SELF ASSESSMENT FOR SUPPORTING LEARNING IN FABLABS & MAKERSPACES

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TEACH STEM

"THE BIG 7"
COMPETENCES FOR SUPPORTING LEARNING IN FABLABS AND MAKERSPACES

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COMPETENCES FOR SUPPORTING LEARNING IN FABLABS AND MAKERSPACES

- Stimulate problem solving

- Stimulate creativity

- Stimulate ritical thinking

- Stimulate group work

- Stimulate entrepeneurship

- Technology use

- Teaching in informal learning environments

ARTIFEX OBJECTIVE (IO.2)

Provide feedback to teachers and educators on their competences to support their students' learning in the context of Fablabs and MakerSpaces

YES
- Competences of teachers
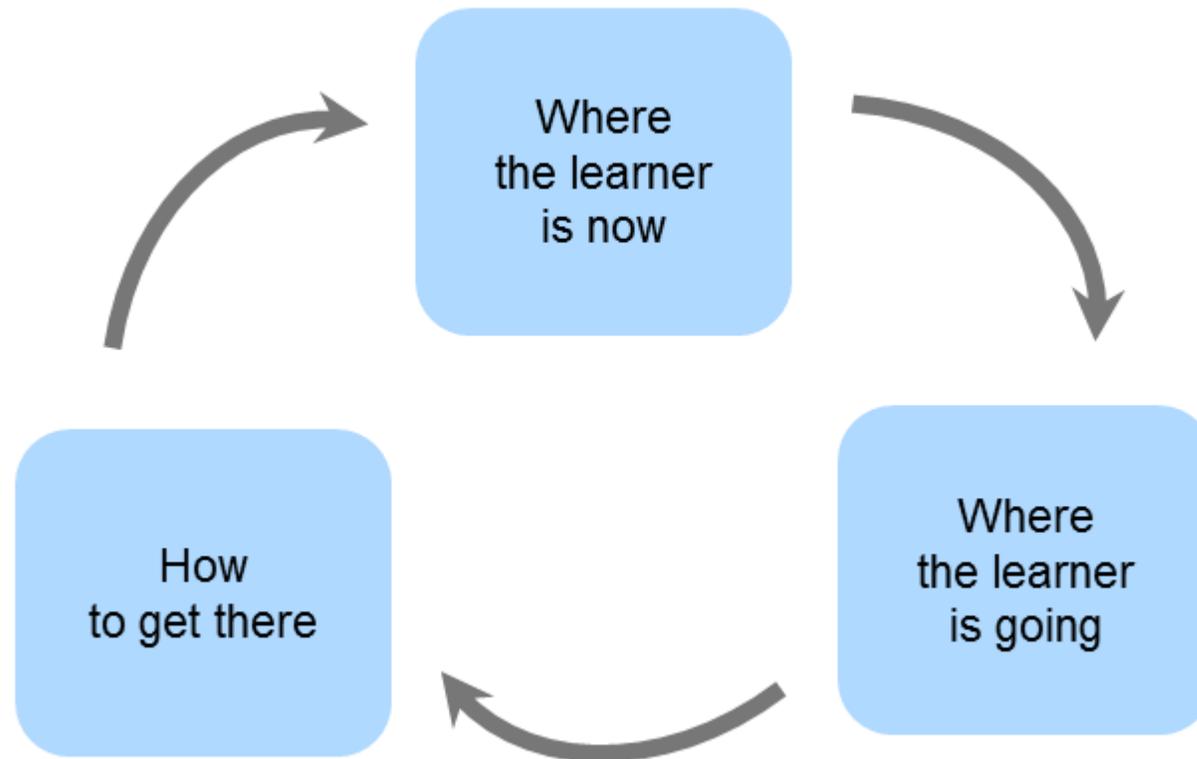- Focus on teaching
- Focus on teacher and educator learning

NO
- Competences of students
- Focus on student learning

ASSESSMENT FOR LEARNING

DEFINITION

Assessment for learning (AFL) is an approach to teaching and learning that creates feedback which is then used to improve learners' performance. Learners become more involved in the learning process and from this gain confidence in what they are expected to learn and to what standard.
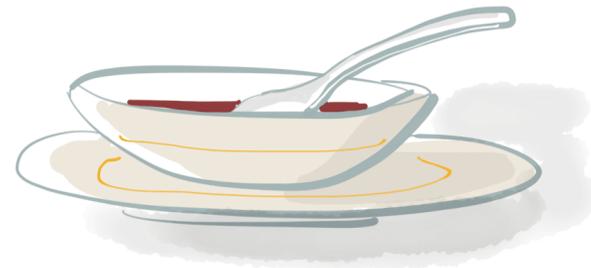
ASSESSMENT FOR LEARNING

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	Summative	**Formative**
Formal	• Tests • Exams • Essays in controlled conditions	• Further analysis of test, exams, essays • Target setting
Informal	• Portfolio • Coursework • Essays in uncontrolled conditions • Teacher assessment	• Questioning • Feedback • Peer-assessment • Self-assessment

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THE ARTIFEX ONLINE PLATFORM

TEACH STEM

TEACHERS & EDUCATORS

SELF-ASSESSMENT **TOOL**

If you have already used the TeachSTEM self-assessment tool and kept your unique personal code, you can enter it here and go directly to your previous results. Alternatively, you can go through the self-assessment process again. Perhaps you made progress since last time?

Let's check it out!

enter code here
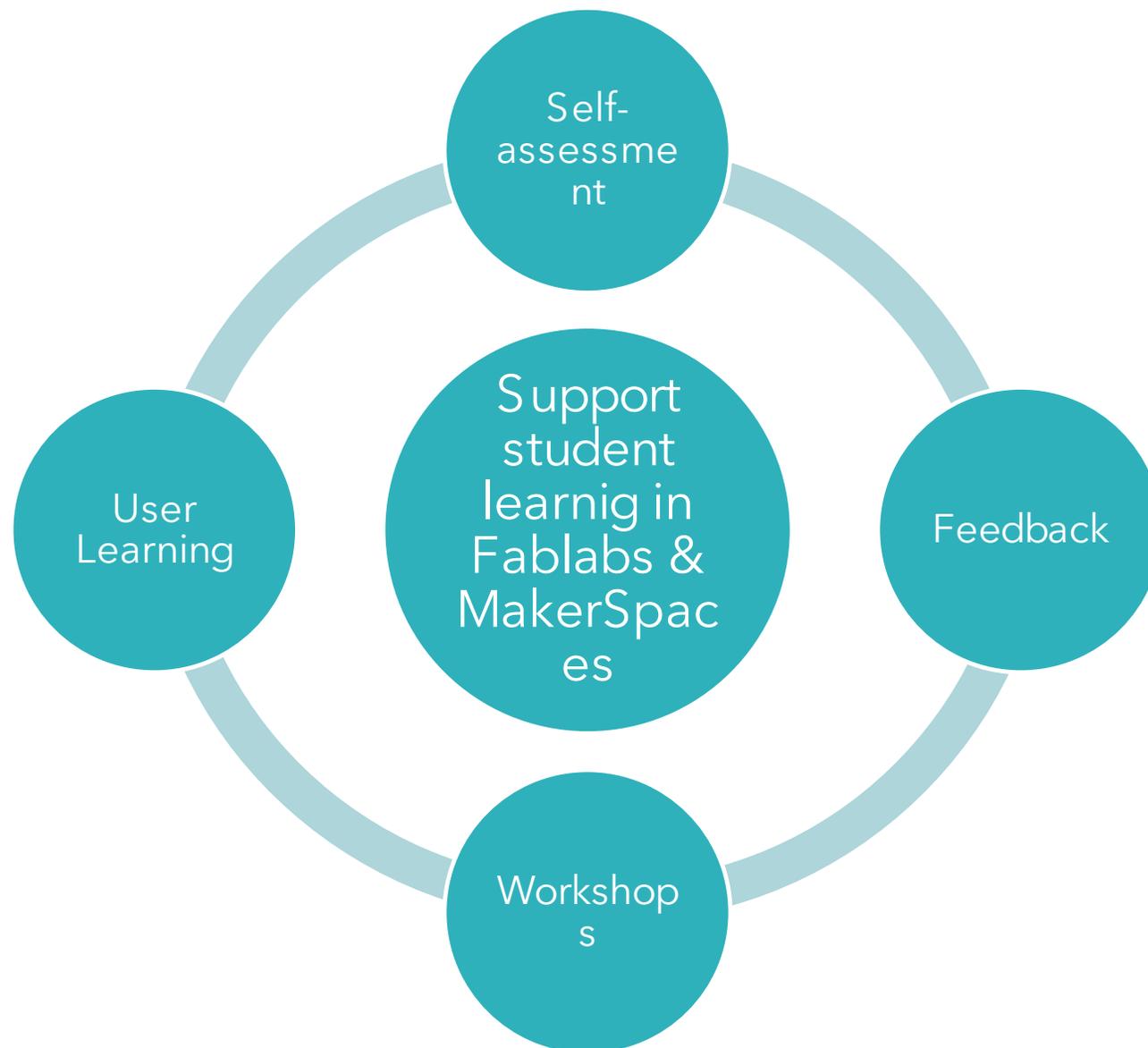
VIEW RESULTS

SELF-ASSESSMENT OF WHAT?

Self-efficacy is a *personal judgment* of "how well one can execute courses of action required to deal with prospective situations".

Individuals who have **high** self-efficacy will exert sufficient effort that, if well executed, leads to successful outcomes, whereas those with **low** self-efficacy are likely to cease effort early and fail.

Self-Efficacy

SOURCES OF SELF-EFFICACY

Social persuasion (coaching and feedback)

Vicarious experience (observed experiences or modeling by others)

Imaginal experience (visualizations of future success)

Performance experience (past experiences)

Self-Efficacy

Physical and emotional states (experience of physical and emotional sensations)

OUR GOALS FOR THIS MEETING

- Share our state-of-affairs ✓
- Get feedback on preliminary results ✓
- Try out self-assessment through life-prototyping
- Involve stakeholders (you) in further development of online learning platform
- Explore how and why to connect feedback from self-assessment to workshop selection
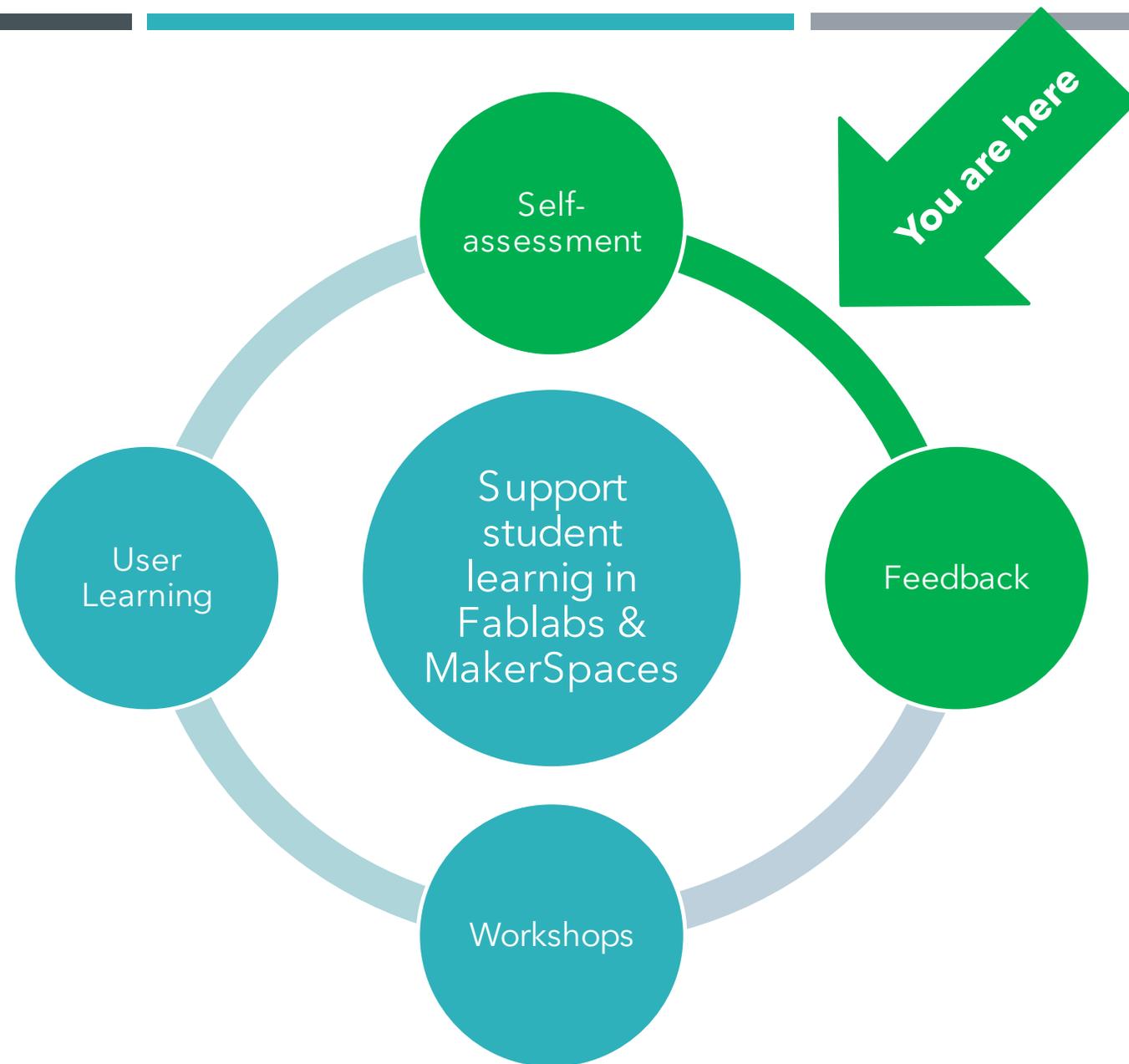
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OUR GOALS FOR THIS MEETING

- Share our state-of-affairs ✓

- Get feedback on preliminary results ✓

- Try out self-assessment through life-prototyping

- Involve stakeholders (you) in further development of online learning platform

- Explore how and why to connect feedback from self-assessment to workshop selection
  - Step 1 : Individual try out and reflections
  - Step 2 : Small group discussions
  - Step 3 : Plenary discussion
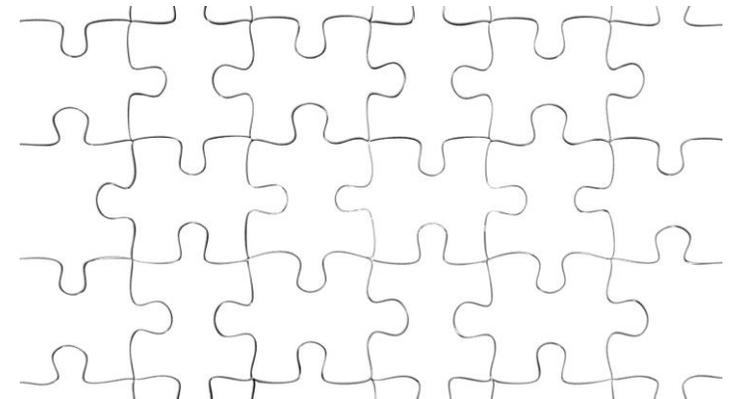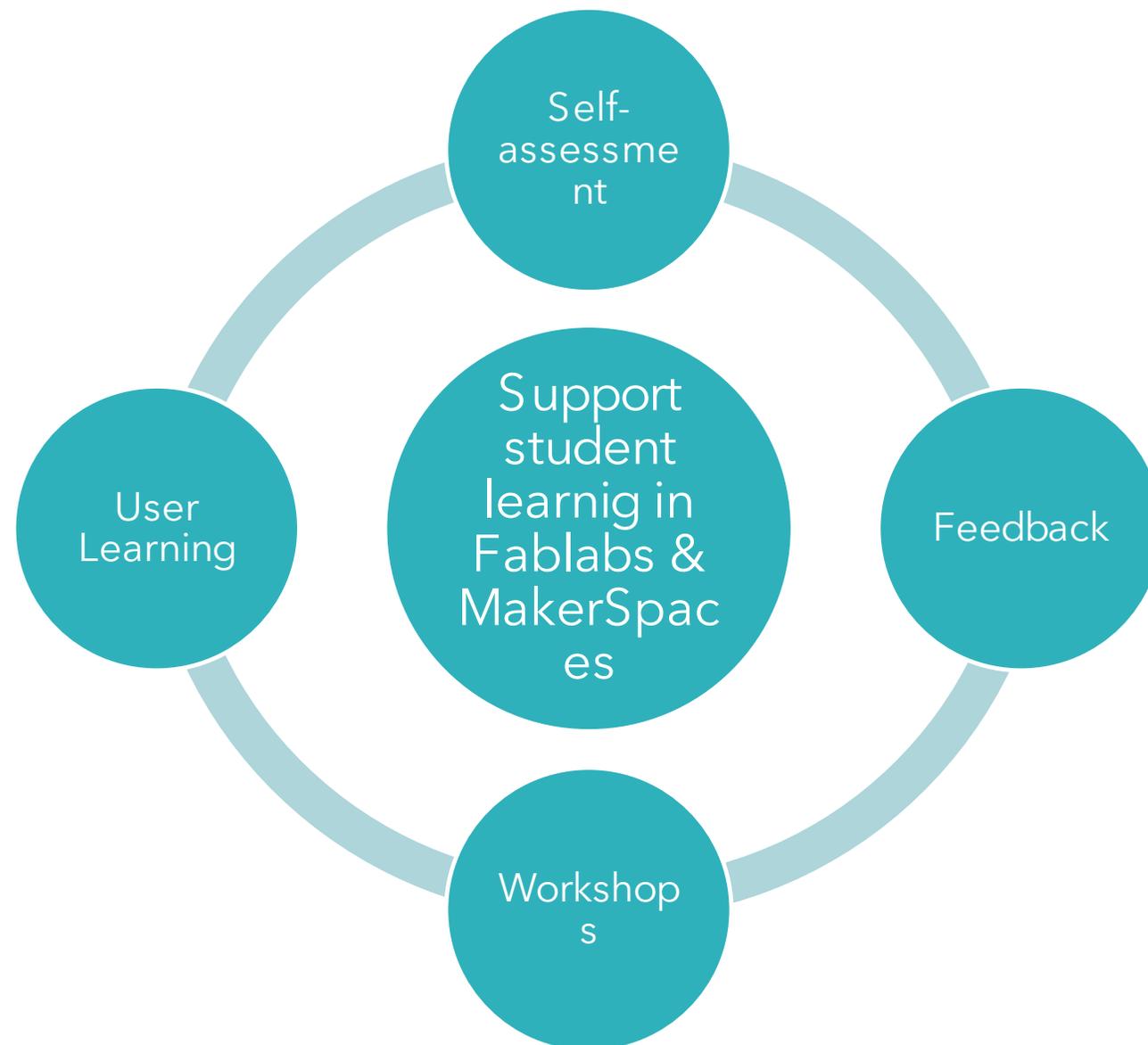
SAMPLE RUN OF THE ARTIFEX SELF-ASSESSMENT

I have confidence in how to…

Teach students about problem-solving

○ strongly disagree   ○ disagree   ○ agree   ○ strongly agree

Use activities in teaching stimulating students' creativity

○ strongly disagree   ○ disagree   ○ agree   ○ strongly agree

Teach students about critical and analytical thinking

○ strongly disagree   ○ disagree   ○ agree   ○ strongly agree
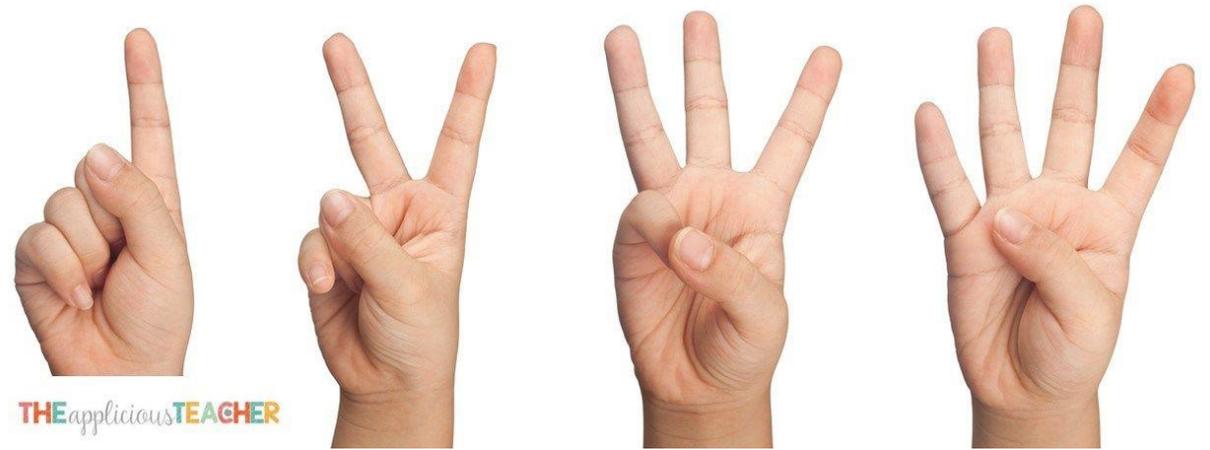
Use activities in which students work in groups

○ strongly disagree   ○ disagree   ○ agree   ○ strongly agree

Provide students with tasks that have no right answer

○ strongly disagree   ○ disagree   ○ agree   ○ strongly agree

## FOUR FINGER SCALE
Self-rating hand signal

THEappliciousTEACHER

SAMPLE RUN OF THE ARTIFEX SELF-ASSESSMENT

Scoring self-efficacy:	My results	Average results*
Problem solving	2.67	3.29
Creativity	2.67	3.28
Critical thinking	2.67	3.17
Group work	3.00	3.24
Entrepreneurship	2.50	3.14
Technology use	3.08	2.31
- of teacher	3.50	2.15
- stimulating students' use	2.88	2.40
Teaching in Informal learning environment	3.22	3.02

* Average results from 381 self-assessments
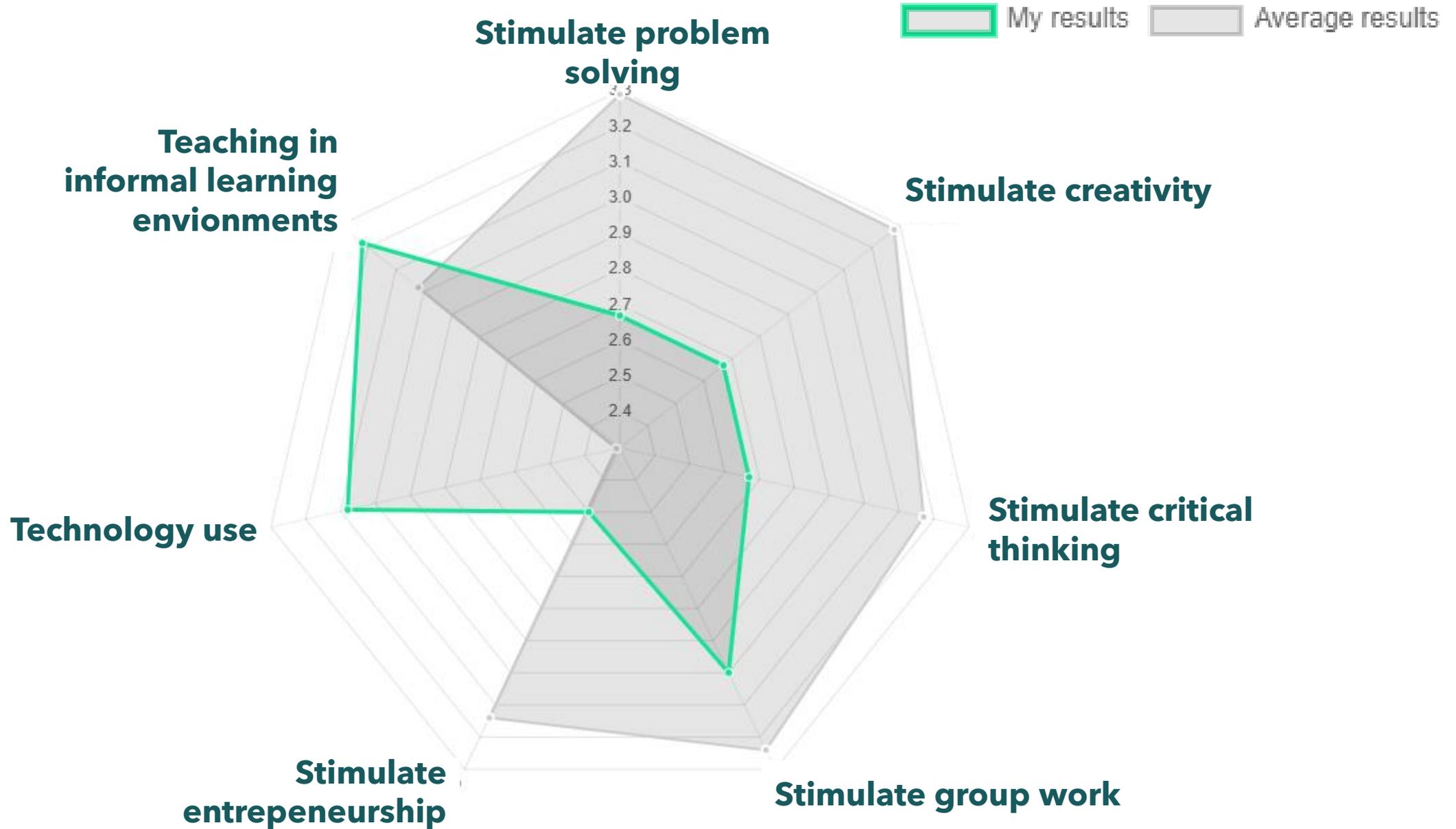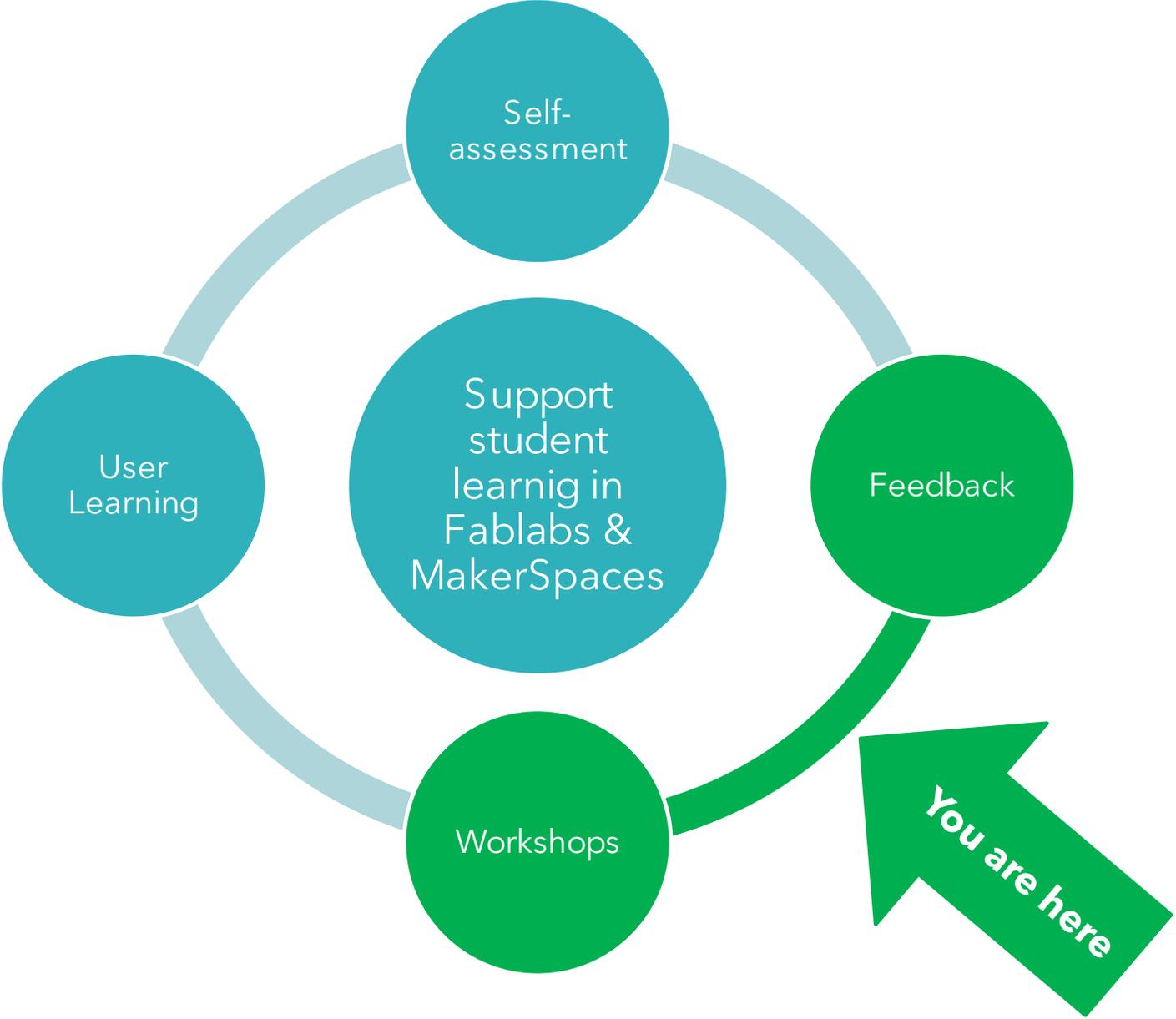
TRY OUT OF THE ARTIFEX SELF-ASSESSMENT

>> Use your laptop or mobile device

>> Go to **teachtstem.eu**

>> Navigate to the self-assessment tool

>> Fill out the survey

>> Get your results

>> Reflect individually

>> Take notes on your reflection sheet

>> Keep the sheet for group work after lunch

Hanooga Times Free Press

TRY OUT OF THE ARTIFEX SELF-ASSESSMENT

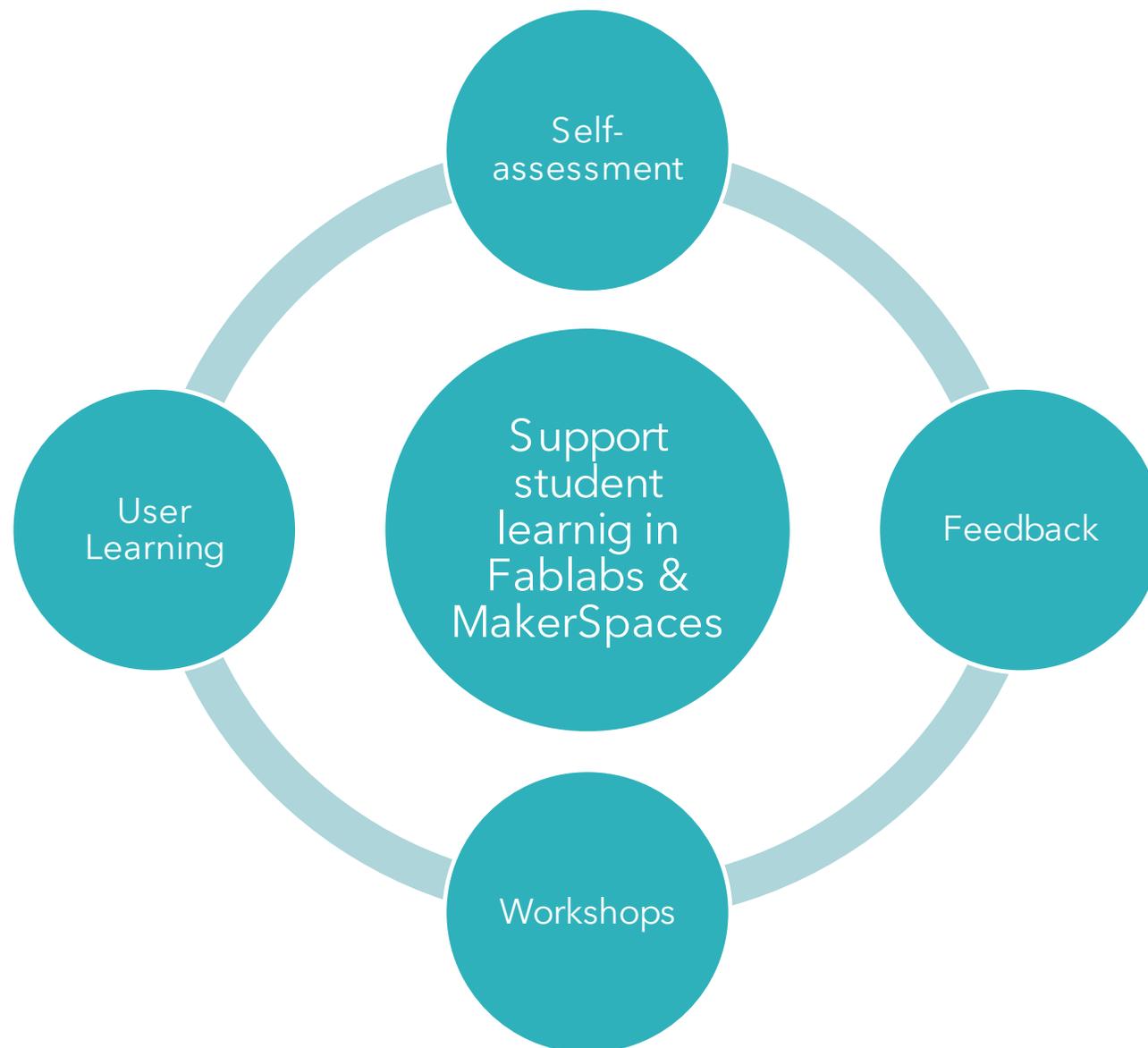**teachtstem.eu**

Focus your reflections on these questions :

- Is this useful?

- What did you learn?

- What did you miss?

- How do you think we can connect this

   to the workshop?

Haneaga Times Free Press

CONNECTING THE SELF ASSESSMENT TO THE WORKSHOPS

GROUP WORK & DISCUSSION

CONNECTING THE SELF-ASSESSMENT TO THE WORKSHOPS

SMALL GROUP DISCUSSIONS

- Find your small group

- Each group has an ARTIFEX observer

- Get to know each other (briefly)

- Share your individual reflections

- Focus on ways to connect the self-assessment to the workshops

  - What are your expectations?

  - What do you hope you can get from this?

  - What are no-go's?

- If you get there : draw your group's solution

CONNECTING THE SELF-ASSESSMENT TO THE WORKSHOPS

PLENARY DISCUSSION

- What did you discuss in your groups?

- Did you see ways to connect the feedback to the workshops?

- What are conditions to do so?

- …