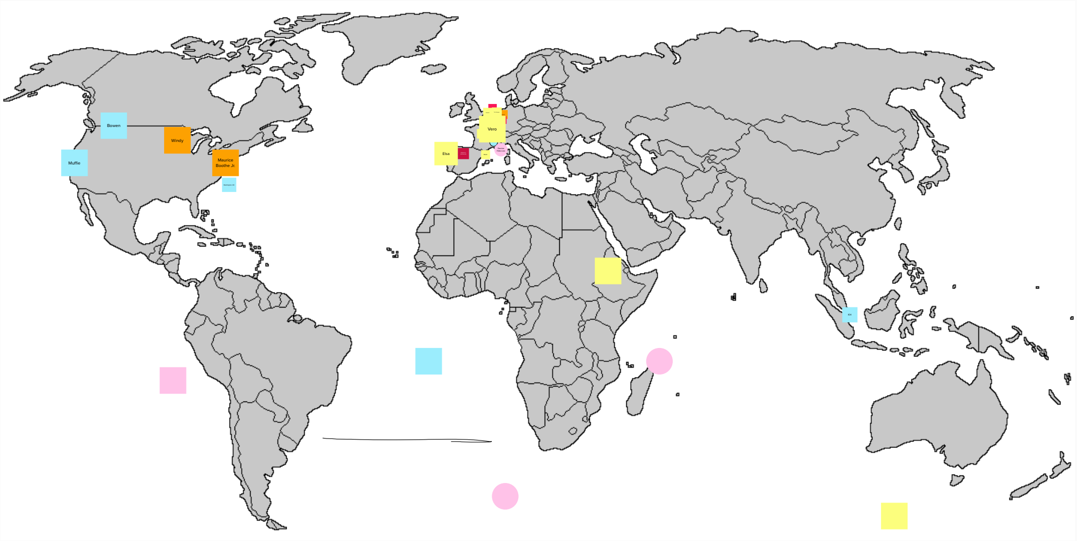
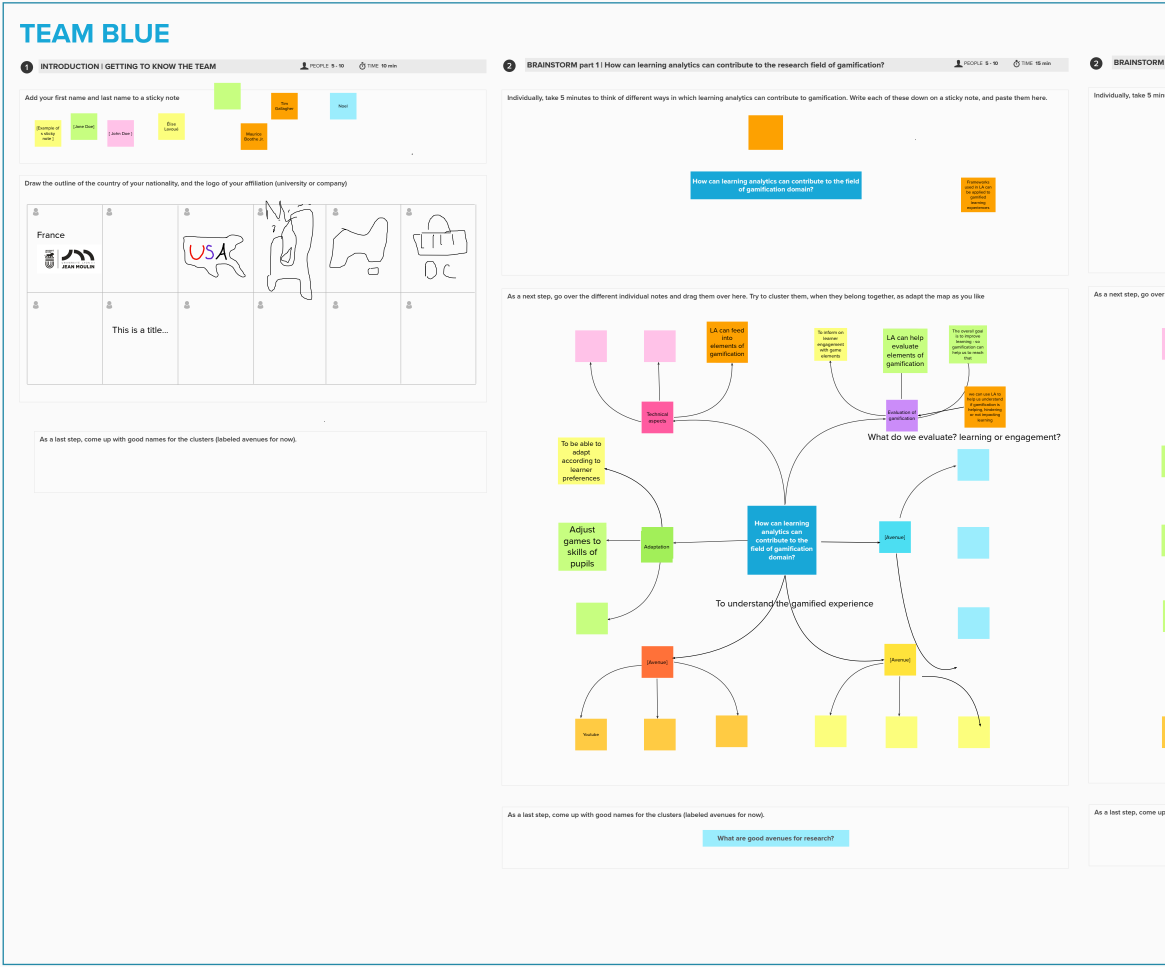

Bowen
Windy
Muffie
Maurice Boothe Jr.
Vero
Elsa



TEAM BLUE

1 INTRODUCTION | GETTING TO KNOW THE TEAM

PEOPLE **5 - 10** TIME **10 min**

Add your first name and last name to a sticky note

[Example of s sticky note]

[Jane Doe]

[John Doe]

Élise Lavoué

Maurice Boothe Jr.

Tim Gallagher

Noel

Draw the outline of the country of your nationality, and the logo of your affiliation (university or company)

France

JEAN MOULIN

USA

This is a title...

As a last step, come up with good names for the clusters (labeled avenues for now).

2 BRAINSTORM part 1 | How can learning analytics can contribute to the research field of gamification?

PEOPLE **5 - 10** TIME **15 min**

Individually, take 5 minutes to think of different ways in which learning analytics can contribute to gamification. Write each of these down on a sticky note, and paste them here.

How can learning analytics can contribute to the field of gamification domain?

Frameworks used in LA can be applied to gamified learning experiences

As a next step, go over the different individual notes and drag them over here. Try to cluster them, when they belong together, as adapt the map as you like

How can learning analytics can contribute to the field of gamification domain?

Technical aspects

LA can feed into elements of gamification

Evaluation of gamification

To inform on learner engagement with game elements

LA can help evaluate elements of gamification

The overall goal is to improve learning - so gamification can help us to reach that

we can use LA to help us understand if gamification is helping, hindering or not impacting learning

What do we evaluate? learning or engagement?

Adaptation

To be able to adapt according to learner preferences

Adjust games to skills of pupils

To understand the gamified experience

[Avenue]

Youtube

[Avenue]

[Avenue]

As a last step, come up with good names for the clusters (labeled avenues for now).

What are good avenues for research?

2 BRAINSTORM

Individually, take 5 min

As a next step, go over

As a last step, come up

part 2 | How can gamification can contribute to the research field of learning analytics?

PEOPLE **5 - 10** TIME **15 min**

utes to think of different ways in which learning analytics can contribute to gamification. Write each of these down on a sticky note, and paste them here.

How can gamification can contribute to the learning analytics domain?

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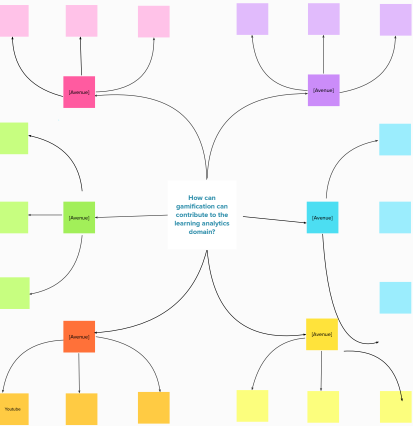


How can gamification can contribute to the learning analytics domain?

[Avenue]

[Avenue]

[Avenue]

[Avenue]

[Avenue]

[Avenue]

Youtube

with good names for the clusters (labeled avenues for now).

What are good avenues for research?

TEAM PINK

1 INTRODUCTION | GETTING TO KNOW THE TEAM

PEOPLE **5 - 10** TIME **10 min**

Add your first name and last name to a sticky note

[Example of s sticky note]

[Jane Doe]

[John Doe]

Annabell Brocker

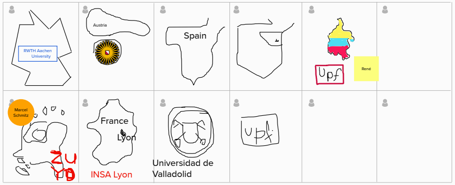
Devinia Hernández-Leo

Michaela Arztmann

Alejandro Ortega-Arranz

Audrey

Draw the outline of the country of your nationality, and the logo of your affiliation (university or company)


RWTH Aachen University
Austria
Spain
Upf
René
Marcel Schmitz
ZU YD
France
Lyon
INSA Lyon
Universidad de Valladolid
upf

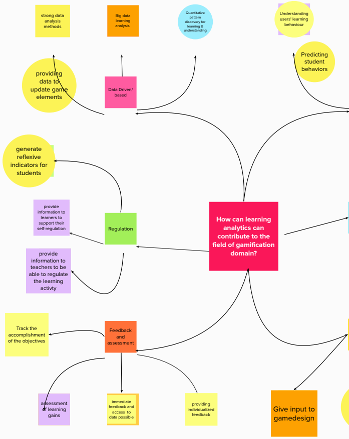
As a last step, come up with good names for the clusters (labeled avenues for now).

2 BRAINSTORM part 1 | How can learning analytics can contribute to the research field of gamification?

Individually, take 5 minutes to think of different ways in which learning analytics can contribute to gamification. Write each

How can learning analytics can contribute to the field of gamification domain?

As a next step, go over the different individual notes and drag them over here. Try to cluster them, when they belong togeth



How can learning analytics can contribute to the field of gamification domain?

Data Driven/ based

strong data analysis methods

providing data to update game elements

Big data learning analysis

Quantitative pattern discovery for learning & understanding

Understanding users' learning behaviour

Predicting student behaviors

Regulation

generate reflexive indicators for students

provide information to learners to support their self-regulation

provide information to teachers to be able to regulate the learning activty

Feedback and assessment

Track the accomplishment of the objectives

assessment of learning gains

immediate feedback and access to data possible

providing individualized feedback

Give input to gamedesign

As a last step, come up with good names for the clusters (labeled avenues for now).

What are good avenues for research?

TIME **15 min**

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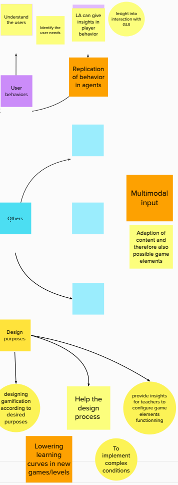
her, as adapt the map as you like


Understand the users
Identify the user needs
LA can give insights in player behavior
Insight into interaction with GUI
User behaviors
Replication of behavior in agents
Others
Multimodal input
Adaption of content and therefore also possible game elements
Design purposes
designing gamification according to desired purposes
Help the design process
provide insights for teachers to configure game elements functionning
Lowering learning curves in new games/levels
To implement complex conditions

2 BRAINSTORM part 2 | How can gamification can contribute to the research field of learning analytics?

TIME **15 min**

Individually, take 5 minutes to think of different ways in which learning analytics can contribute to gamification. Write each of these down on a sticky note, and paste them here.

How can gamification can contribute to the learning analytics domain?

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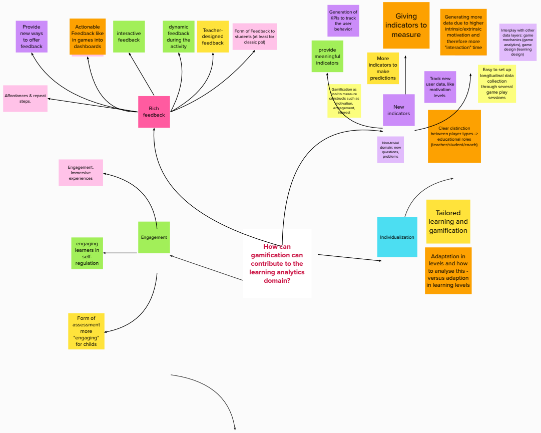

Provide new ways to offer feedback
Actionable Feedback like in games into dashboards
interactive feedback
dynamic feedback during the activity
Teacher-designed feedback
Form of Feedback to students (at least for classic pbl)
Affordances & repeat steps.
Rich feedback
Generation of KPIs to track the user behavior
Giving indicators to measure
Generating more data due to higher intrinsic/extrinsic motivation and therefore more "interaction" time
Interplay with other data layers: game mechanics (game analytics), game design (learning design)
provide meaningful indicators
More indicators to make predictions
Track new user data, like motivation levels
Easy to set up longitudinal data collection through several game play sessions
Gamification as tool to measure constructs such as motivation, engagement, interest
New indicators
Clear distinction between player types -> educational roles (teacher/student/coach)
Non-trivial domain: new questions, problems
Engagement, Immersive experiences
Engagement
engaging learners in self-regulation
Form of assessment more "engaging" for childs
How can gamification can contribute to the learning analytics domain?
Individualization
Tailored learning and gamification
Adaptation in levels and how to analyse this - versus adaption in learning levels

As a last step, come up with good names for the clusters (labeled avenues for now).

What are good avenues for research?

TEAM GREEN

1 INTRODUCTION | GETTING TO KNOW THE TEAM

PEOPLE **5 - 10**

Add your first name and last name to a sticky note

Stuart

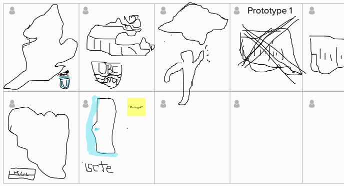
Elsa

VERO

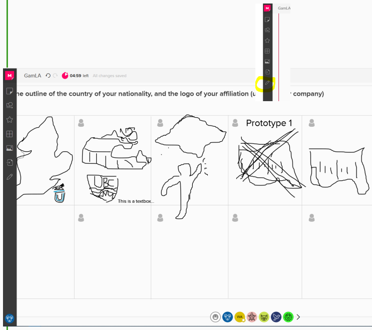
Kai Hui Ng

Windy Therior

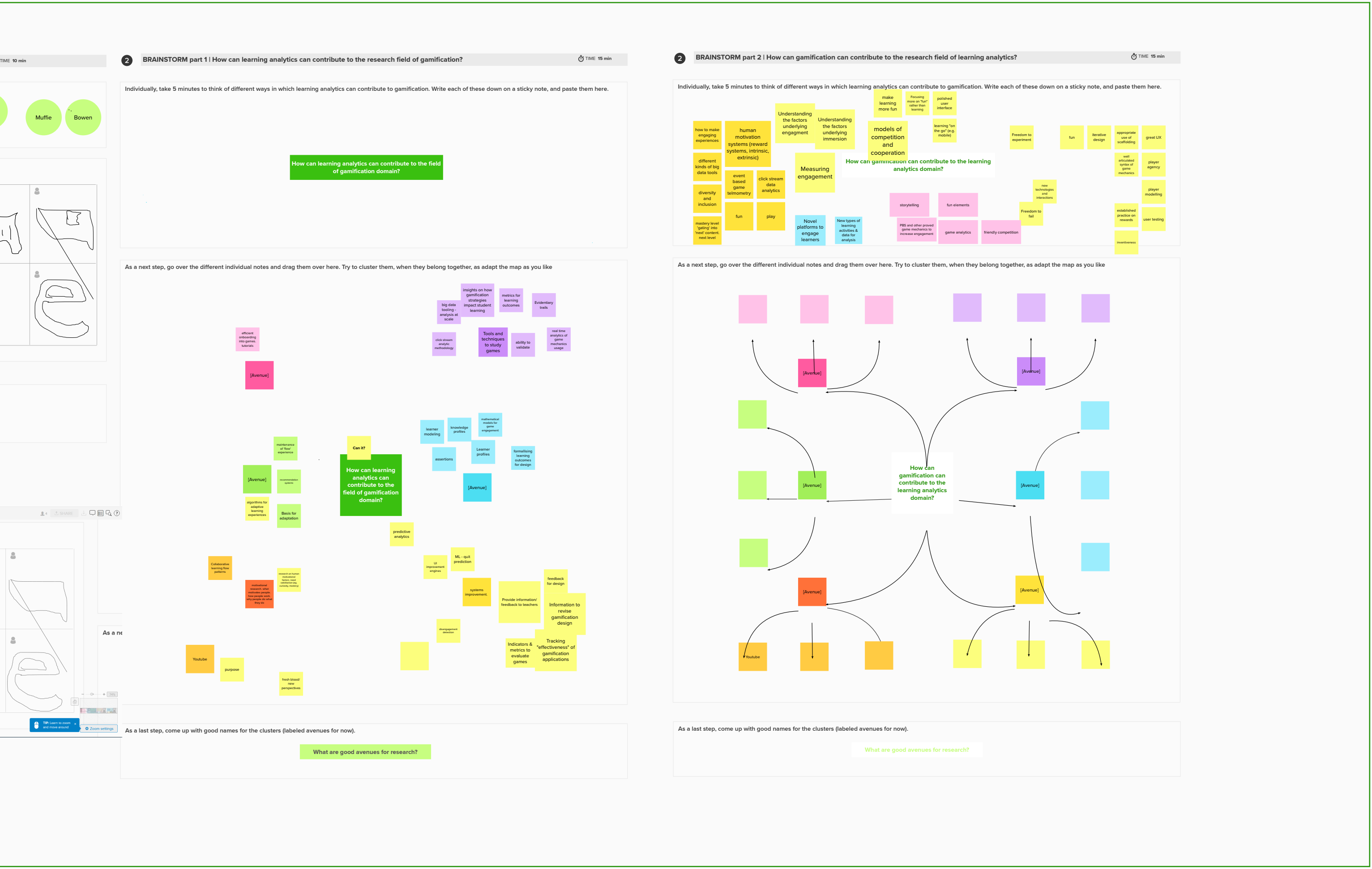
Draw the outline of the country of your nationality, and the logo of your affiliation (university or company)


Prototype 1
UBC
Portugal?
KUL
iscte

As a last step, come up with good names for the clusters (labeled avenues for now).


GamLA
GamLA
04:59 left
All changes saved
Prototype 1
This is a textbox...

he outline of the country of your nationality, and the logo of your affiliation (u company)



TIME **10 min**

Muffie

Bowen

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big data tooling - analysis at scale

insights on how gamification strategies impact student learning

metrics for learning outcomes

Evidentiary trails

click stream analytic methodology

Tools and techniques to study games

ability to validate

real time analytics of game mechanics usage

efficient onboarding into games. tutorials

[Avenue]

learner modeling

knowledge profiles

mathematical models for game engagement

assertions

Learner profiles

formallising learning outcomes for design

[Avenue]

maintenance of 'flow' experience

[Avenue]

recommendation systems

algorithms for adaptive learning experiences

Basis for adaptation

Can it?

How can learning analytics can contribute to the field of gamification domain?

predictive analytics

Collaborative learning flow patterns

motivational research. what motivates people. how people work. why people do what they do

research on human motivational factors. need satisfaction (eg. curiosity, mastery)

UI improvement engines

ML - quit prediction

systems improvement.

Provide information/ feedback to teachers

feedback for design

Information to revise gamification design

disengagement detection

Indicators & metrics to evaluate games

Tracking "effectiveness" of gamification applications

Youtube

purpose

fresh blood/ new perspectives

As a last step, come up with good names for the clusters (labeled avenues for now).

What are good avenues for research?

2 BRAINSTORM part 2 | How can gamification can contribute to the research field of learning analytics?

TIME **15 min**

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how to make engaging experiences

human motivation systems (reward systems, intrinsic, extrinsic)

Understanding the factors underlying engagment

Understanding the factors underlying immersion

make learning more fun

Focusing more on "fun" rather than learning

polished user interface

learning "on the go" (e.g. mobile)

models of competition and cooperation

How can gamification can contribute to the learning analytics domain?

different kinds of big data tools

event based game telmometry

click stream data analytics

Measuring engagement

diversity and inclusion

fun

play

mastery level 'gating' into 'next' content. next level

Novel platforms to engage learners

New types of learning activities & data for analysis

storytelling

fun elements

PBS and other proved game mechanics to increase engagement

game analytics

friendly competition

Freedom to experiment

new technologies and interactions

Freedom to fail

fun

iterative design

appropriate use of scaffolding

great UX

well articulated syntax of game mechanics

player agency

player modelling

established practice on rewards

user testing

inventiveness

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[Avenue]

[Avenue]

[Avenue]

How can gamification can contribute to the learning analytics domain?

[Avenue]

[Avenue]

[Avenue]

Youtube

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What are good avenues for research?

SHARE
TIP: Learn to zoom and move around
Zoom settings
74%
As a ne
As a last st