



University of St.Gallen

Transforming Student Mindsets: the power of serious gaming

Exploring innovative ways to integrate grand challenges/sustainability into teaching

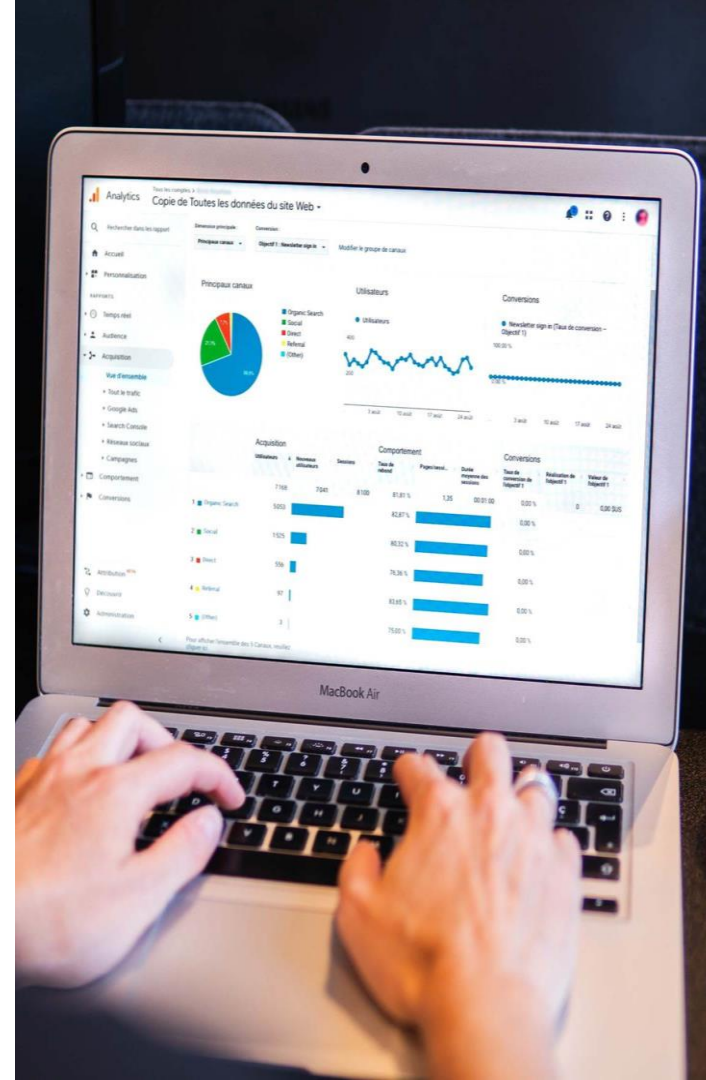
St.Gallen, 23. Mai 2023
Tag der Lehre



From insight to impact.

Agenda

1. Welcome: who are we?
2. Sustainability in teaching at HSG
3. Serious games concept & purpose
4. Use of serious games to integrate Sustainability into courses
 - *Inspiration from peers*
 - *More generally*
 - *Experience: Fish game*
5. Find a way for your own teaching
6. Wrap up
7. Next Steps

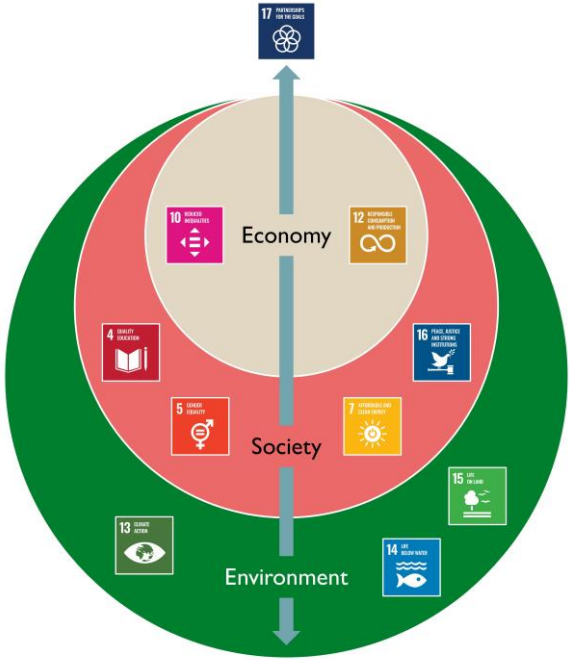
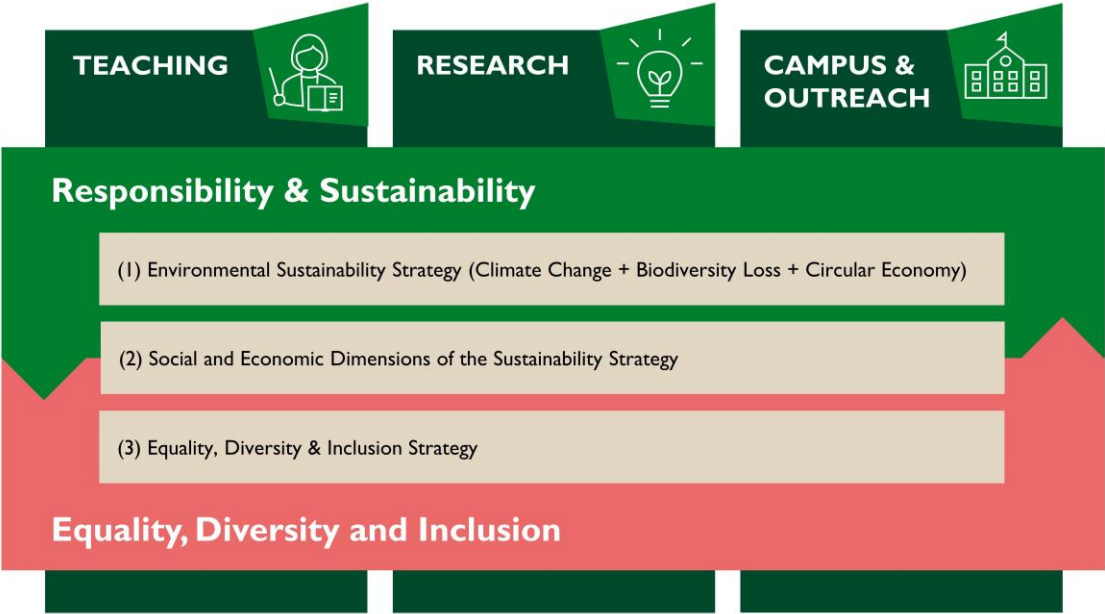


Who are we? Never have I ever...

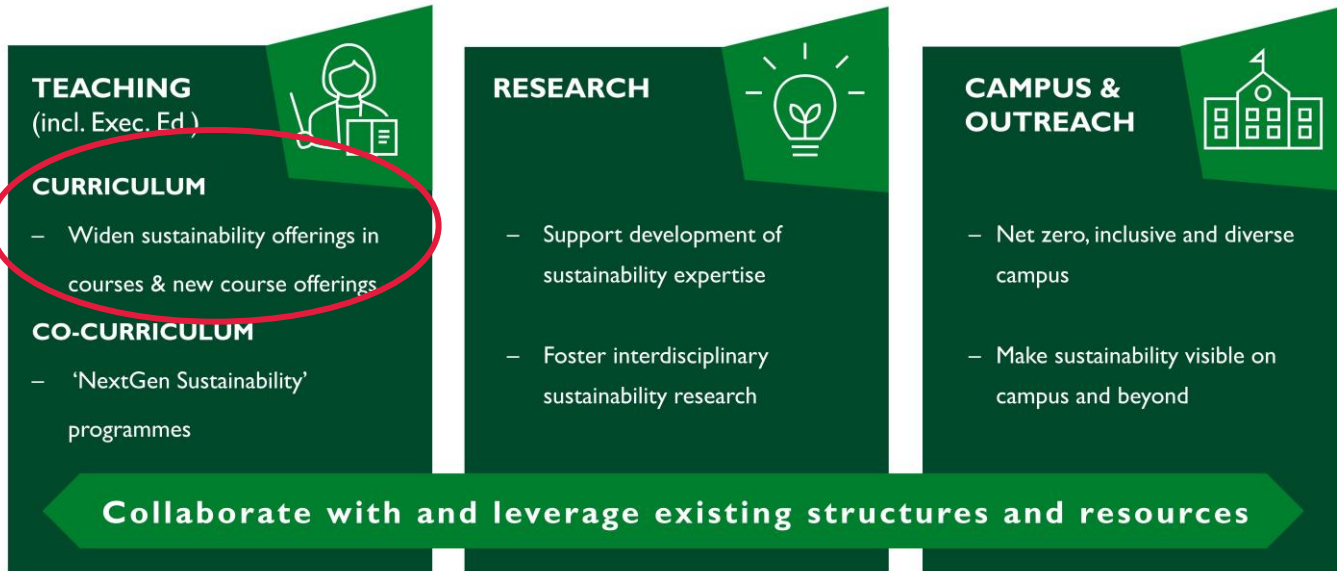


- Never have I ever played a game with a child just because I wanted to play it.
- Never have I ever wished to use serious or simulation games in my own education.
- Never have I ever used serious or simulation games in my own formal education.
- Never have I ever used serious or simulation games in my own informal education.
- Never have I ever used a serious or simulation game in my course.

Sustainability at HSG: from Insight to Impact



Sustainability at HSG: Goals of the sustainability strategy



Teaching Goal: Integrating responsibility & sustainability into all levels of education

R&S Team supporting programs & faculty to build up and build in sustainability content and (new) courses

Curriculum Development



- Widen course offerings
Encourage & accompany the creation of new courses on sustainability
- Collaboration with Program Managers
- To embed sustainability into programs (e.g. kick-off courses, core, mandatory electives, ...)
- Workshops for faculty/programmes
To integrate sustainability into existing courses (introductory, and follow ups)
- Integrated workshops
E.g with HDZ, Tag der Lehre, Mid Researchers Day, Sustainability Week, ...

Faculty Support



- R&S Team Support
 - Customized support for individual faculty
 - HDZ Seminar: Fostering Responsibility & Sustainability in Student Learning
 - *Online platform with materials, cases, simulations, best practices (SDSN/WWF)*
- Peer Support
 - “Rent a teacher” and co-teaching models
 - Peer network to exchange and facilitate development
- Student Support
 - Sustainability Teaching Analysis Poll
 - Slide deck analysis & suggestion of options
 - Sustainability Curriculum Innovation Lab

Serious games: concept & purpose

Definition: use of games for educational/learning purposes

Broad sense: serious games, simulation, game-based learning, gamification, ...

Use: educational institutions, companies, public institutions

Learning type: Experiential learning

Different forms:

- Role play
- Board games
- Digital games

What do students get out of learning via serious games?

- *More engaged in their learning process*
- *Better comprehension of the complexity*
- *Empathy*

What do lecturers get out of learning via serious games?

- *More interactive exchanges with the students*
- *Exciting & interesting*



Use of serious games to integrate Grand Challenges into courses

Get inspired from your peers

Anyone in the room with some experience?

Some examples:

- Climate Change Course and Model UNFCCC (CEMS Exclusive Course), *Pascal Vuichard & Hans Christoph Curtius*
- Brian accessible to all assessment year ([Brian \(unisg.ch\)](https://www.unisg.ch/brian)), *TIL*
- Technology: Digital Games – Business, Culture, Ethics (Contextual Studies), *Busch Thorsten*
- Responsibility: The Power of Games – How Simulation Games Can Foster Sustainability Transitions (Contextual Studies), *Merla Kubli & Andreas Gerber*
- Psychologie: Führung in Krisenzeiten (Contextual Studies), *Lucia Görke*
- Skills: Führung lernen – Praxisübung in Gender & Diversity, *Susanne Spüllbeck*

Do you know anyone else? Do you have other HSG examples?

Use of serious games to integrate Grand Challenges into courses

More Generally - Non Exhaustive List

- **Cards**

- Climate Fresk: [Climate Fresk](#)
- Circular Economy Pattern Cards: [The Circular Economy Pattern Cards – BMI Lab](#)

- **Escape Games**

- “60 Minutes to Save the World” Escape Room (ISSUE, EU financed project): [Issue Project \(issue-project.eu\)](#)
- “Unlock the Future” DIY Escape Game: [Home \(google.com\)](#)
- Instructions for running a sustainability themed escape room: [How-to-Run-a-Green-Escape-Room.pdf \(spark-educonferences.com.au\)](#)

- **Simulation games (online)**

- The World's Future [The World's Future - A Sustainable Development Goals game \(socialsimulations.org\)](#)
- The En-ROADS Climate Solutions Simulator [En-ROADS \(climateinteractive.org\)](#)
- Circular Economy Business Game [The Blue Connection: Circular Economy Business Game Simulation \(inchainge.com\)](#)
- Sustainable Business Simulation [Sustainable Business Simulation | Edumundo](#)
- The Trade off (ESG purpose/profit balance) [The Trade-off \(ft.com\)](#)

- **Simulation games (onsite)**

- Fish Game
- The Lego Serious Play Method [The LEGO® Serious Play® method – SeriousplayTraining](#)
- Improvisation Theater

- **Serious Games Platforms**

- [Social Simulations](#)
- [Games4Sustainability - Sustainability through serious games](#)
- [K20 LEARN \(ou.edu\)](#)



**You use/have tried
some serious
games?**

**Let us know about your
experience!**

Experience: Fish Game



EACH ROUND, THERE ARE UP TO 75 FISH IN THE SEA.



IN EACH ROUND, YOU FISH WITH YOUR TEAM.



**EACH ROUND, YOUR TEAM HAS 2 MINUTES TO DECIDE
HOW MANY FISH THEY WANT TO CATCH.**





WITHIN THE 2 MINUTES, EACH TEAM SUBMITS A BID BY WRITING THE NUMBER OF FISH THEY WANT TO TAKE OUT OF THE SEA COVERTLY ON TO A PIECE OF PAPER.

DURING THE PLENARY PHASE, WE WILL RANDOMLY DETERMINE THE ORDER OF FISHING.

AS LONG AS THERE ARE STILL FISH IN THE SEA, WE WILL DISTRIBUTE FISH TO YOU.

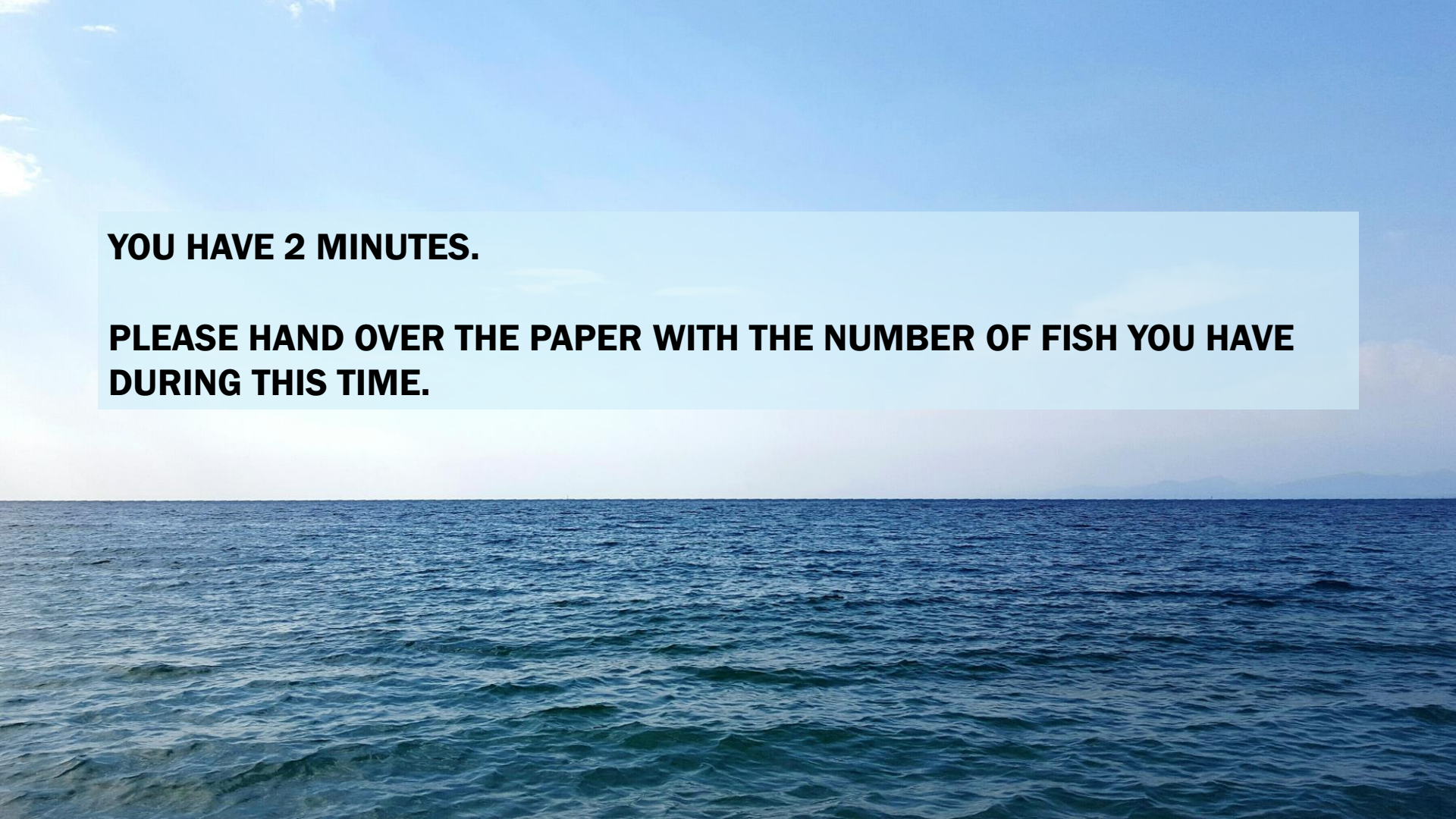
THOSE WHO WANT TO CATCH TOO MANY FISH WILL NO LONGER RECEIVE ANY.





AT THE END OF EACH ROUND, ALL THE FISH REMAINING IN THE SEA WILL BE DOUBLED.

FOR EXAMPLE, 5 FISH WILL BECOME 10, AND 20 FISH WILL BECOME 40. THE MAXIMUM CAPACITY OF THE SEA IS 75.



YOU HAVE 2 MINUTES.

**PLEASE HAND OVER THE PAPER WITH THE NUMBER OF FISH YOU HAVE
DURING THIS TIME.**

Debriefing (where the magic happens)





Your experience

- How was your experience?
- Who has won?
- Who has lost?



Find a way for your own teaching



Exchange in small groups

Wrap up

Takeaway(s) for your own teaching/learning



Next Steps



St Gallen Strategy Days (SQUARE)
June 1st & 2nd, 2023



Introduction to “Serious Gaming” &
Game Design Workshop (SQUARE)
June 29th, 2023, full day



Climate Fresk Facilitator Training
Biodiversity Fresk Facilitator Training
Fall 2023



Explore the tools - *Self Pace, ongoing*

Thank You.

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Akkreditierungen



Back up

(to not publish online)

Facilitator: Script

1. Welcome: who are we? - 5 min
2. Sustainability in teaching at HSG (brief input) - 5 min
3. Serious games concept & purpose (brief input: simulation, game based learning, gamification) (what students get out of using this: more engaged in their learning process; different format for different usage and teaching styles)- 5min
4. Use of serious games to integrate Sustainability into courses
--> Get inspired from your peers: Already being used at HSG by some faculty (show the examples) in the room/on slides (SQUARE, strategy days, prof Freyburg (course comparative politics : creation of a taboo), Merla course, Brian for assessment year, lucia (leadership in crisis: role play), Climate fresk (training for HSG) + Julia prof to check. Do you know anyone else? Do you have other HSG examples? - 10 min
--> More generally ([K20 LEARN | Home \(ou.edu\)](https://www.k20learn.org/home)), available options: NBS + list co created - 5 min (ask Fiona)
--> Experience: Fish game – 40min (Niklas, Fiona)
5. Find a way for your own teaching (Niklas/Fiona handover to Clementine)- 10min
--> Exchange in small groups
6. Wrap up (reflection on their own take away on post it? 1 idea per post it) (Niklas) - 10min
7. Contact us: Niklas/Fiona Co organizer of strategy days; Clementine

Room setting: chair in rounds + move the chairs the way you need for small group talks