

For results of the workshop see:  
<https://app.conceptboard.com/board/9xxp-067f-bxpt-qi35-4icg>

# How to foster Future Skills in independent learning phases?

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Christian F. Freisleben-Teutscher, Anita Kidritsch

Please write a name tag:

**Choose a green card:** „when you mainly teach“

**Choose a blue card:** „when you're mainly in teaching support“

Please add the following information:

Your name

Where do you work?

Your position

And on the back some of your projects you find interesting to share

# Speakers



**Gerlinde Koppitsch**

- Lecturer for English in the Engineering and IT degree programmes
- Fachhochschule Kärnten



**Prof. Dr. Katja Wengler**

- Professor of Business Informatics
- Duale Hochschule Baden-Württemberg



**Judith Hüther**

- Head of Blended Learning Centre
- Fachhochschule Graubünden



**Iris Neiske**

- Working in Higher Education Unit specialising in digital teaching
- Universität Paderborn

unfortunately absent



**Dr. Christian F. Freisleben-Teutscher**

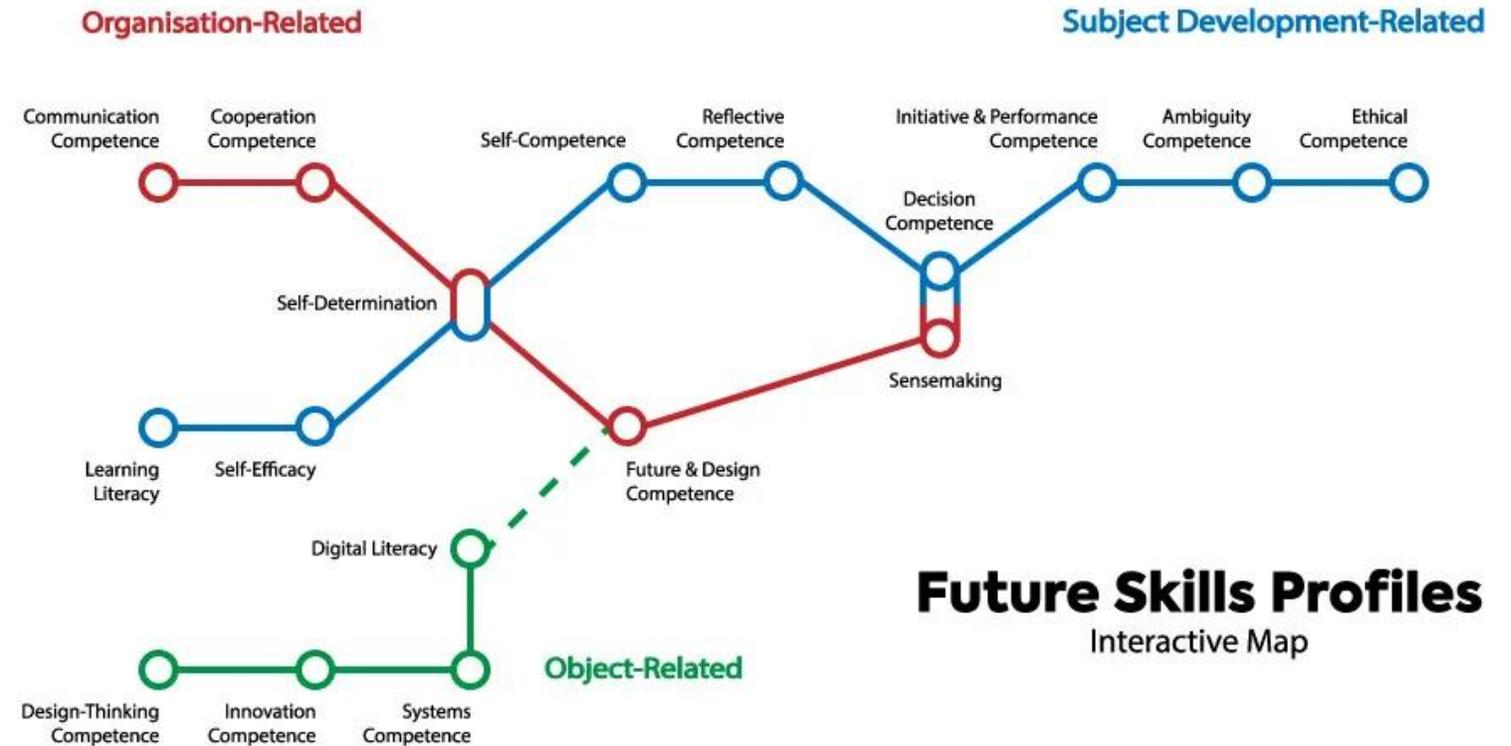
- Freelancer Higher Education Development
- [www.Improflair.at](http://www.Improflair.at)



**Anita Kidritsch**

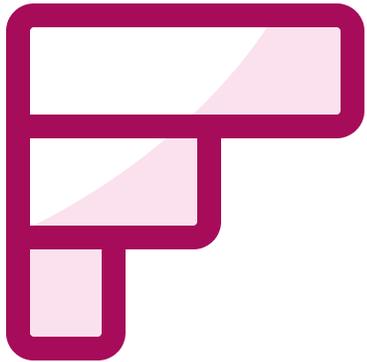
- Lecturer in the physiotherapy and digital healthcare degree programmes, physiotherapist
- Fachhochschule St. Pölten

# What are the skills student need to learn to be successful in independent learning phases?



**Future Skills Profiles**  
Interactive Map

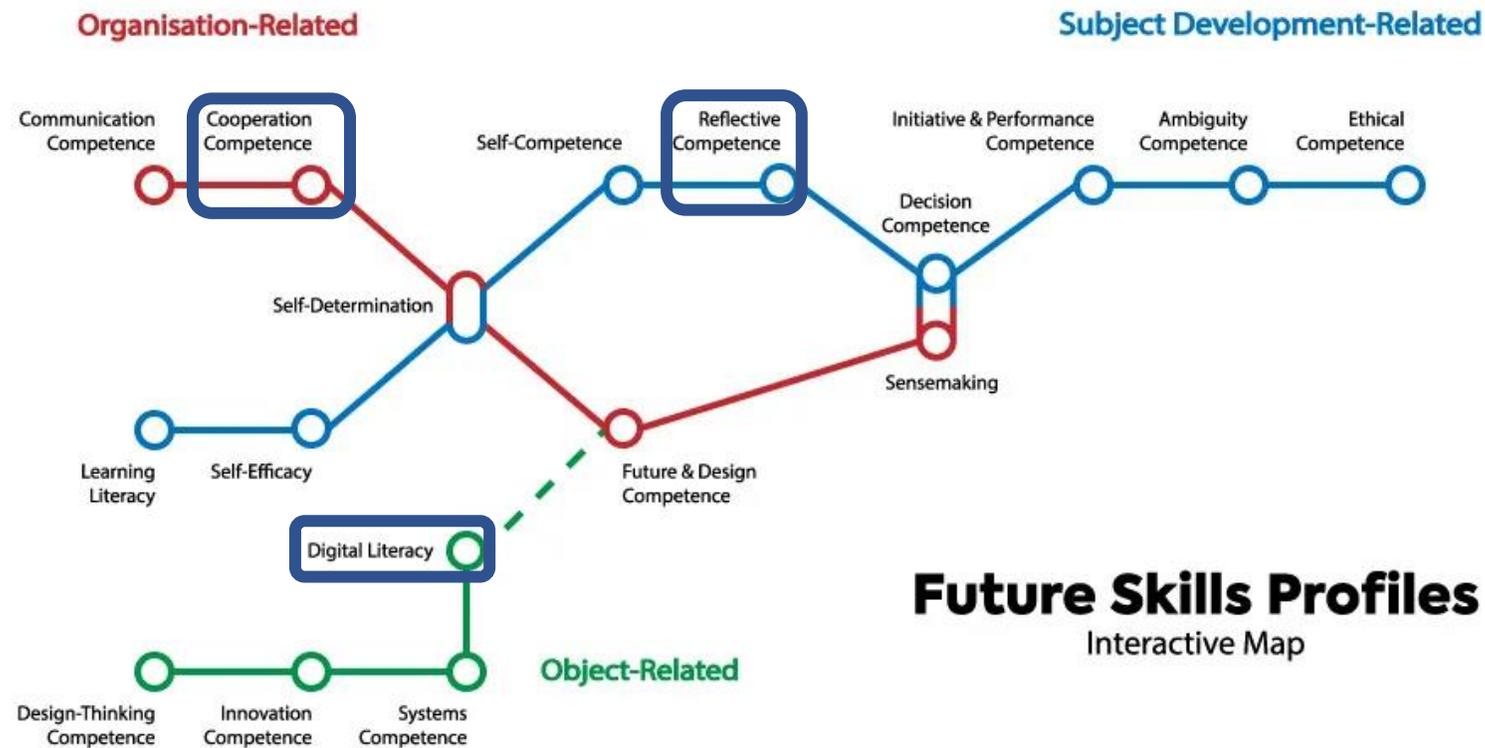
slido



**What are the skills you would focus on?**

ⓘ Start presenting to display the poll results on this slide.

# What are the skills student need to learn to be successful in independent learning phases?



## Cognitive

### Critical thinking

- Structured problem solving
- Logical reasoning
- Understanding biases
- Seeking relevant information

### Planning and ways of working

- Work-plan development
- Time management and prioritization
- Agile thinking

### Communication

- Storytelling and public speaking
- Asking the right questions
- Synthesizing messages
- Active listening

### Mental flexibility

- Creativity and imagination
- Translating knowledge to different contexts
- Adopting a different perspective
- Adaptability
- Ability to learn

## Interpersonal

### Mobilizing systems

- Role modeling
- Win-win negotiations
- Crafting an inspiring vision
- Organizational awareness

### Developing relationships

- Empathy
- Inspiring trust
- Humility
- Sociability

### Teamwork effectiveness

- Fostering inclusiveness
- Motivating different personalities
- Resolving conflicts
- Collaboration
- Coaching
- Empowering

## Self-leadership

### Self-awareness and self-management

- Understanding own emotions and triggers
- Self-control and regulation
- Understanding own strengths
- Integrity
- Self-motivation and wellness
- Self-confidence

### Entrepreneurship

- Courage and risk-taking
- Driving change and innovation
- Energy, passion, and optimism
- Breaking orthodoxies

### Goals achievement

- Ownership and decisiveness
- Achievement orientation
- Grit and persistence
- Coping with uncertainty
- Self-development

## Digital

### Digital fluency and citizenship

- Digital literacy
- Digital learning
- Digital collaboration
- Digital ethics

### Software use and development

- Programming literacy
- Data analysis and statistics
- Computational and algorithmic thinking

### Understanding digital systems

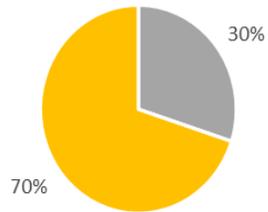
- Data literacy
- Smart systems
- Cybersecurity literacy
- Tech translation and enablement

DELTA - Distinct Elements of Talent  
(McKinsey & Company 2021)

# We focused on these three skills

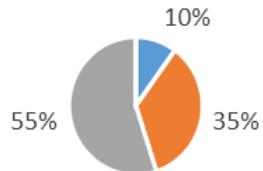
## Teamwork - results WS 22/23

I prefer pair/group work to individual activities in class.



■ strongly disagree ■ somewhat disagree ■ somewhat agree ■ strongly agree

I prepare/study for this course together with my classmates.



■ strongly disagree ■ somewhat disagree ■ somewhat agree ■ strongly agree

## Critical thinking

“With rapid information flows and lightning-fast AI tools being used to create content we must take personal responsibility to question everything! An emotional trigger, coupled with confirmation bias and a lack of research is something to take very seriously.“ (Schooler 2023)

## Digital literacy - the ‘Digital native myth’

- Frequent use of technology equals advanced technological skills.
- The Generation Z are digital natives and, therefore, have competency in this area.
- Competency in digital technology implies competency in critical thinking and the ability to discern correct answers from information gathered.

(Wolstencraft & Zhou 2020, Western Sydney University)

# Teamwork - Cooperation Competence

## What is needed:

- Ability to collaborate in person or digitally in intercultural groups
- Helping the team to move forward
- Making constructive contributions in and outside of team meetings
- Respectful behavior
- Solving conflicts

## Findings:

- HowTo / Behaviour known
- Little structured
- No clear allocation of roles
- Learn from others (views and errors)

I AM PART OF A LEARNING GROUP  
(1. SEM, DHBW, 2023)



# Teamwork - survey results WS 2023/24

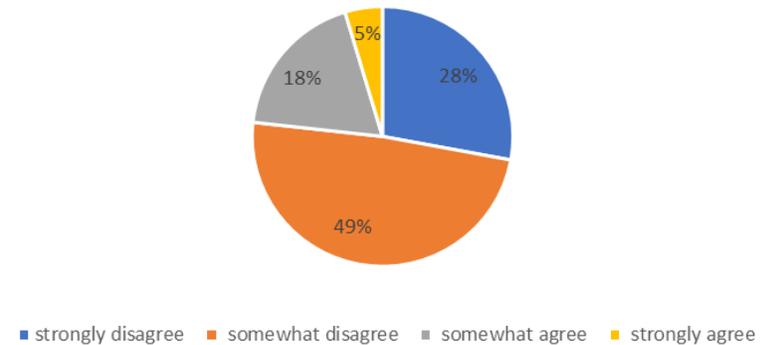
## “What is good teamwork?”

- + sharing opinions
- + being able to discuss
- + teamwork that goes further than organising a workflow
- + to use the strength of everyone in the group
- + To make impossible things possible
- + discuss the topics in a group
- + When everyone contributes equal value to the team.
- + everyone is working together

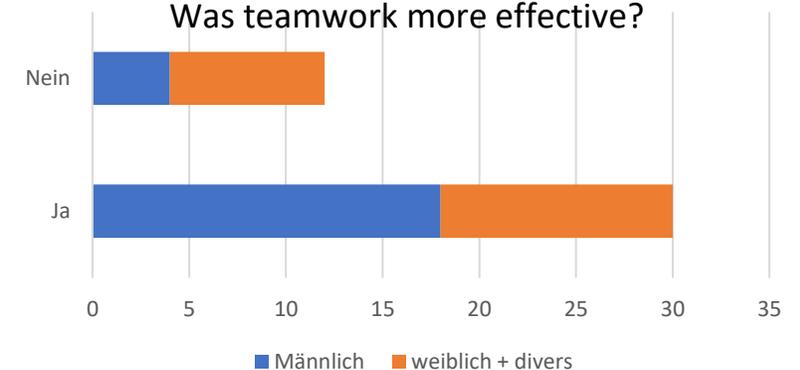
## “What is important when working in a team?”

- + to be open for other opinions
- + Good communication
- + Listen to everyone and help together
- + That everyone participates
- + Respect, Patience
- + To work and not wait for the other person to do everything
- + Good group dynamics
- + dividing the tasks and making sure that everybody knows what he has to do

I profit from teamwork more than from individual work. (43 students, English 1 & 3)



Was teamwork more effective?



# Critical thinking - survey results

“Critical thinking means...”

- Asking questions
- Finding new solutions
- Questioning the source of information
- Analyzing and evaluating
- Discussing and thinking about things from different perspectives
- (Self-)reflecting
- Having an open mindset

10 of 76 Students answered,  
**yes**, I do reflect the work  
done in teamwork afterwards

“The process of critical thinking involves...”

- taking risk of offending others
- asking questions about sources of information
- Developing your own arguments
- Overthinking and criticizing
- Evaluating information
- Thinking outside the box

*Is the ability ‘knowing about & describing critical thinking skills’ comparable to ‘**having and applying**’ such skills?  
How do we measure that?*

# Digital (information) literacy

- Ability to use digital media in a reflective and informed way
- Taking into account both its potential and limitations.
- Assess the credibility and reliability of AI-generated information
- Knowledge about digital media
- Competencies to critically apply and communicate
- Connected to information literacy, the ability to effectively identify, evaluate, and use information



# Digital literacy, survey results

<i>When studying for a subject, I use the following software tools to help me with my learning:</i>	<i>English 1</i>	<i>English 3</i>
Google/other search engines	11	2
(Youtube) videos	4	3
ChatGPT and other AI	2	6
Word	2	
quizlet	1	
Deutschewelle	1	
anki	1	
GoodNotes	1	
Notion	1	
learning card app	1	
LTSpice (Electronics)	1	
GoodNotes	1	
Wikipedia	1	
Google scholar		1
Fusion 360		1
Microsoft Journal		1
Imprint		1

<i>When writing a text, I use the following software tools to improve/edit my writing:</i>	<i>English 1</i>	<i>English 3</i>
Word (spellchecker)	6	2
Google translate	4	2
DeepL	4	
bilingual dictionary (leo)	3	3
ChatGPT/AI	3	2
synonym websites	2	
Monolingual dictionary (Cambridge)	1	1
grammaly	1	2
Internet/Google	1	1

“there tends to be more diversity of technological skills within age groups than there is between them“  
(Western Sydney University)

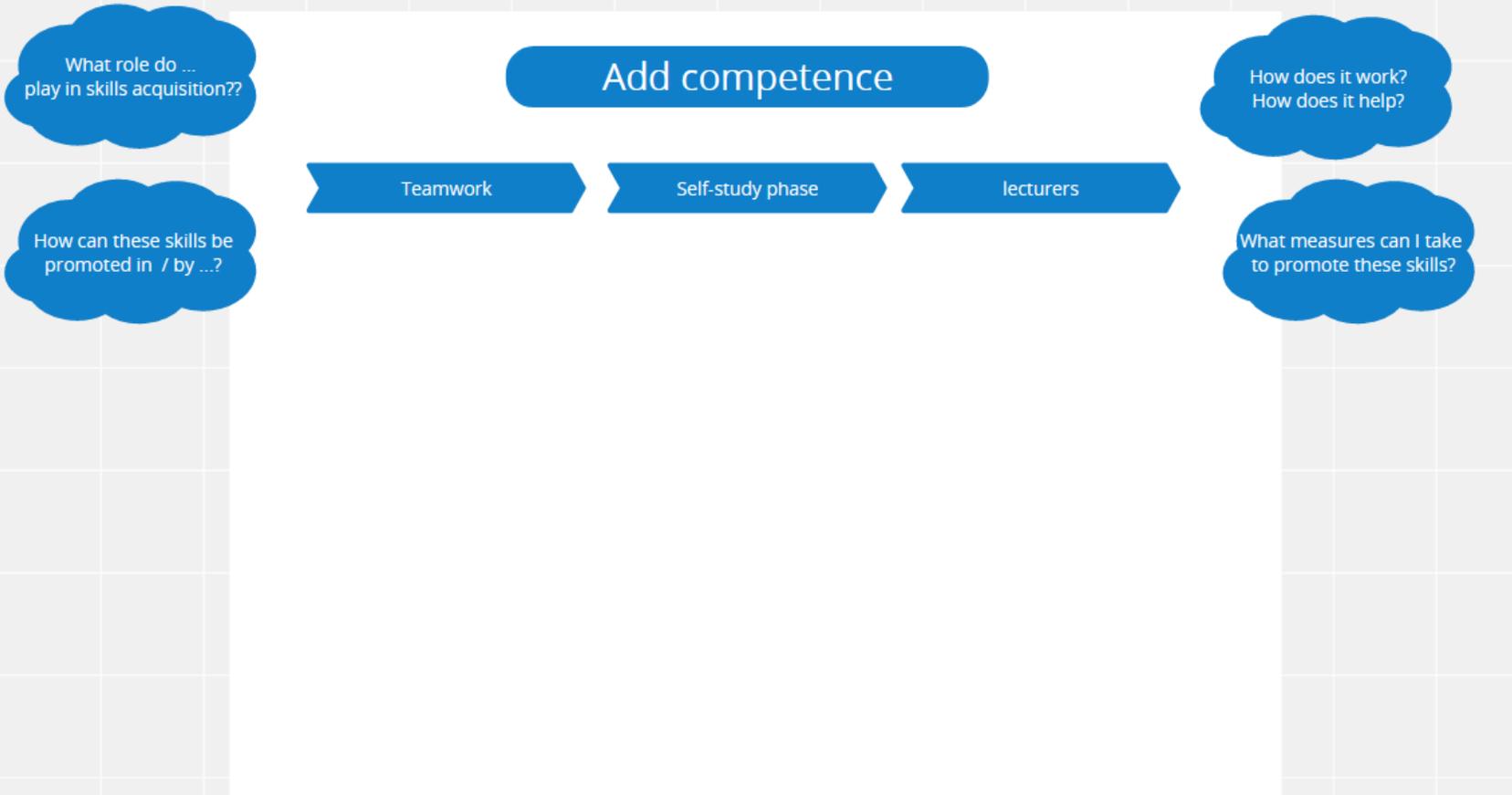
We also asked the students, whether they need any support using these tools? Mostly: **NO**

Select a competence you want to work on in the next 20 minutes



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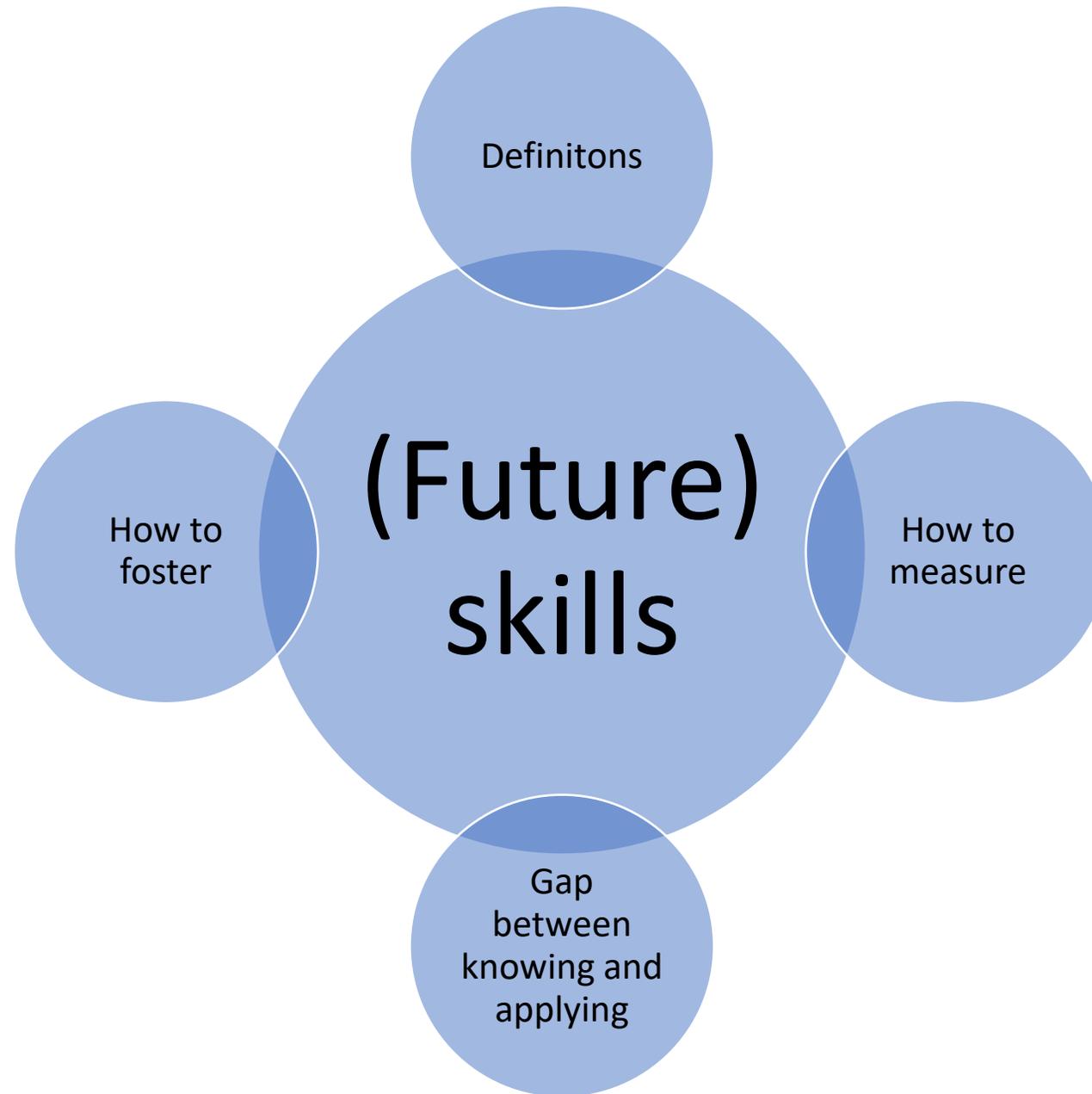
# Groups / Workshop



Surprises?  
Please share them  
on the board...



# Wrap Up



# References

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Gerlinde Koppitsch, Katja Wengler, Iris Neiske und Christian F. Freisleben-Teutscher, Gestaltung von Selbstlernphasen zur Förderung von Student Engagement in Proceedings Inverted Classroom and beyond 2023.

Katja Wengler, Judith Hüther, Anita Kidritsch, Gerlinde Koppitsch, Christian F. Freisleben-Teutscher, Jörg Riedel, Sind meine Studierenden 'engaged' bzw. wie lassen sich meine Studierenden zu mehr Student Engagement anregen? in Proceedings Inverted Classroom and beyond 2022.