



Accelerate Technology, Entrepreneurship and Creativity

Check in

Wat was het laatste leerdoel wat jij voor jezelf hebt bedacht, en waarom?

Deel jouw antwoorden met de groep



Selective Perfectionist

- Bachelor Industrial Design TU/e
- Minor Product Design UTS
- Master Industrial Design TU/e
- PULSED – Self-Directed Learning & Assessment





Multidisciplinair team



A photograph of three men in a library setting. One man is wearing a brown baseball cap and glasses, another is wearing a grey hoodie and has a beard, and a third man is partially visible on the left wearing a light-colored hat. They are all looking at a laptop screen with interest. The background shows bookshelves filled with books and binders.

Make education and life one

Education is not a preparation for life.
We believe that education is part of life itself.

Onze TEC Programma's

1st years (Empower TEC)



3th years (Embrace TEC)



Future Impact Design (Msc)



Boundaries are meant to be crossed

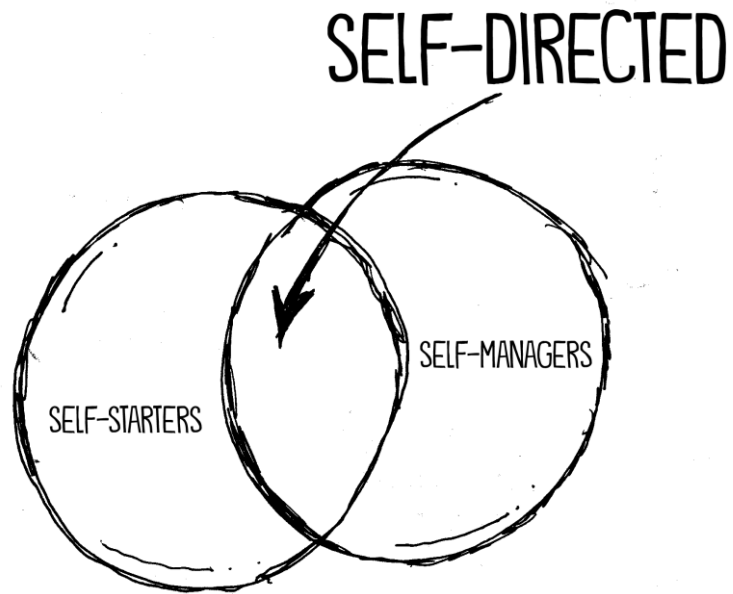
- Identity & Learning
- Innovative solutions
- International



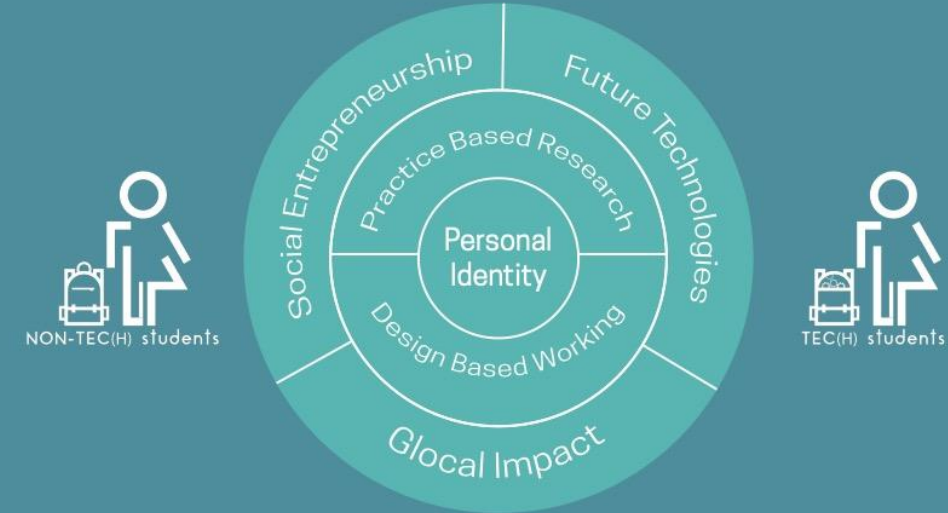
Wie ben jij?

Self Directed Professionals

Through a Design Based Learning approach



Self Directed Professional



Empower TEC



Future Impact Design

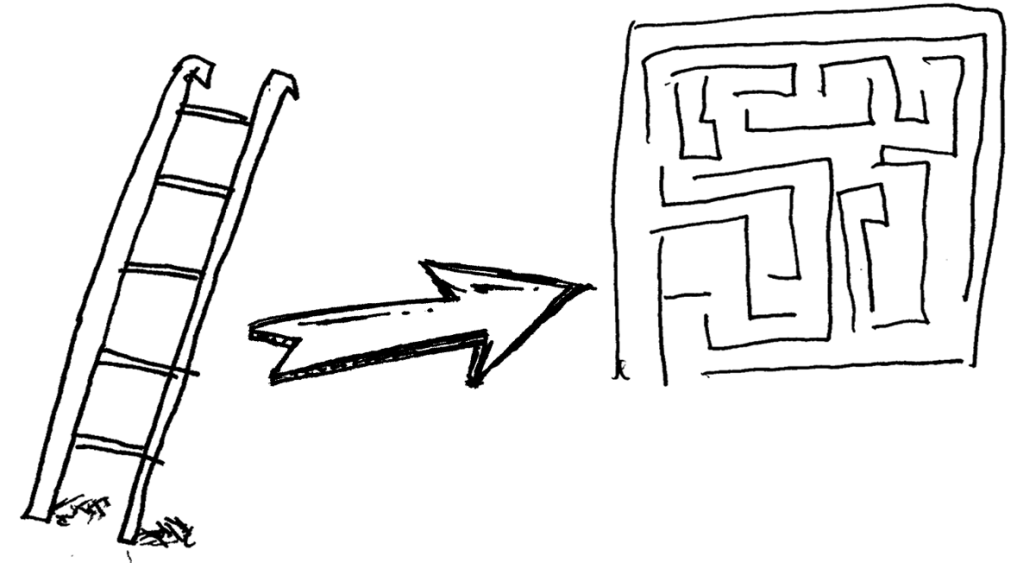
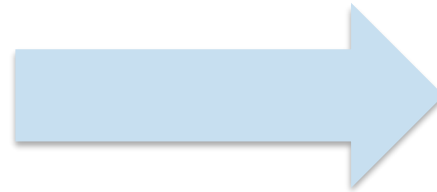
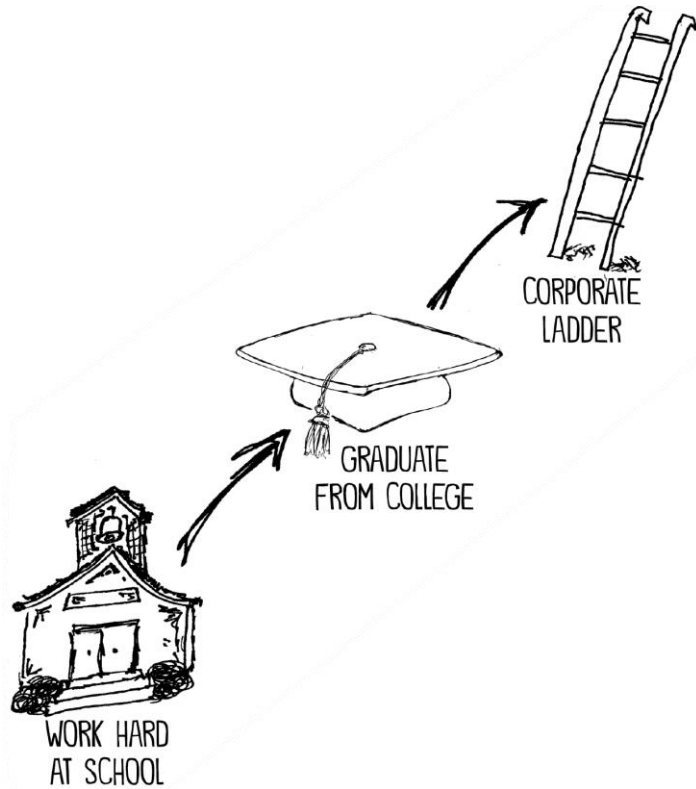


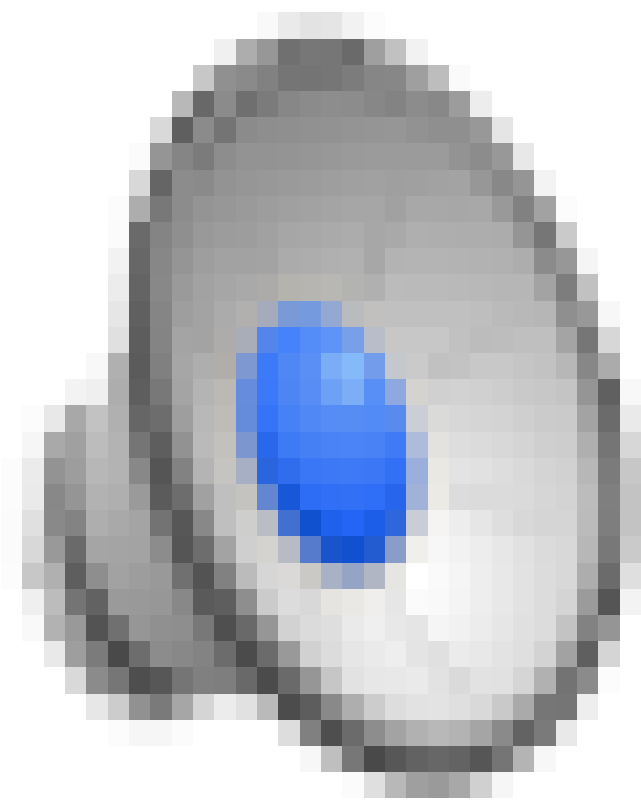
Embrace TEC



Waarom is Self-Directed Learning relevant?

From ladder to maze





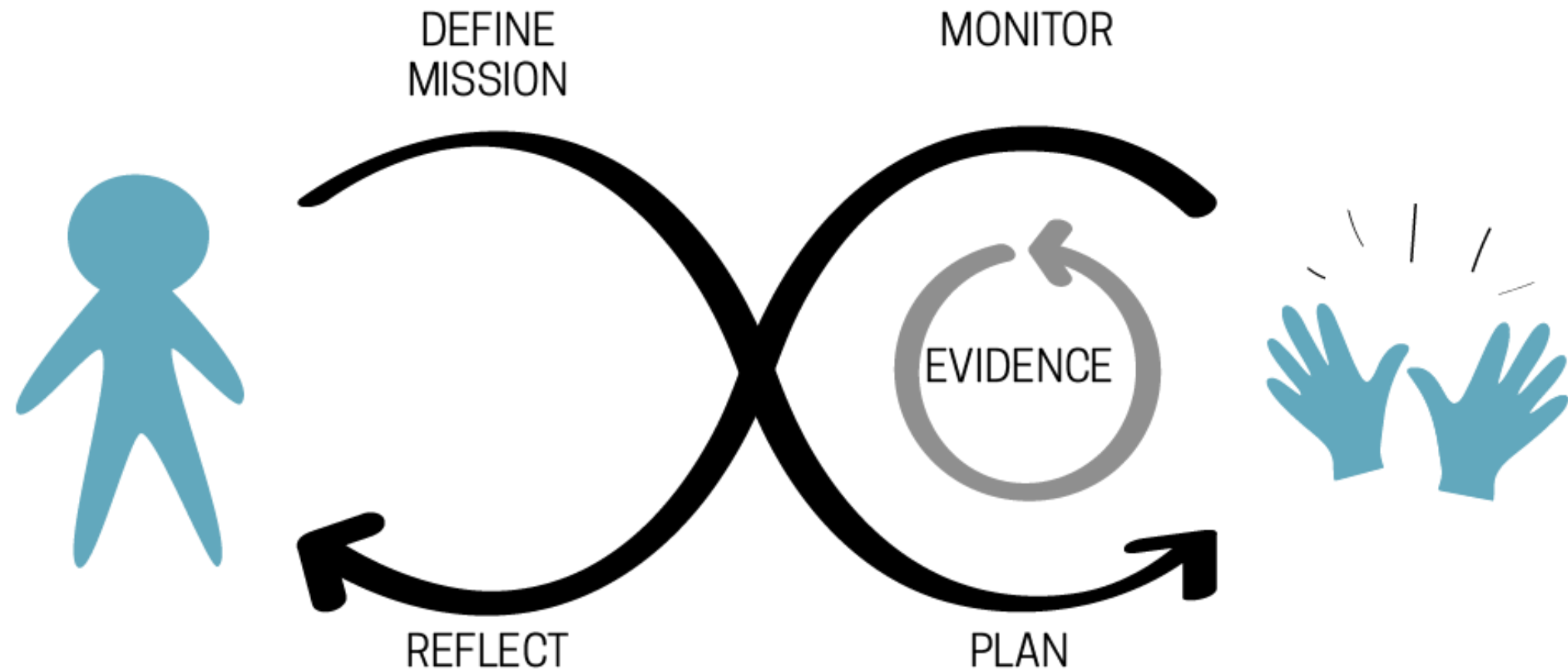
Hoe Self-Directed zijn jouw studenten?



Future Technologies

=

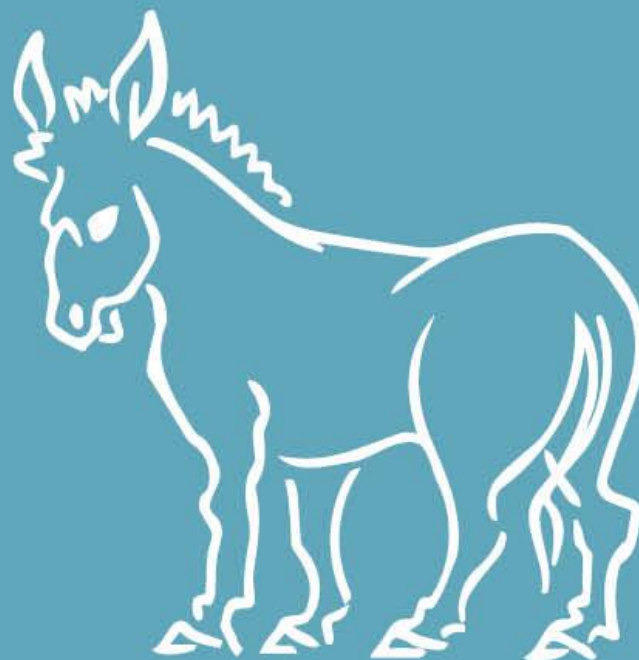
**Startpunt veel SNELLE veranderingen,
dus leven lang leren!**



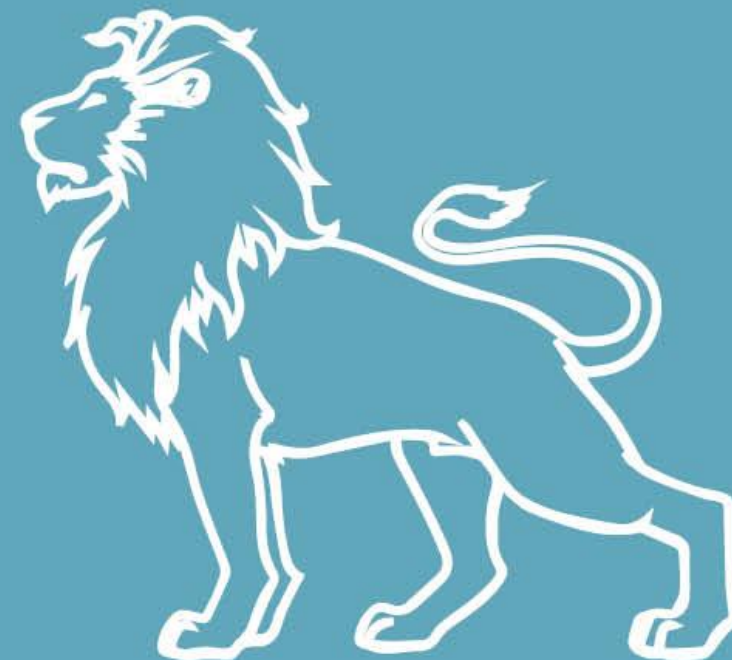
SELF DIRECTED LEARNING



DEPENDANT

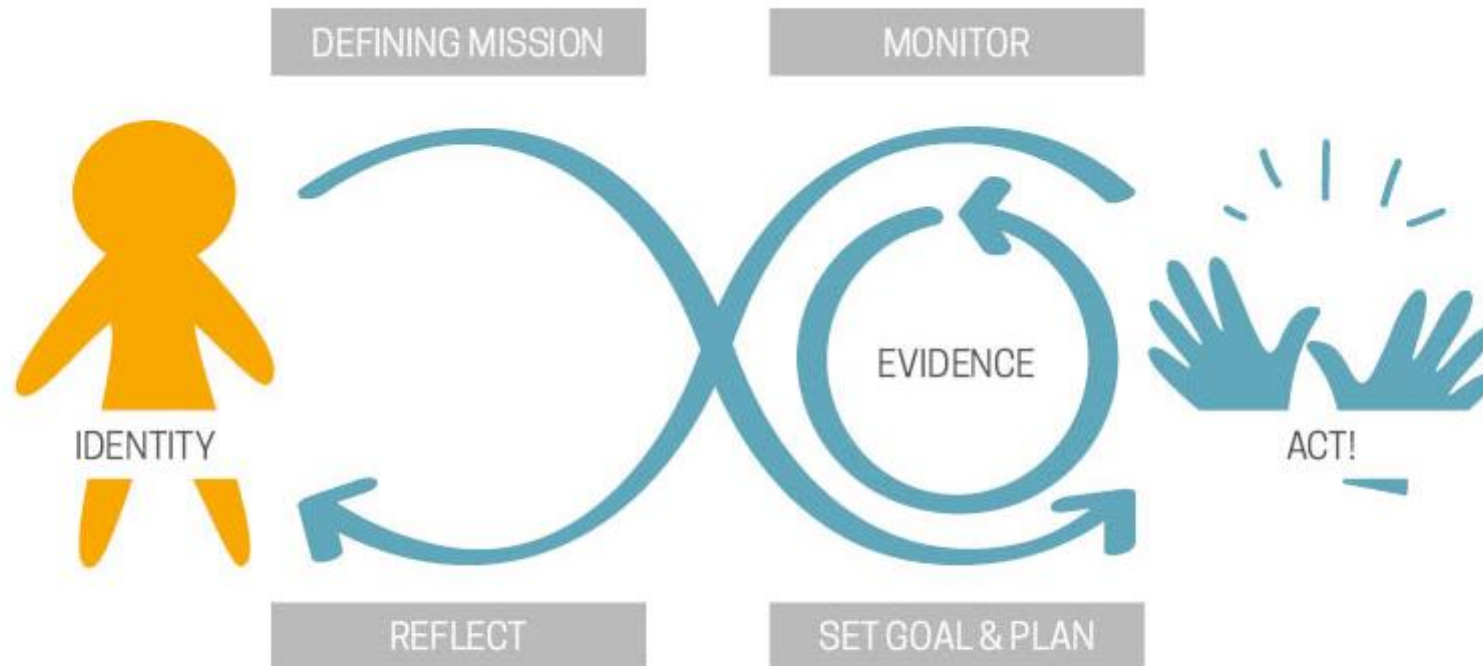


SELF DIRECTED



SELF DETERMINED

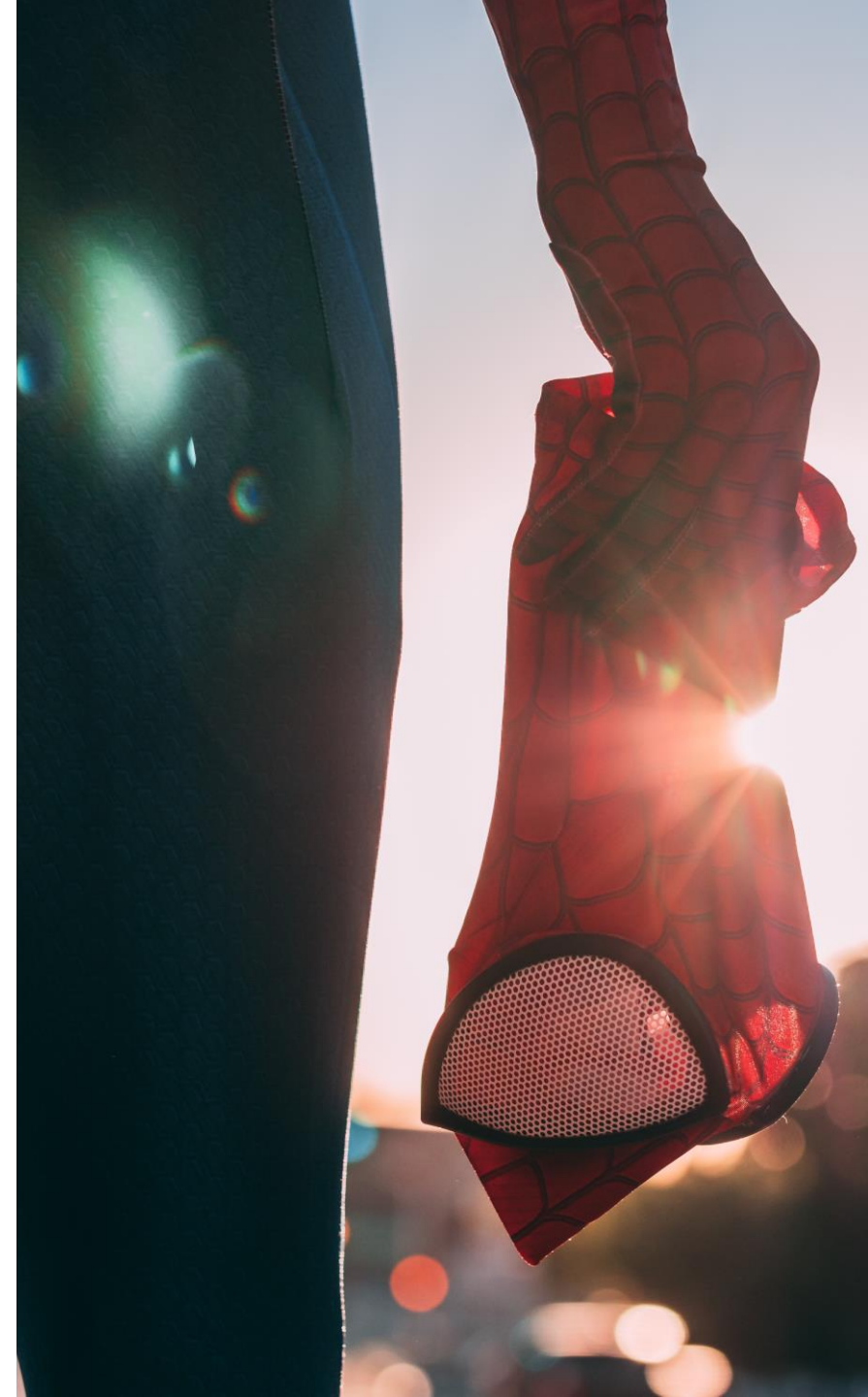
Identiteit



Wie ben jij?

- .. Volgens jouw studenten?
- .. Volgens iemand van wie je houdt?
- .. Volgens iemand van vroeger?

Wat zou ... zeggen over jou?



Welk gebouw ben jij?

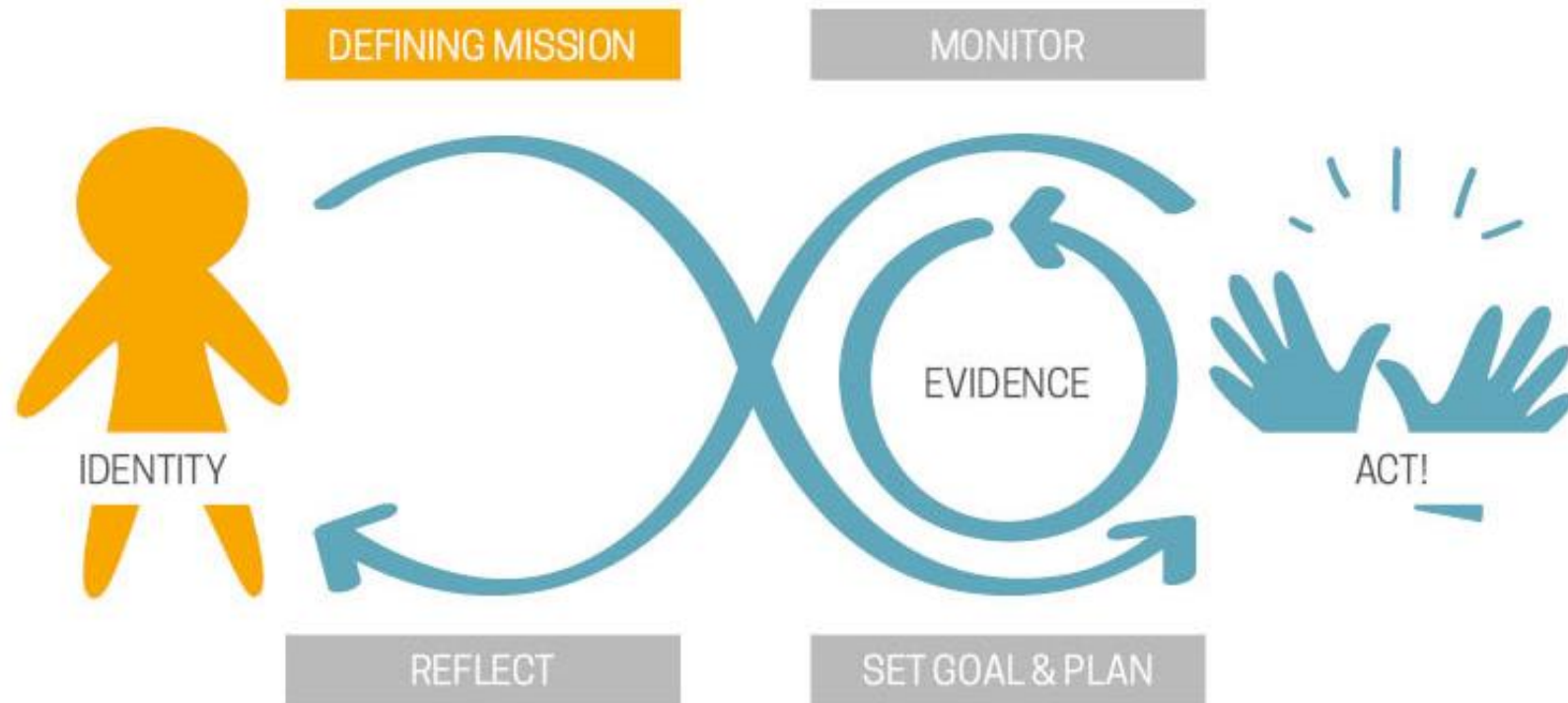
- Kies een gebouw die bij jou past
- Waarom past het bij jou?

Deel jouw resultaat!



Waar toe kan Self Directed Learning leiden?

Missie





SUSTAINABLE DEVELOPMENT GOALS



Van frustratie tot missie

- Identity
- Design Based Working
- Practice Based Research
- Social Entrepreneurship

TARGET

12•5



**SUBSTANTIALLY
REDUCE WASTE
GENERATION**



THE MISSION

To make nutritionally complete,
convenient, affordable food, with
minimal impact on animals
and the environment.



Want we willen liever niets weggooien!



35%
KORTING

Foodster

Wat is JOUW frustratie?

Set Goal & Plan

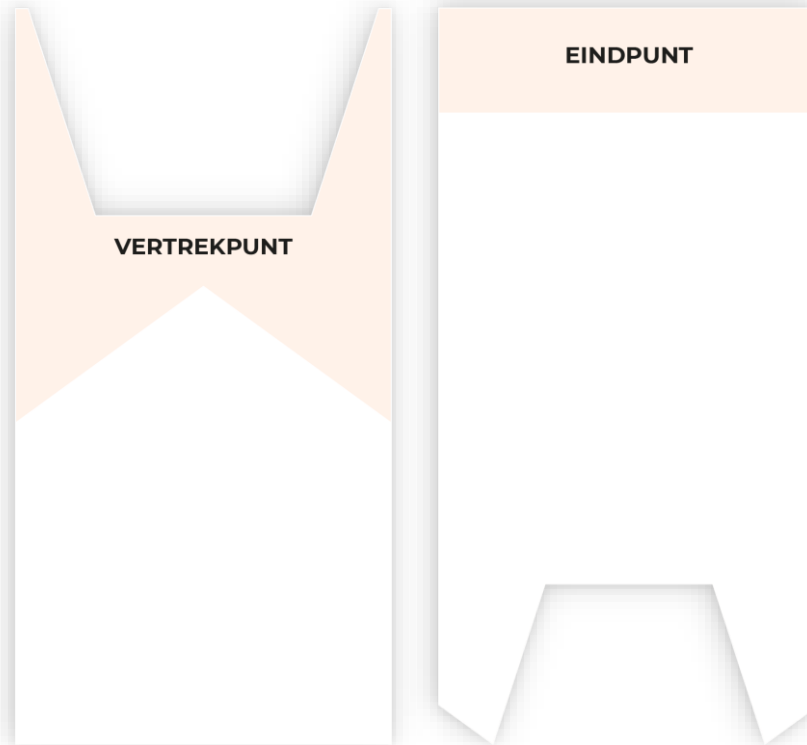




Het leerproces

Vertrek- & eindpunt

Thema/onderwerp
Probleem
Onderzoeksvraag



(Oplever)doelen
Deadlines
Aandachtspunten

Wat kun JIJ eraan doen?

- Bedenk een persoonlijk (leer)doel
- Wat verwacht je aan het einde te hebben/weten?

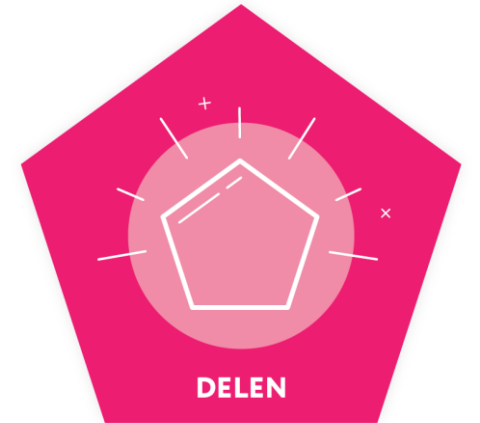
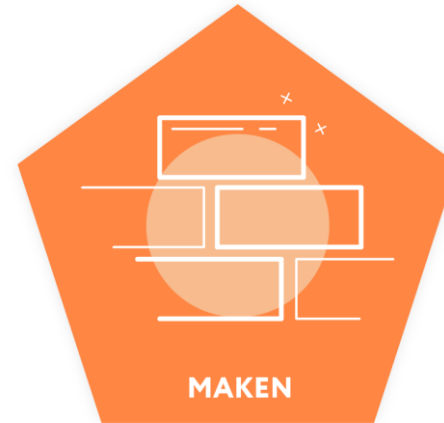
Maak groepjes van 3 en kies een van de doelen. De eigenaar van het doel wordt nu een hond/ezel/leeuw, de anderen de docent!



GrooW bouwstenen



Ontwerp-stappen





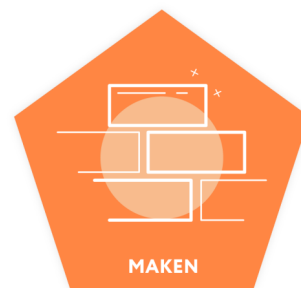
BEGRIJPEN



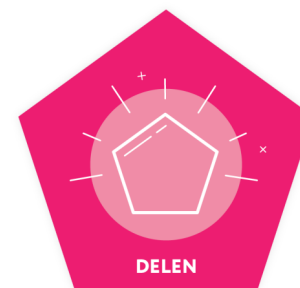
ONTDEKKEN



ONTWERPEN



MAKEN



DELEN



WAAROM-VRAGEN
STELLEN



VERSLAG



TENTOON-
STELLEN



SUCCES
BEPALen



SCHETSEN



SCENARIO



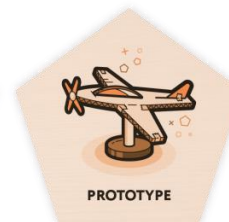
SAMENVATTEN



SAMEN STERK



REFLECTEREN



PROTOTYPE



KEUZES MAKEN



KWALITEITS-
CONTROLE



MINDMAP



MOODBOARD



NABESPREKEN



NIEUW LEVEN
INBLAZEN



ONDERNEMINGS-
PLAN



ONDERZOEKEN



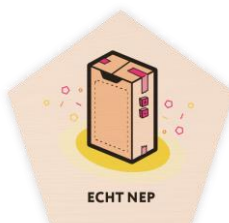
ORGANISEREN



PRESENTEREN



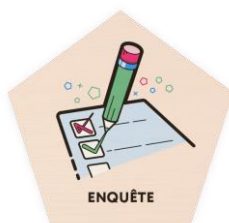
DUIVELTJE



ECHT NEP



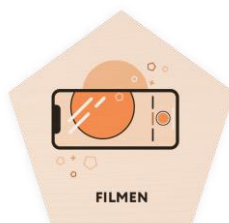
ENGELTJE



ENQUÊTE



EXPERTS
BETREKKEN



FILMEN



JE DOELGROEP
LEREN KENNEN



JE GEVOEL
VOLGEN



JE ZINTUIGEN
GEBRUIKEN



PLANNING



DOOR DE
OGEN VAN



BRAINSTORM



ALLES MAG,
ALLES KAN



ACTEREN



DE WERELD IN



DOE MAAR
DUURZAAM



GEBRUIKERTEST



GEDACHTEN
PARKEREN



INSPIRATIE
OPDOEN



PERSONA



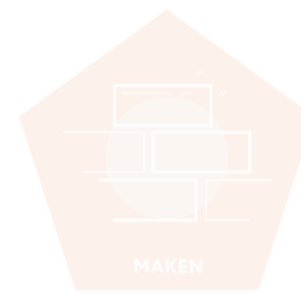
BEGRIJPEN



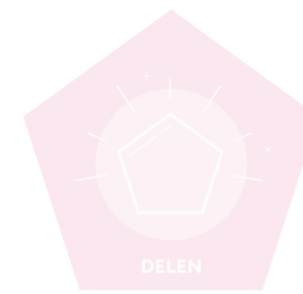
ONTDEKKEN



ONTWERPEN



MAKEN



DELEN



WAAROM-VRAGEN
STELLEN



VERSLAG



TENTOON-
STELLEN



SUCCES
BEPALen



SCHETSEN



SCENARIO



SAMENVATTEN



SAMEN STERK



REFLECTEREN



PROTOTYPE



KEUZES MAKEN



KWALITEITS-
CONTROLE



MINDMAP



MOODBOARD



NABESPREKEN



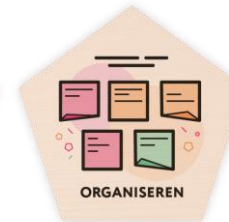
NIEUW LEVEN
INBLAZEN



ONDERNEMINGS-
PLAN



ONDERZOEKEN



ORGANISEREN



PRESENTEREN



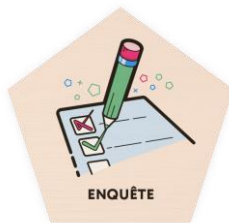
DUIVELTJE



ECHT NEP



ENGELTJE



ENQUÊTE



EXPERTS
BETREKKEN



FILMEN



JE DOELGROEP
LEREN KENNEN



JE GEVOEL
VOLGEN



JE ZINTUIGEN
GEBRUIKEN



PLANNING



DOOR DE
OGEN VAN



BRAINSTORM



ALLES MAG,
ALLES KAN



ACTEREN



DE WERELD IN



DOE MAAR
DUURZAAM



GEBRUIKERTEST



GEDACHTEN
PARKEREN

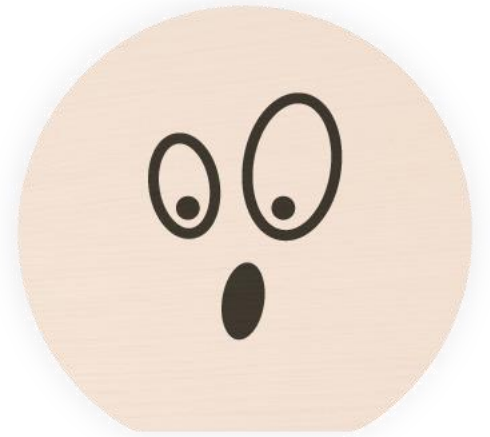
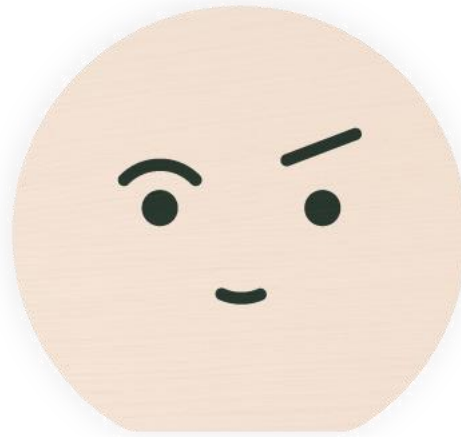
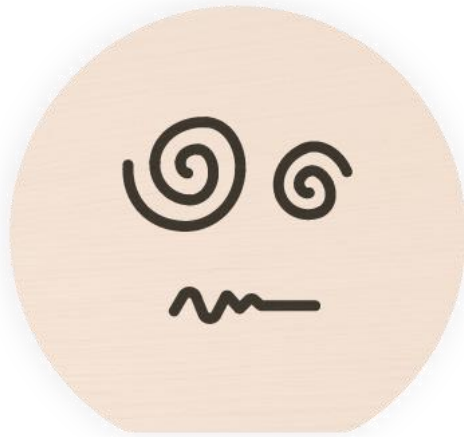
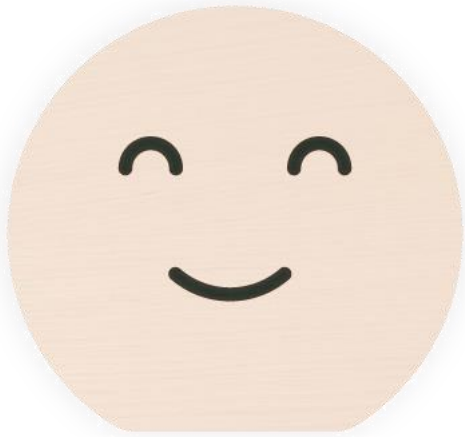
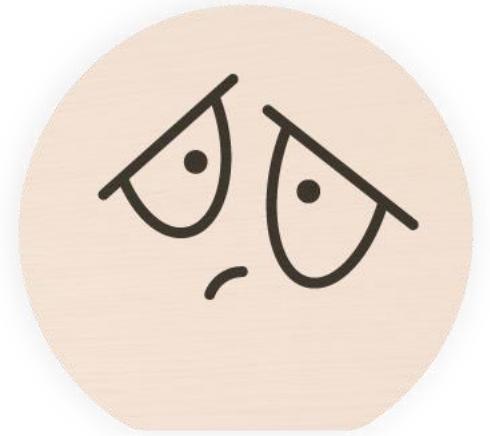
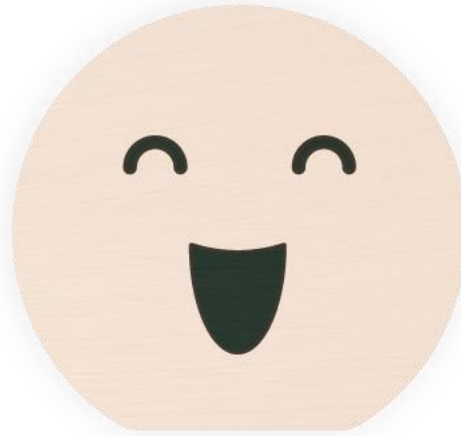
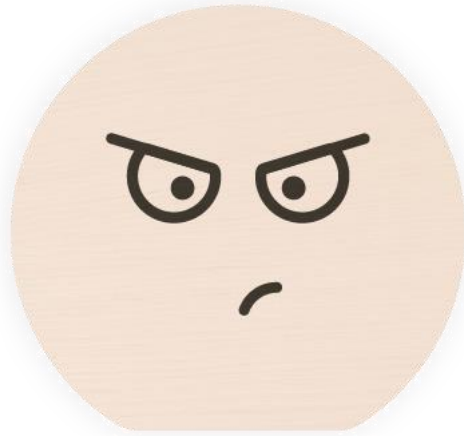
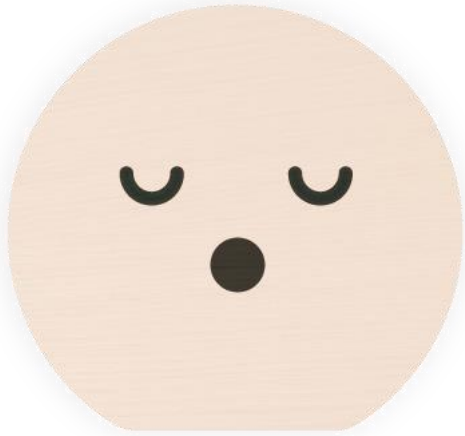


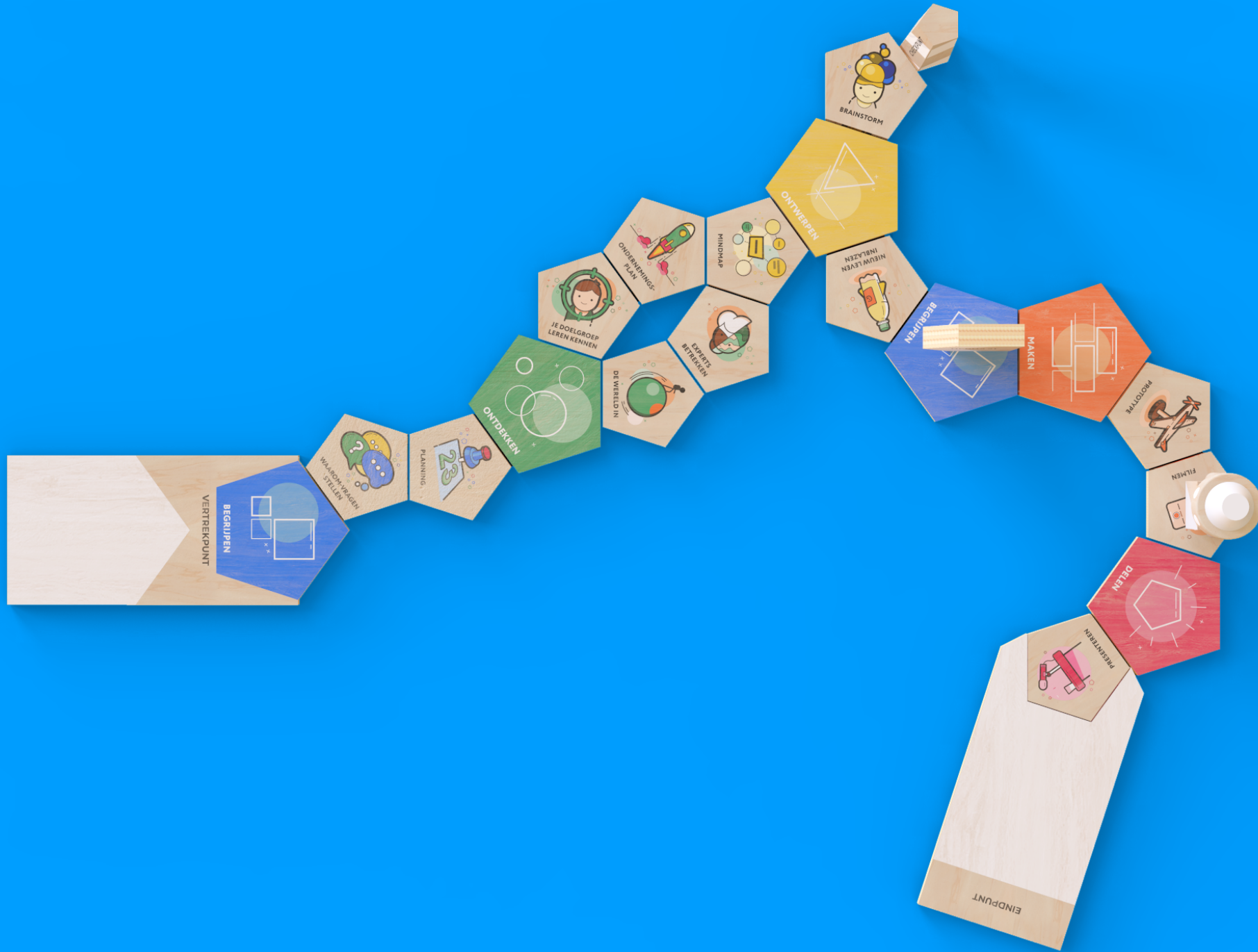
INSPIRATIE
OPDOEN



PERSONA

Beleving & emoties





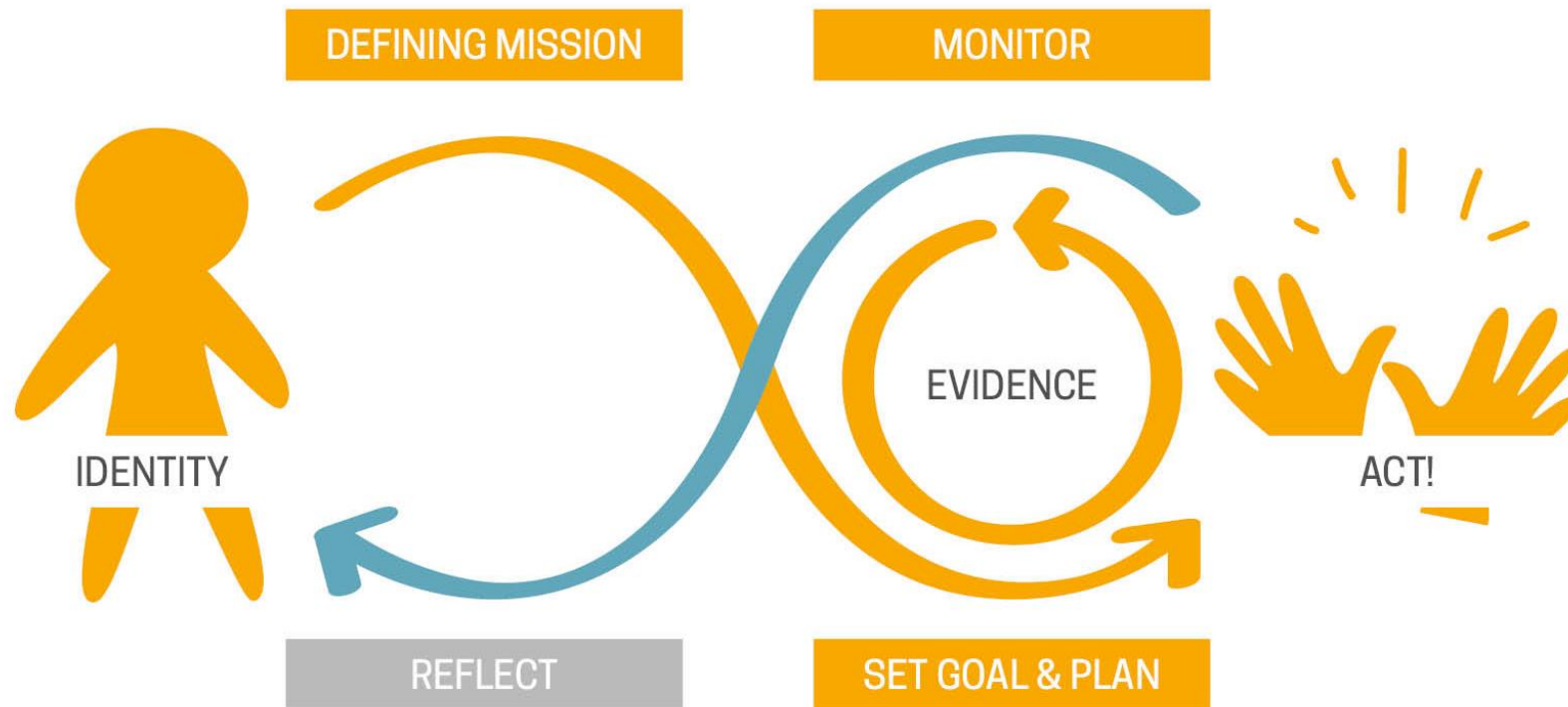
Plan!

- Bedenk een proces met activiteiten om de (leer)doel op te lossen
- Denk aan jouw identiteit en beleving!

Wie doet wat tijdens dit proces? Wat is de rol van de docent?



Monitor



Monitor

- Hoe wordt vooruitgang m.b.t. het einddoel tussentijds meetbaar?
- Wat zijn resultaten (evidence) die het proces opleveren waaraan die vooruitgang te zien is?

Blijf goed op de rollen letten, wie bepaald wat? Wat is de rol van de docent?



Reflect



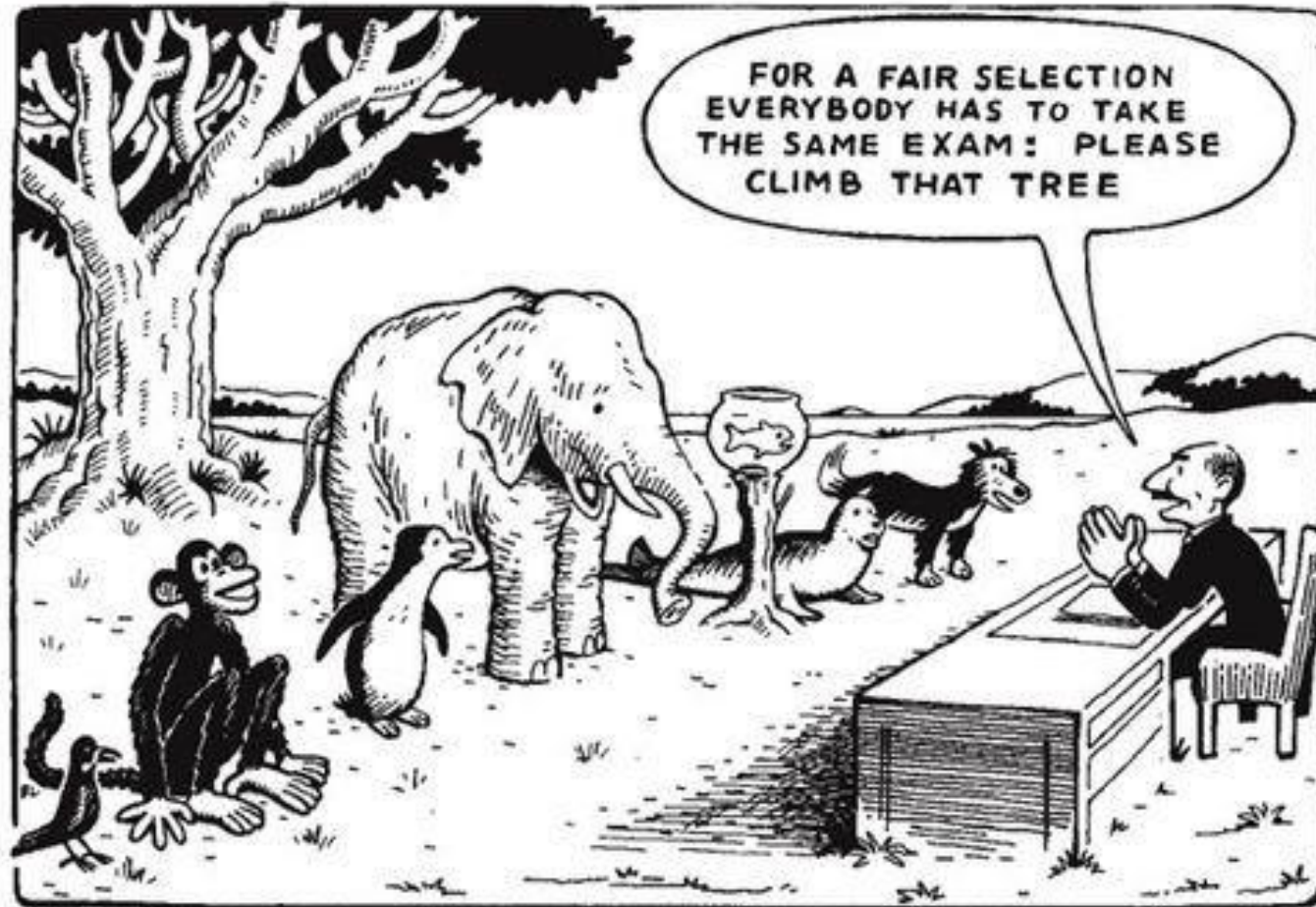
Wat heb jij geleerd?

- Hoe ging het?
- Waarom ging het zo? Wat zegt dat over jou?
- Wat heb je geleerd?
- Hoe zou jij dit gebruiken in de toekomst?

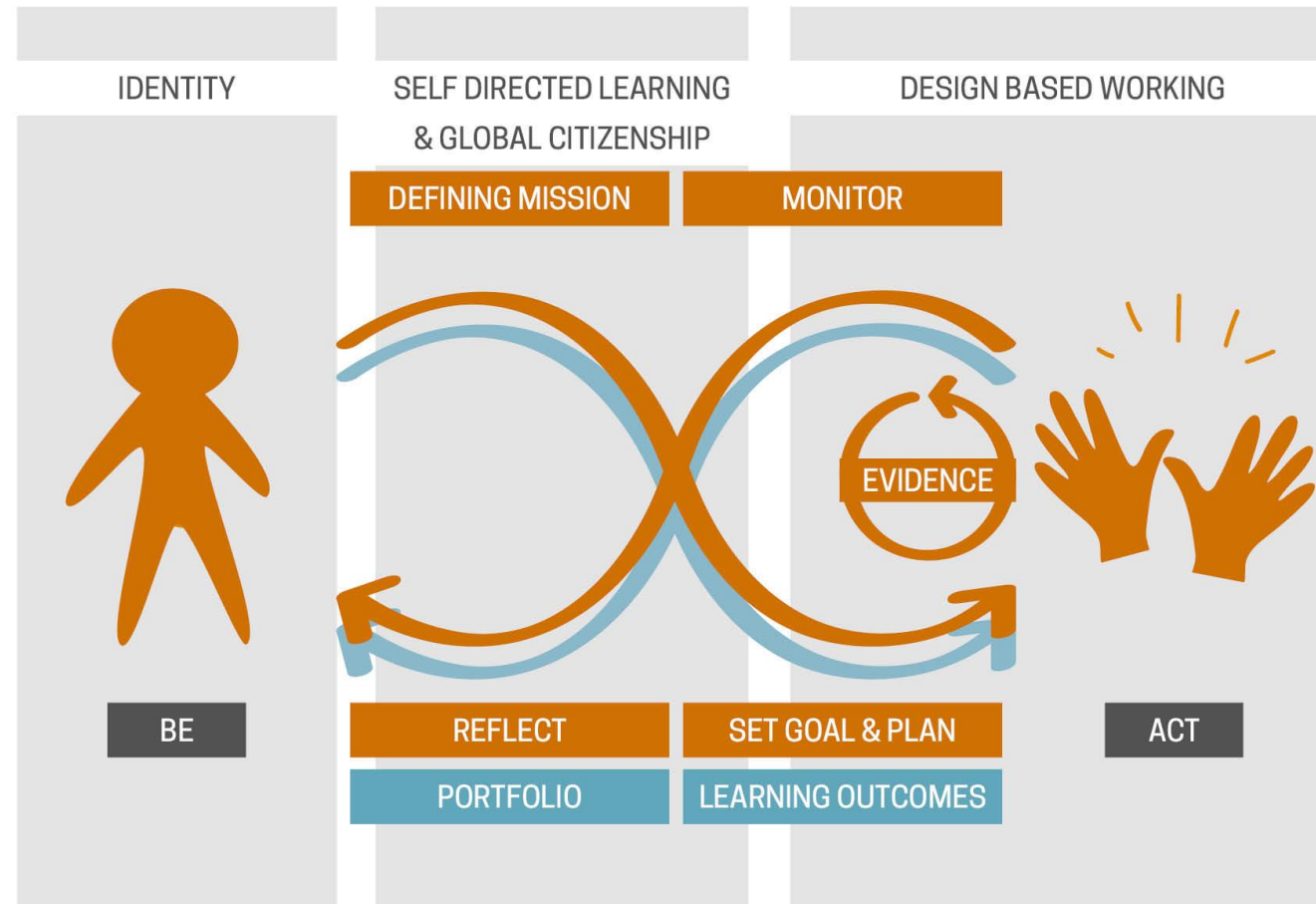
Deel jouw ervaring als hond/ezel/leeuw met jouw docenten en geef feedback.



Hoe zou jij dit beoordelen?



Ons course-team



EMBRACE TEC LEARNING OUTCOMES AND THEIR INDICATORS

IDENTITY

Based on your own unique personality, you consciously and respectfully make use of the diversity and uniqueness of others while collaborating.

CREATIVITY

You create and stimulate opportunities to solve complex issues using creativity. Furthermore, you understand different forms of creativity and how they lead to concrete, workable solutions.

ENTREPRENEURSHIP

You use your entrepreneurial attitude in formal and everyday-life collaborations, characterized by a solution-, and action oriented approach. You validate the impact and feasibility of your solution in the appropriate context.

A

You are able to describe your talents and limitations.

B

You are aware of your personal effectiveness

C

You are aware of the situations in which

D

You apply a variety of strategies to promote

E

You can express your creative process in

F

You know your own unique creative

G

You gain experience with roles and

H

You connect stakeholders in an

I

You validate the impact of your solution in the appropriate context.

Learning Outcomes, Portfolio & Evidence

TECHNOLOGY

You explore new technological applications with a design-based approach and choose the optimal role of technology in your solution by critically analysing the options.

GLOBAL CITIZENSHIP

“Ability to communicate effectively and appropriately in intercultural situations based on one’s intercultural knowledge, skills and attitudes” (Deardorff, 2006).

LEARNING OUTCOME

Explanation of the learning outcome.

J

You develop a lasting research strategy to keep identifying new technologies.

K

You playfully teach yourself the operation and application of technology.

L

You learn to speak languages inherent in technological applications.

M

You consider alternative ideas and opinions valuable and are willing to review them.

N

You develop an understanding of your frame of reference (worldview) and are able to link this to the viewpoints of others.

O

You provide insight into new problems and consequences that may arise due to the realized solution.

X

Basic level indicator of the learning outcome, which you have to accomplish.

X

Basic level indicator of the learning outcome, which you have to accomplish.

X

Basic level indicator of the learning outcome, which you have to accomplish.

EMBRACE TEC LEARNING OUTCOMES AND THEIR INDICATORS

IDENTITY

Based on your own unique personality, you consciously and respectfully make use of the diversity and uniqueness of others while collaborating.

- A** You are able to describe your talents and limitations.
- B** You are aware of your personal effectiveness and your impact on other people.
- C** You are aware of the situations in which these limitations occur.

CREATIVITY

You create and stimulate opportunities to solve complex issues using creativity. Furthermore, you understand different forms of creativity and how they lead to concrete, workable solutions.

- D** You apply a variety of strategies to promote the creative process of yourself and others and evaluate the effectiveness of each chosen strategy.
- E** You can express your creative process in various ways and appreciate how others express their process.
- F** You know your own unique creative (im)possibilities and facilitate them accordingly.

ENTREPRENEURSHIP

You use your entrepreneurial attitude in formal and everyday-life collaborations, characterized by a solution-, and action oriented approach. You validate the impact and feasibility of your solution in the appropriate context.

- G** You gain experience with roles and responsibilities from working together in result-oriented teams.
- H** You connect stakeholders in an active way to work together on your solution.
- I** You validate the impact of your solution in the appropriate context.

TECHNOLOGY

You explore new technological applications with a design-based approach and choose the optimal role of technology in your solution by critically analysing the options.

- J** You develop a lasting research strategy to keep identifying new technologies.
- K** You playfully teach yourself the operation and application of technology.
- L** You learn to speak languages inherent in technological applications.

GLOBAL CITIZENSHIP

"Ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills and attitudes" (Deardorff, 2006).

- M** You consider alternative ideas and opinions valuable and are willing to review them.
- N** You develop an understanding of your frame of reference (worldview) and are able to link this to the viewpoints of others.
- O** You provide insight into how problems and consequences that may arise due to the realized solution.

LEARNING OUTCOME

Explanation of the learning outcome.

- X** Basic level indicator of the learning outcome, which you have to accomplish.
- X** Basic level indicator of the learning outcome, which you have to accomplish.
- X** Basic level indicator of the learning outcome, which you have to accomplish.

Expert level indicator of the learning outcome, which you define yourself.

MIDTERM RUBRIC

The portfolio has to check the following requirements, else the portfolio is not accepted and cannot be graded:

- Transparency (T):**
You use input and feedback from others to support your evidence. You know and communicate the difference between facts and opinions.
- Evidence (E):**
You have evidence to support your claims (of learning progress) and refer to the appropriate pieces.
- Completeness (C):**
Your portfolio includes all learning outcomes and includes all basic indicators per learning outcome.

Administration

Student:

Student number:

Assessor:

Date:

DESCRIPTION	VERY GOOD 2 POINTS	SUFFICIENT 1 POINT	INSUFFICIENT 0 POINTS
Learning Progress	<p>The student challenged him/herself related to this learning outcome, put in extra effort and had many valuable learning experiences.</p> <p>And the student meets the Sufficient description.</p> <div><div></div><div></div><div></div><div></div><div></div></div>	<p>The student made sufficient learning progress related to learning outcome.</p> <p>And the student provided sufficient evidence to support the described progress.</p> <div><div></div><div></div><div></div><div></div><div></div></div>	<p>The student:</p> <p>I. did not make learning progress related to this learning outcome; or</p> <p>T. Isn't transparent; or</p> <p>E. doesn't provide enough supporting evidence</p> <div><div></div><div></div><div></div><div></div><div></div></div>
Basic Level	<p>It is clear that the student has beyond-basic proficiency within one or more indicators.</p> <p>And the student meets the Sufficient description.</p> <div><div></div><div></div><div></div><div></div><div></div></div>	<p>It is clear that the student has basic proficiency within all three indicators.</p> <p>And the student discusses each indicator and refers to the supporting evidence.</p> <div><div></div><div></div><div></div><div></div><div></div></div>	<p>The student did not:</p> <p>I. show a basic level of proficiency; or</p> <p>T. Isn't transparent</p> <p>E. provide (enough) supporting evidence</p> <p>C. discuss all 3 basic indicators</p> <div><div></div><div></div><div></div><div></div><div></div></div>
Ownership	<p>The student has explained the relevance for his/her professional future and identified directions for his/her future development related to this learning outcome.</p> <p>And the student meets the Sufficient description.</p> <div><div></div><div></div><div></div><div></div><div></div></div>	<p>The student explained how the developed knowledge and skills within the learning outcome were applied in his/her process or products</p> <div><div></div><div></div><div></div><div></div><div></div></div>	<p>The student did not:</p> <p>I. explain how the developed knowledge and skills within the learning outcome were applied in his/her process or products</p> <div><div></div><div></div><div></div><div></div><div></div></div>
TOTAL	<div><div></div> = <div></div> =</div>	<div><div></div> =</div>	<div><div></div> = <div></div> =</div>
PASS At least 3 points	<div><div></div> = Pass</div>	<div><div></div> = Pass</div>	<div><div></div> = Pass</div>

IDENTITY CREATIVITY ENTREPRENEURSHIP TECHNOLOGY GLOBAL CITIZENSHIP

PRIMARY RUBRIC

The portfolio has to check the following requirements, else the portfolio is not accepted and cannot be graded:

- Transparency (T):**
You use input and feedback from others to support your evidence. You know and communicate the difference between facts and opinions.
- Evidence (E):**
You have evidence to support your claims (of learning progress) and refer to the appropriate pieces.
- Completeness (C):**
Your portfolio includes all learning outcomes and includes all basic indicators per learning outcome.

Administration

Student: _____
Student number: _____
Assessor: _____
Date: _____

DESCRIPTION	VERY GOOD 2 POINTS	SUFFICIENT 1 POINT	INSUFFICIENT 0 POINTS
Learning Progress	The student challenged him/herself related to this learning outcome, put in extra effort and had many valuable learning experiences. <i>And the student meets the Sufficient description.</i> 	The student made sufficient learning progress related to learning outcome. <i>And the student provided sufficient evidence to support the described progress.</i> 	The student: I. did not make learning progress related to this learning outcome; or T. Isn't transparent; or E. doesn't provide enough supporting evidence
Basic Level	It is clear that the student has beyond-basic proficiency within one or more indicators. <i>And the student meets the Sufficient description.</i> 	It is clear that the student has basic proficiency within all three indicators. <i>And the student discusses each indicator and refers to the supporting evidence.</i> 	The student did not: I. show a basic level of proficiency; or T. Isn't transparent E. provide (enough) supporting evidence C. discuss all 3 basic indicators
Ownership	The student has explained the relevance for his/her professional future and identified directions for his/her future development related to this learning outcome. <i>And the student meets the Sufficient description.</i> 	The student explained how the developed knowledge and skills within the learning outcome were applied in his/her process or products 	The student did not: I. explain how the developed knowledge and skills within the learning outcome were applied in his/her process or products
TOTAL	=	=	=
PASS <i>At least 3 points</i>	= Pass	= Pass	= Pass

IDENTITY CREATIVITY ENTREPRENEURSHIP TECHNOLOGY GLOBAL CITIZENSHIP

EXPERT RUBRIC

The expert goals have to check the following requirements, else the goal is not accepted and cannot be graded:

- ☐ **Transparency (T):**
You use input and feedback from others to support your evidence. You know and communicate the difference between facts and opinions.
- ☐ **Evidence (E):**
You have evidence to support your claims (of learning progress) and refer to the appropriate pieces.
- ☐ **Expert level completion (C):**
You have formulated at least three (max 5) expert goals and these goals were approved by your coach.

DESCRIPTION	VERY GOOD	SUFFICIENT	INSUFFICIENT
Expert Goals	The student formulated a goal that was challenging for him/her (as indicated by the coach), and: <ul style="list-style-type: none"> achieved the original learning goal; or revised learning goal during the FS and achieved the revised learning goal <i>This all was adequately supported by evidence.</i> 	The student made sufficient learning progress regarding this goal. <i>Also, student formulated an expert level goal which was approved, and provided adequate evidence to support the progress.</i>	The student did not: <ul style="list-style-type: none"> (C) provide an approved expert-level goal; or (I) make progress on the goal; or (E) provide adequate evidence to support the progress.
	1 2 3 4 5 	1 2 3 4 5 	1 2 3 4 5
Passed at least 4 Learning Outcomes and scored at least 'sufficient' on 3 Expert Goals COMPLETED THE MINOR DID NOT COMPLETE THE MINOR			

Feedback to the student:

IDENTITY CREATIVITY ENTREPRENEURSHIP TECHNOLOGY GLOBAL CITIZENSHIP

Bedankt!