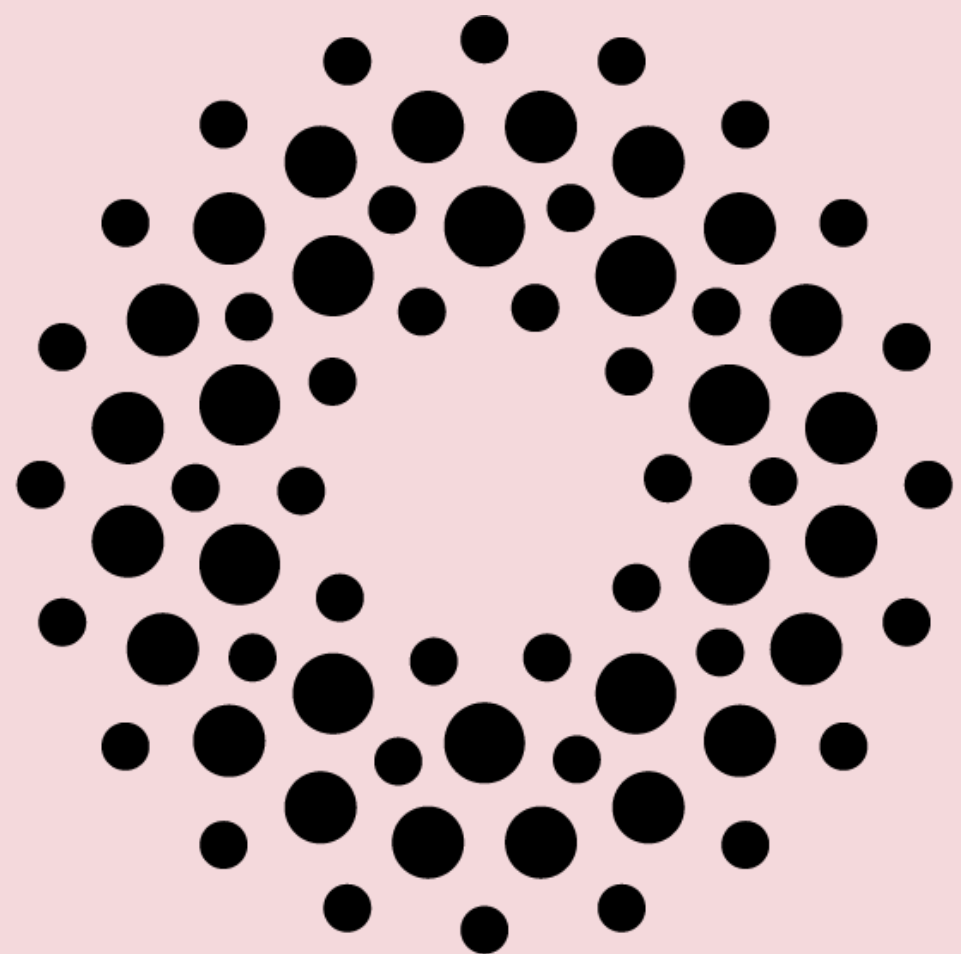
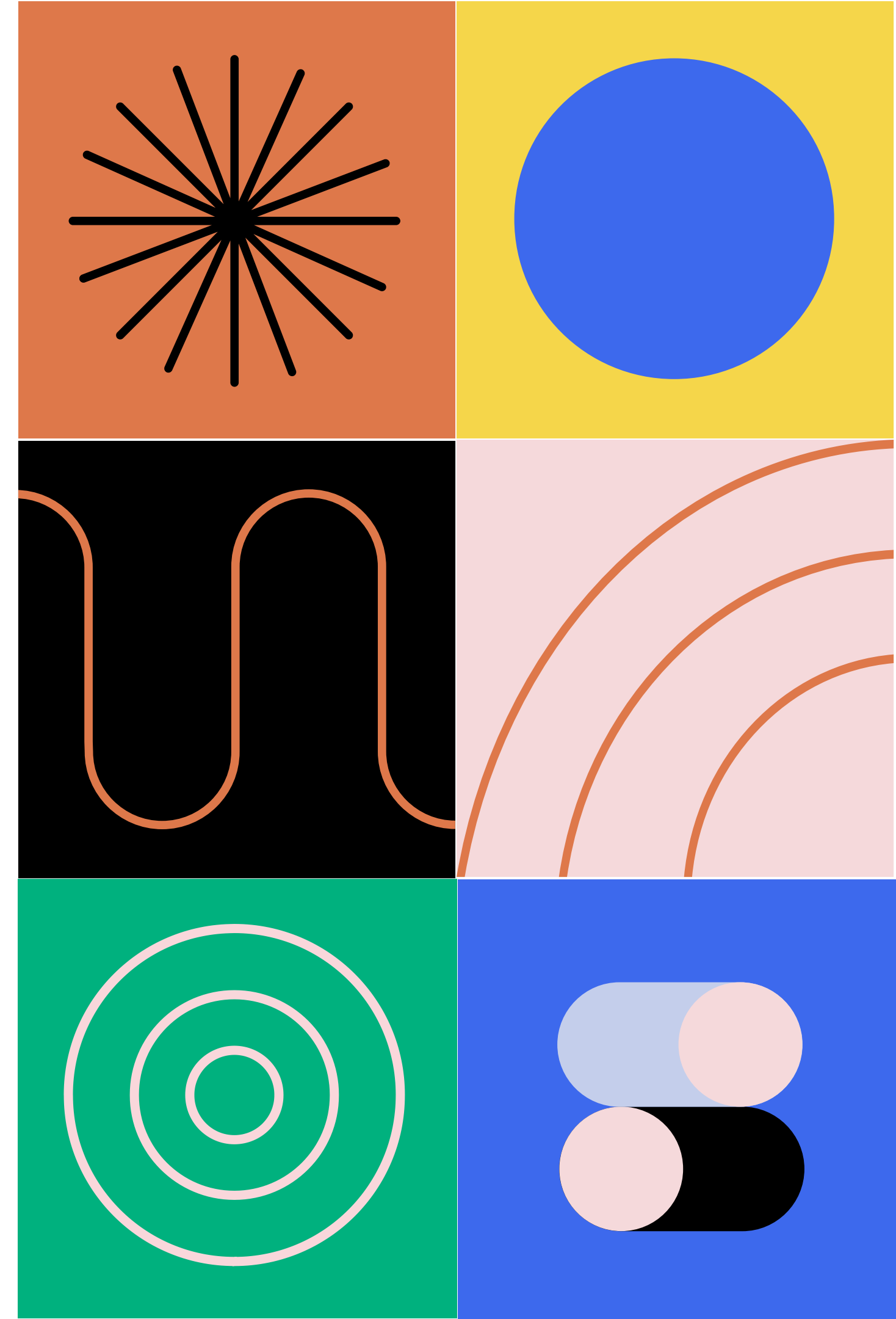




Npuls

AI-literacy: The AI-GO! framework

- Kim Schildkamp (Npuls; Universiteit Twente)
- Hanneke Theelen (Npuls; Zuyd Hogeschool)
- Iwan Wopereis (Npuls; Open Universiteit)
- Maarten Renkema (Npuls; Universiteit Twente)
- Elske van den Boom-Muilenburg (Npuls; Hogeschool Utrecht)
- Ilona Friso-van den Bos (Npuls; Universiteit Twente)



Three ambitions Npuls

Learning without obstacles

Learners have more control over their own learning and development path without administrative barriers.

Continuously high quality education

We want to offer every learner the best education at all times: accessible, up-to-date and high quality.

Ethically and effective use of data and AI

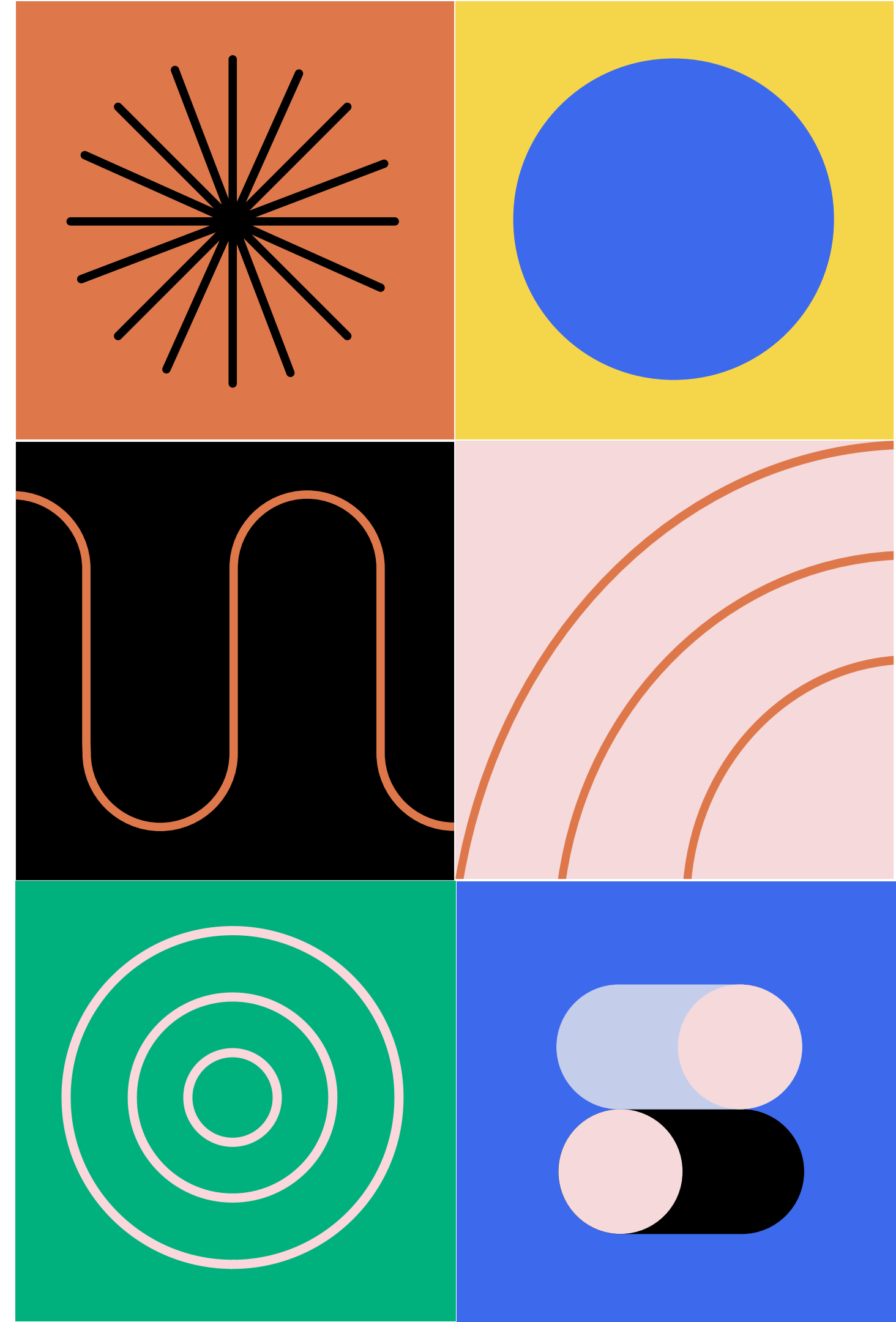
The learning and education professional use AI responsibly and safely. AI and data are used in a valuable way.

Introduction

- More and more research into AI-literacy
 - Definitions
 - Components
 - Target groups
- Developed frameworks
 - Not for education
 - Not evidence-based

What did we want to know?

- How do you define AI literacy?
- What are the components of AI Literacy?
- -> Based on scientific evidence





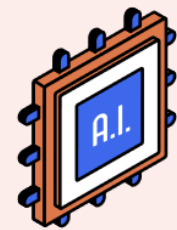
method

- 1. Umbrella review to design the framework
- 2. Retrieving real-life examples to illustrate the framework via world cafes

Approach review



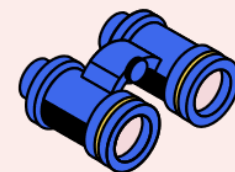
Umbrella review



ASReview



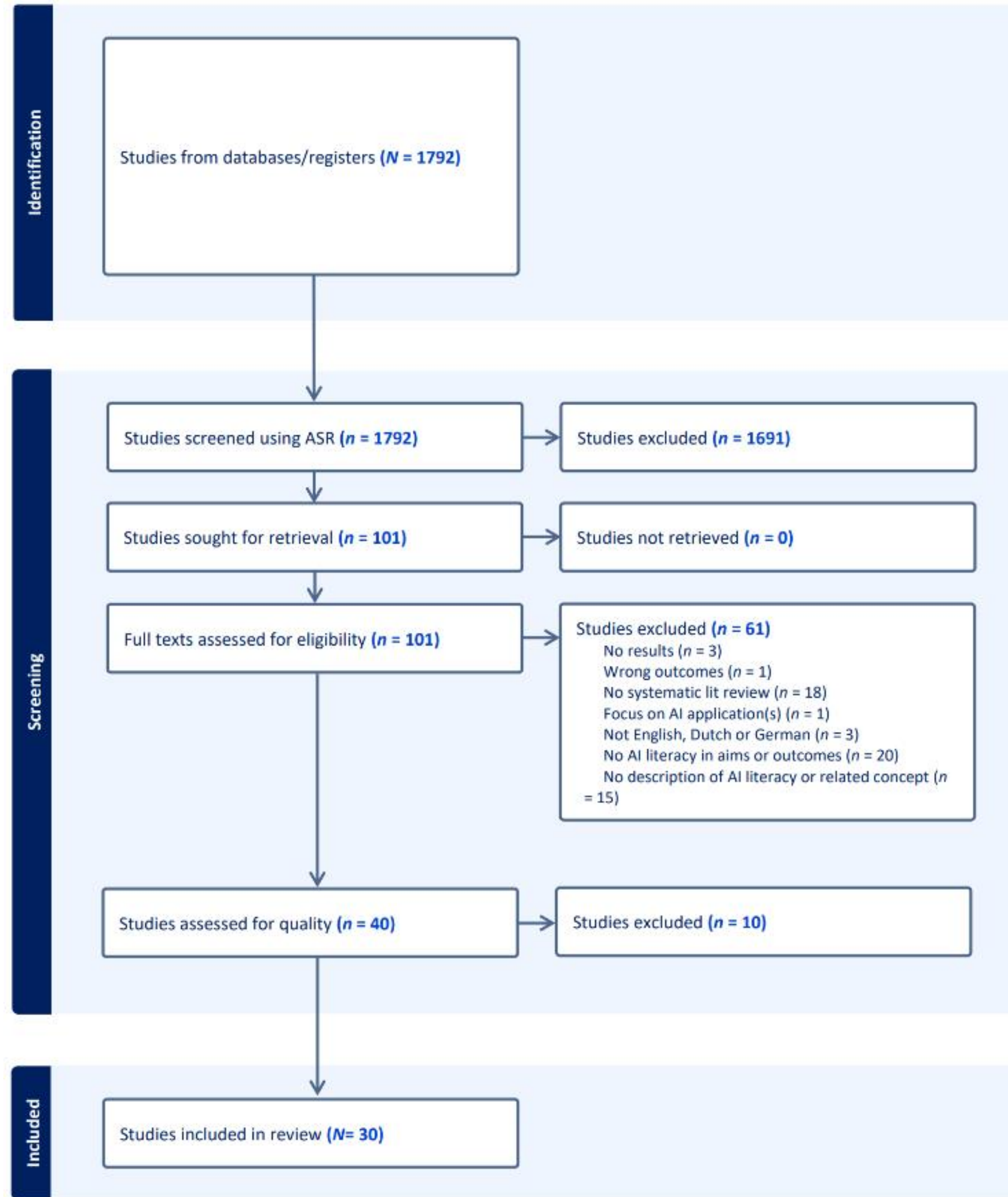
Full text



Quality assessment



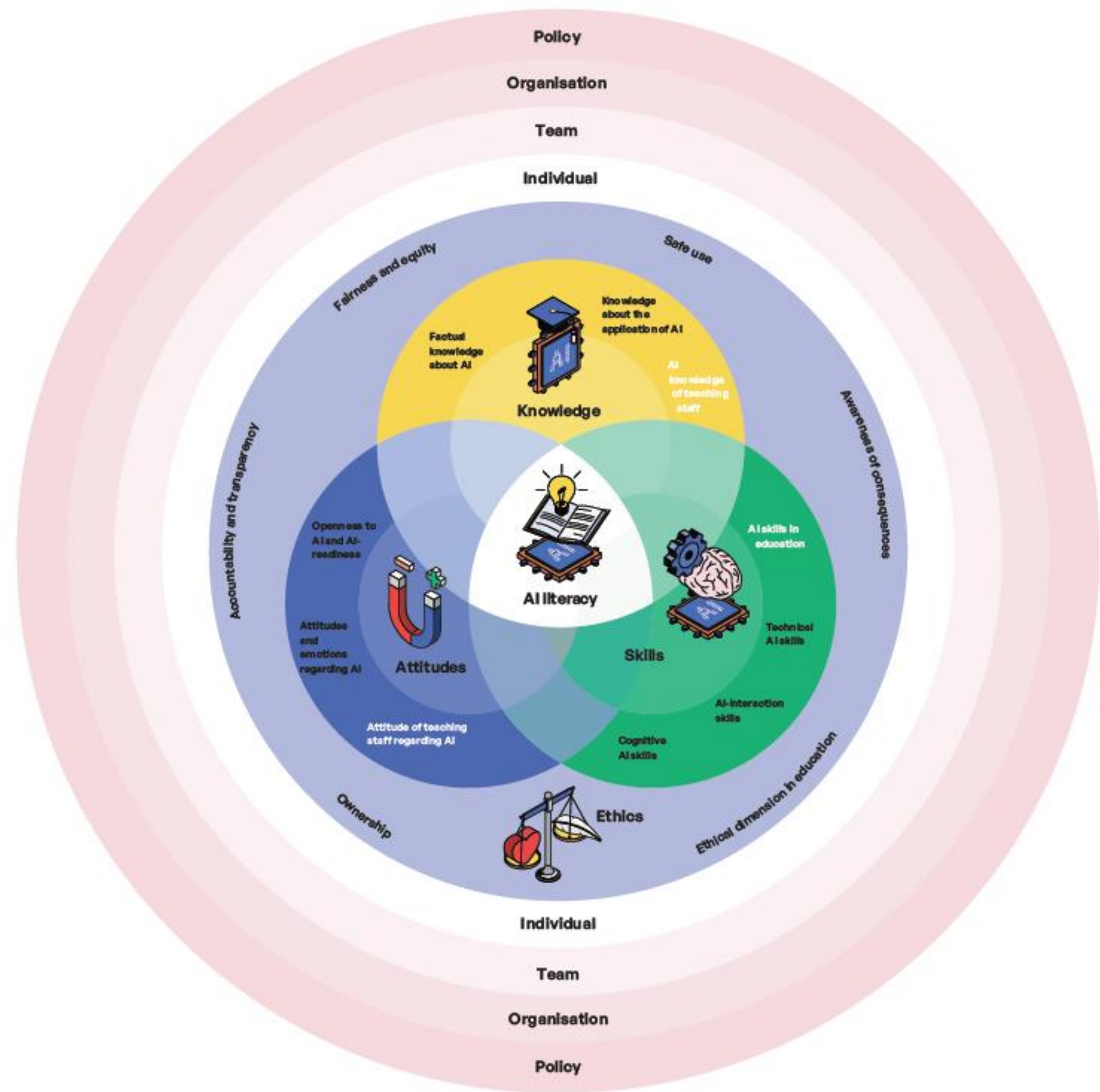
Deductive and inductive coding

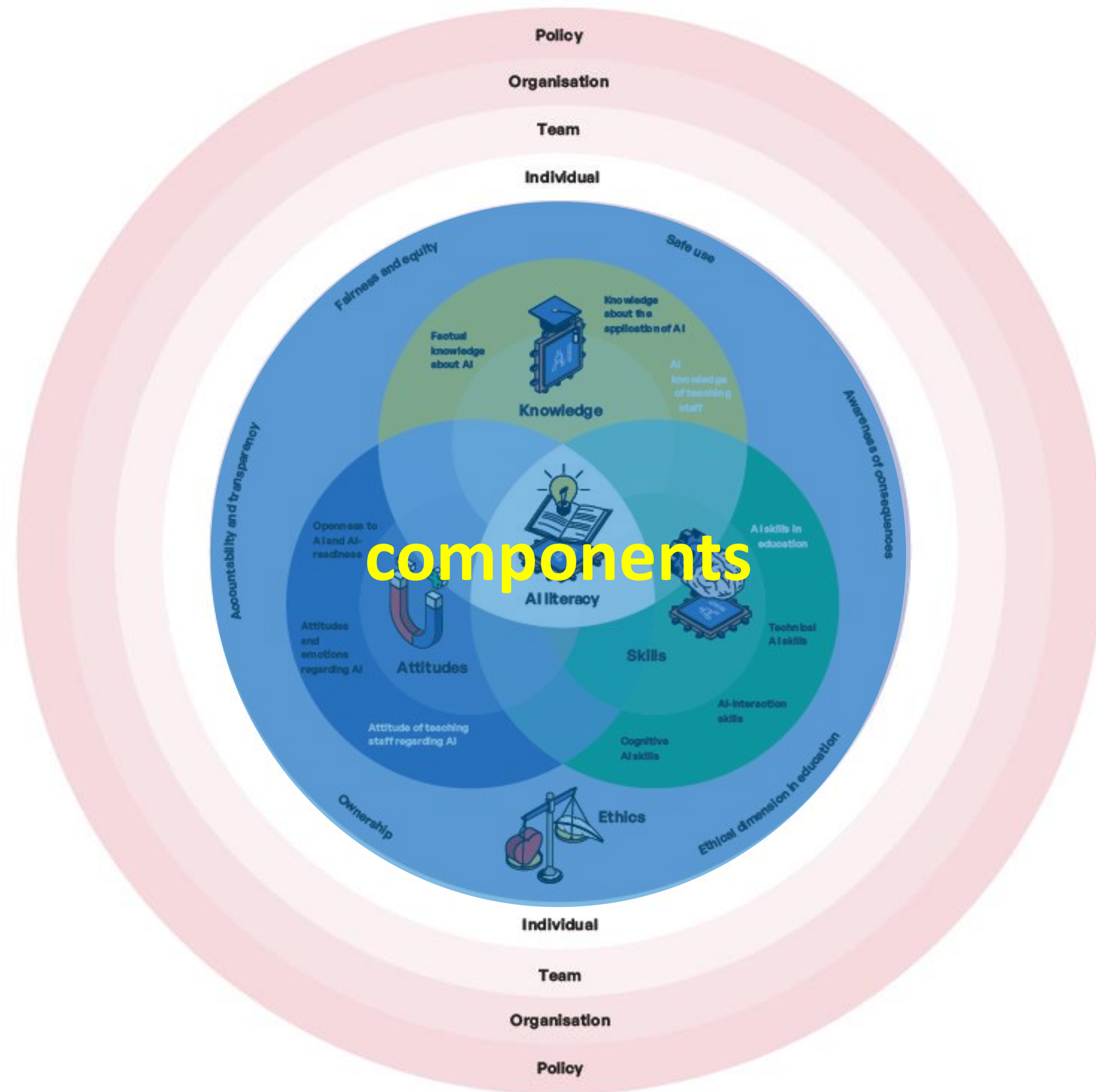


AI Literacy

“AI literacy refers to the interplay of knowledge, skills, and attitudes, grounded in ethical awareness, that enables individuals to engage with AI systems and their applications in a critical, responsible, and effective manner.” (Renkema et al., 2025)

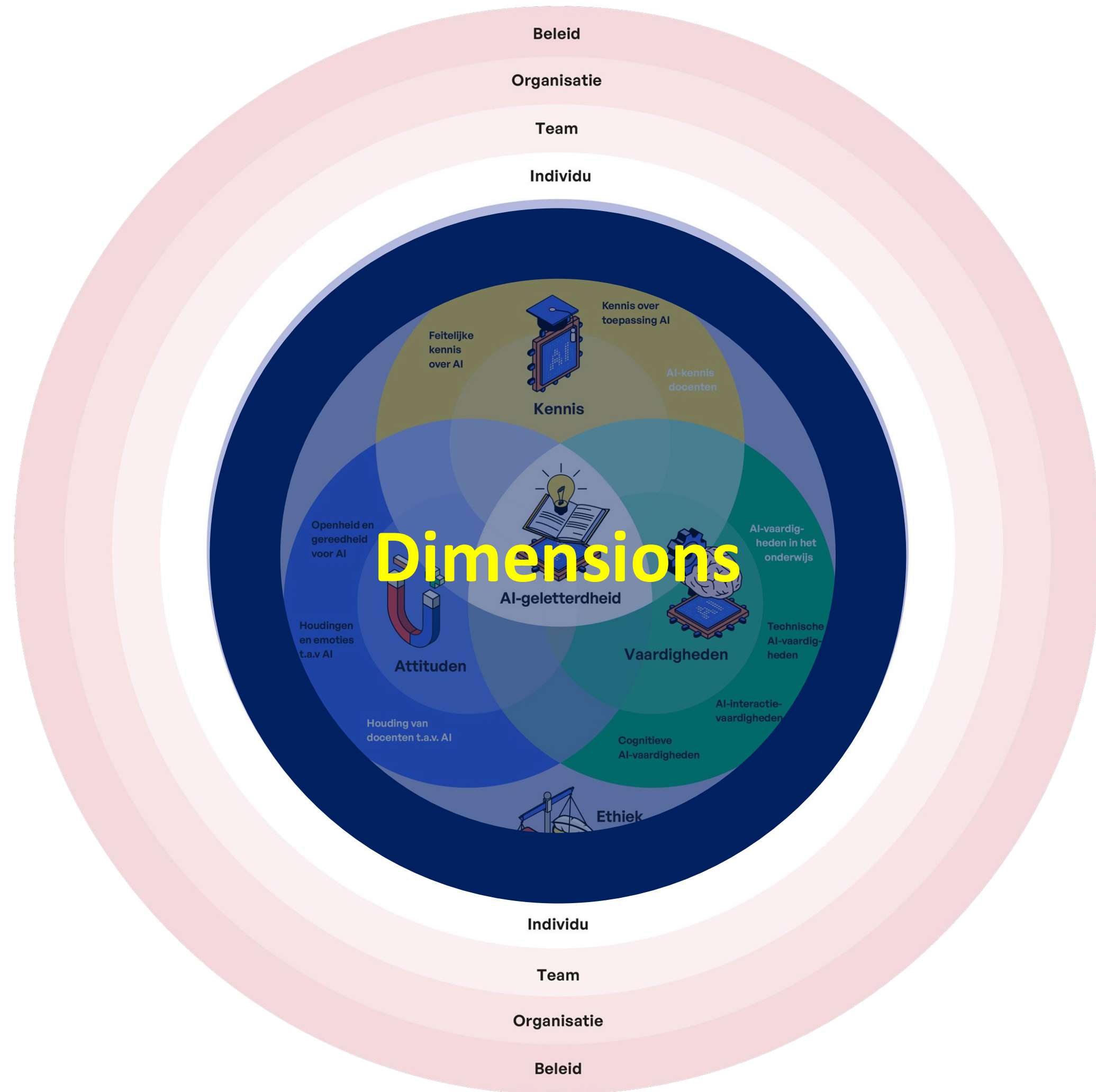
- AI literacy includes:
 - understanding fundamental AI concepts, applications and their societal implications;
 - applying AI-related skills to solve problems or collaborate with AI technologies;
 - developing a reflective attitude towards the role of AI in society, including one's own views and assumptions;
 - recognizing ethics as an underlying principle in the design, use and assessment of AI applications.





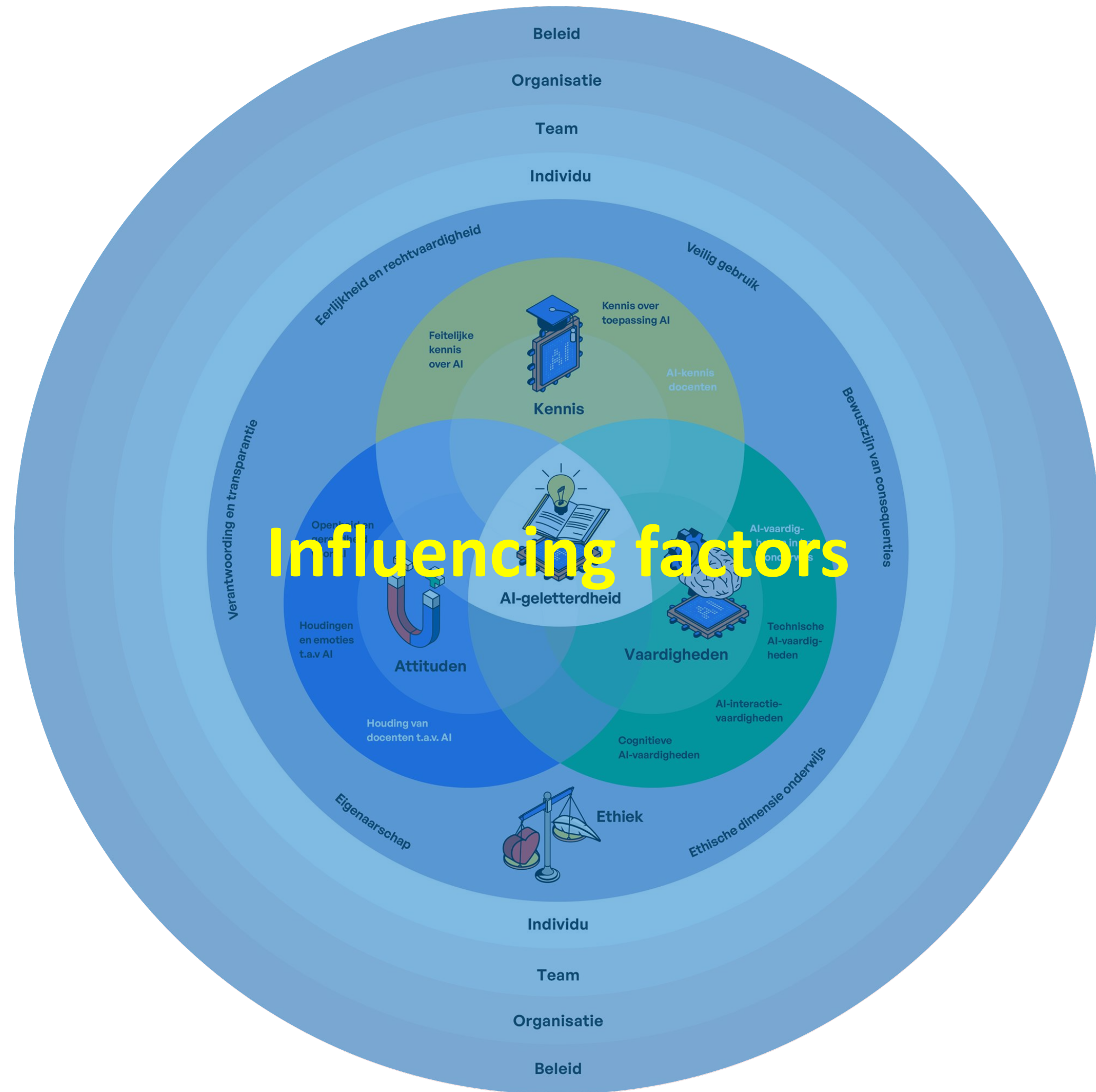
Components

- Four components
 - Knowledge (fundamental AI concepts, application and societal implications)
 - Skills (technical, cognitive, interactive)
 - Attitudes (reflective and critical attitude towards the role of AI in society)
 - Ethics ('underlying principle' in design, use and assessment of AI)



Dimensions

- Ethics ('underlying principle' in design, use and assessment of AI)
- Pedagogical-didactics dimension
 - Knowledge
 - Skills
 - Attitudes
 - Ethics



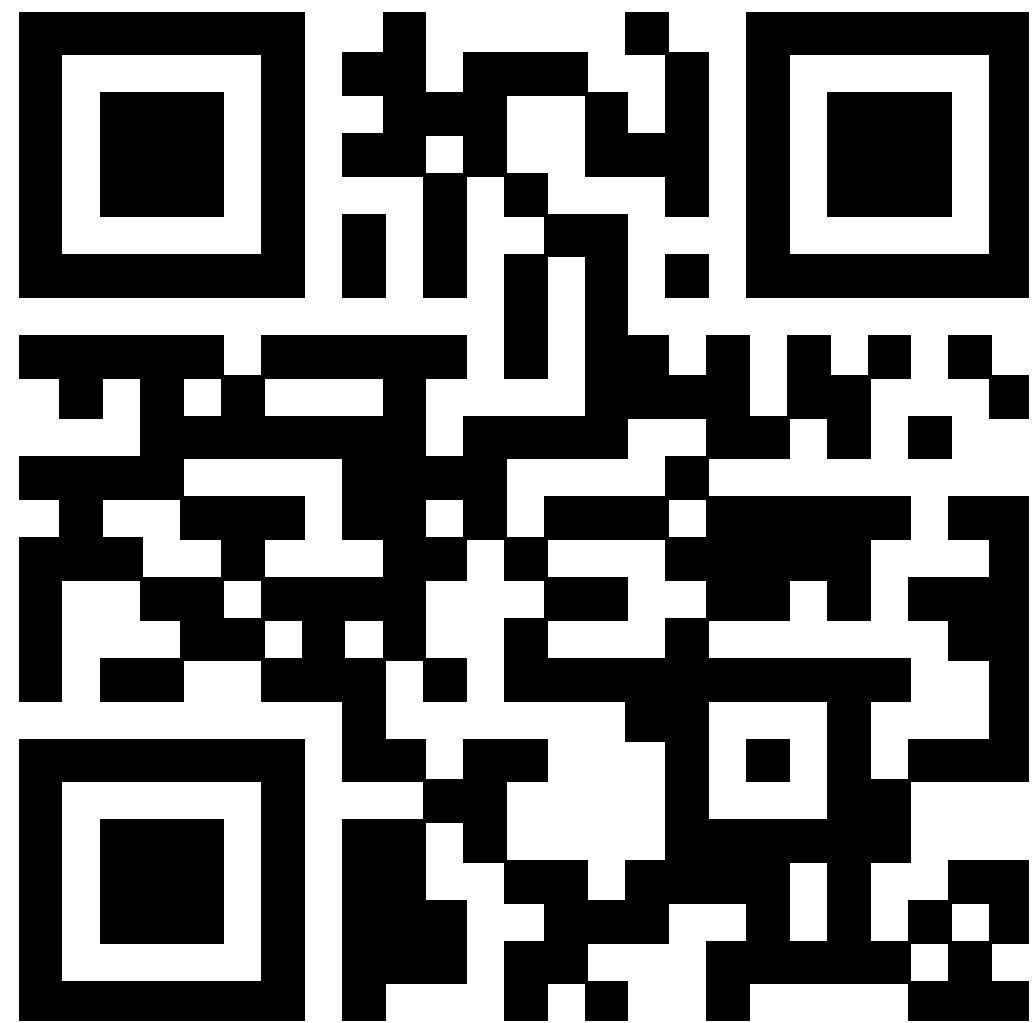
Characteristics / factors

Individual Factors

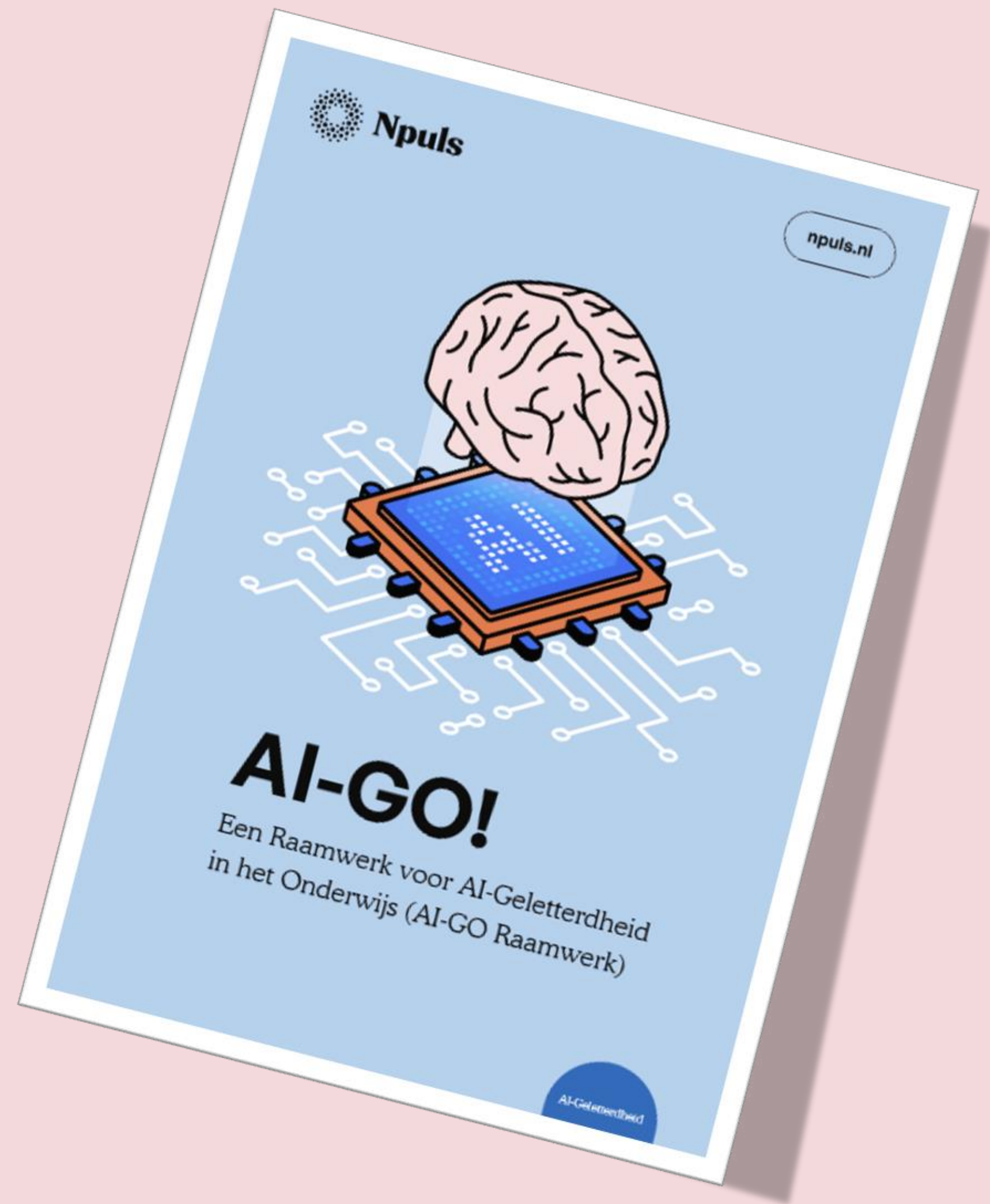
- Education and training
- Experience with AI
- Professional role and context
- Coherence between the use of AI and pedagogical-didactic insights

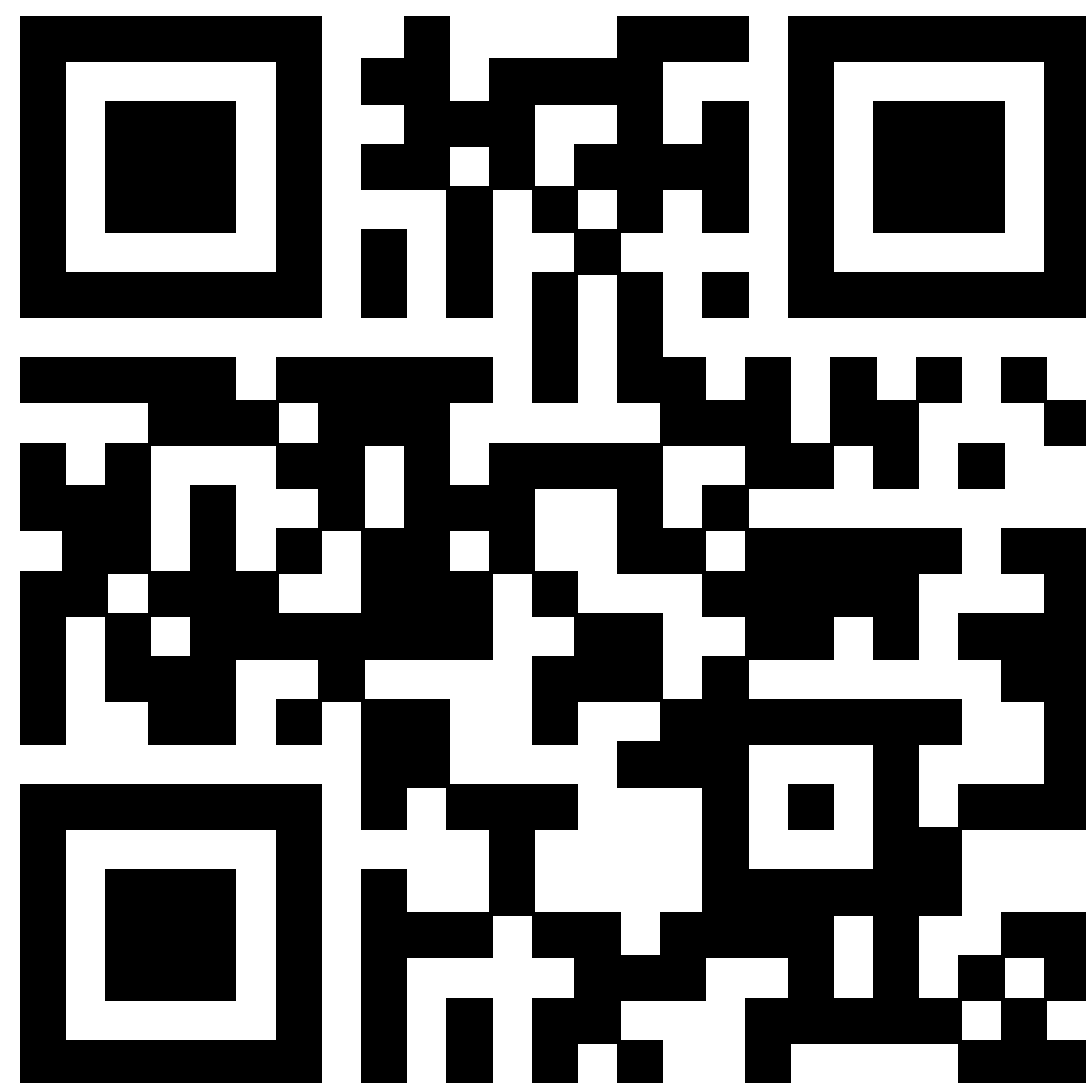
Organizational Factors

- Appropriate learning resources, learning pathways and frameworks
- Strategic embedding of professional development
- Supporting infrastructure
- Interdisciplinary collaboration
- Positioning in leadership and policy



edu.nl/x4uff



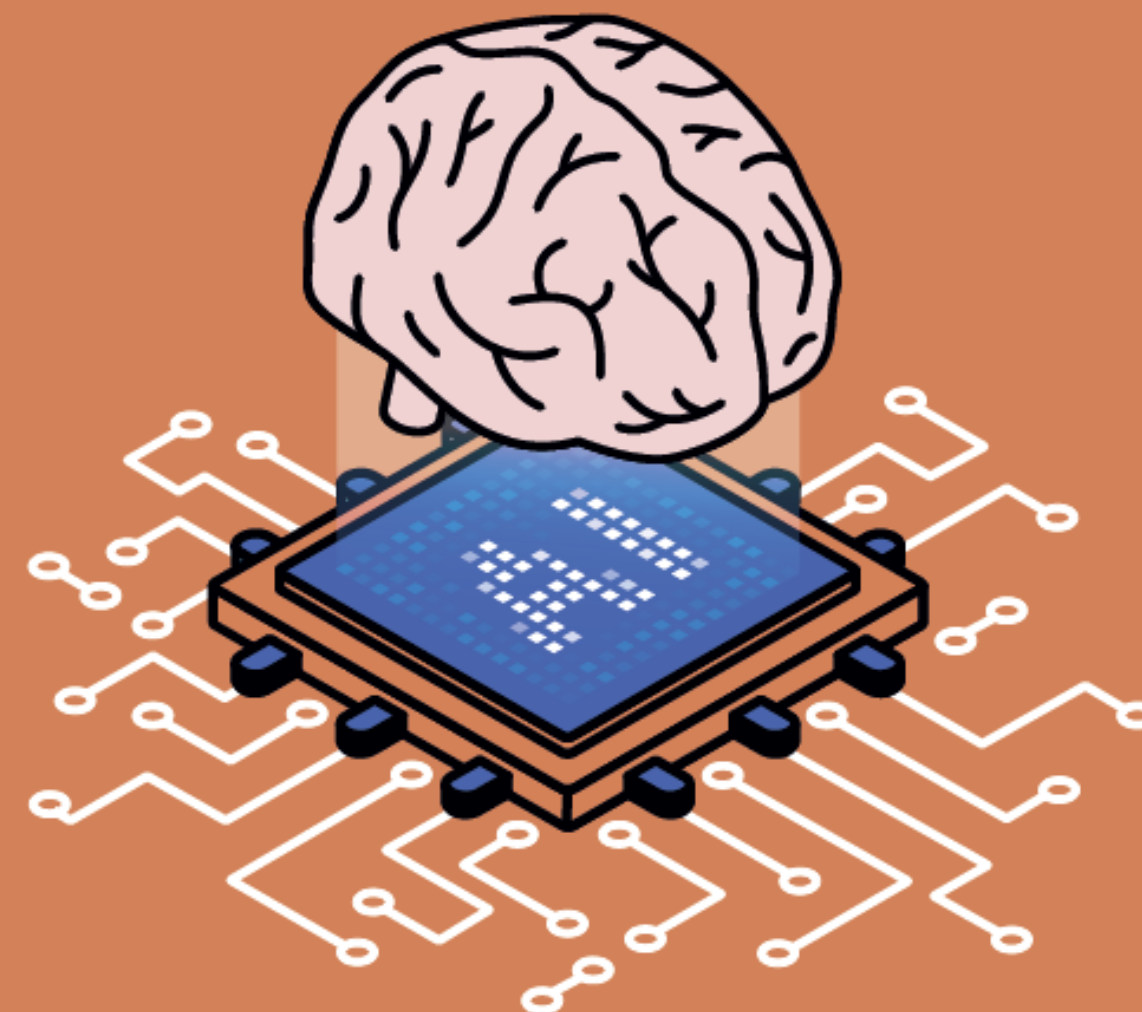


edu.nl/mw4ty



Npuls

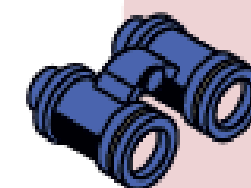
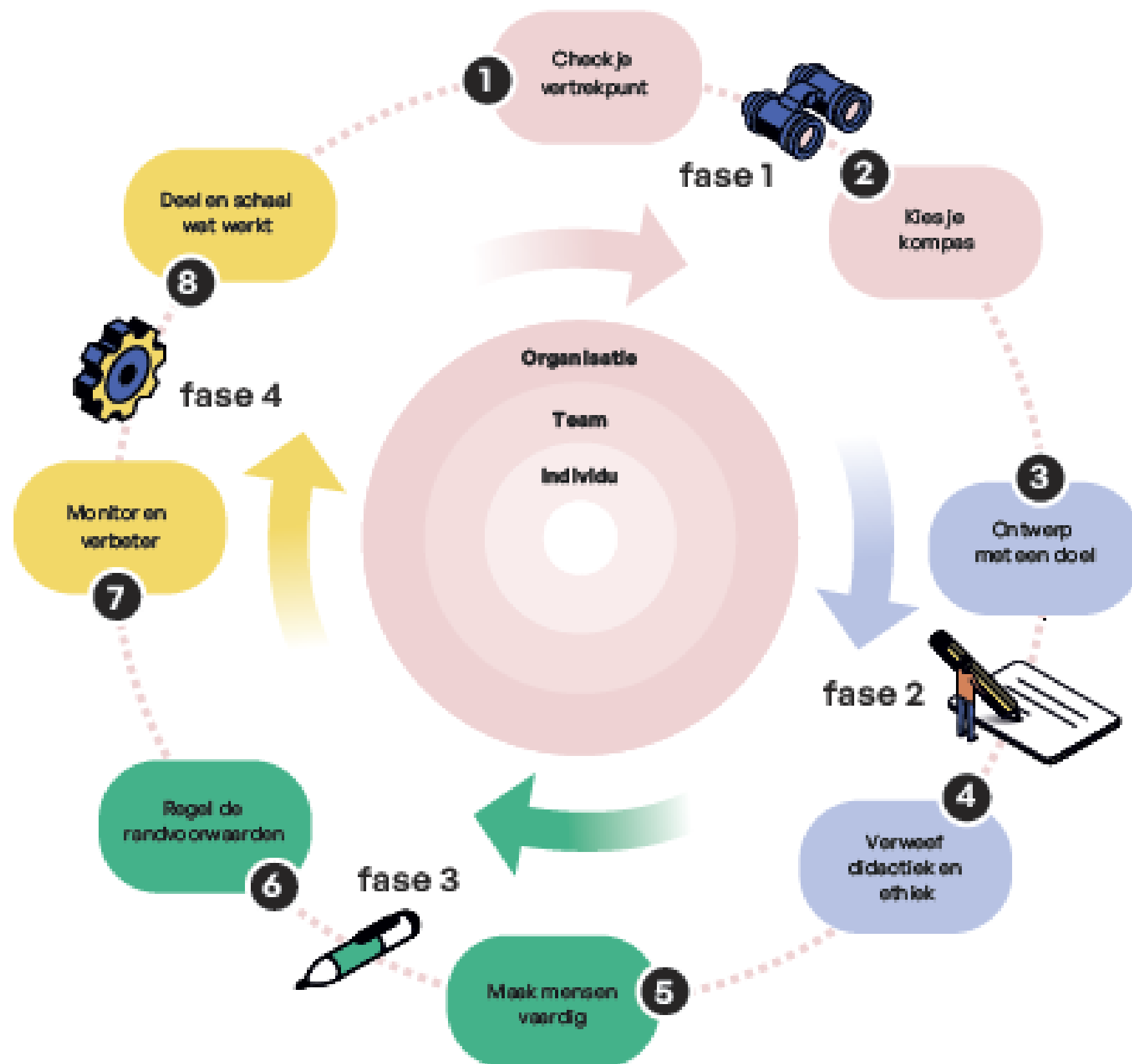
npuls.nl



AI-GO in Actie.

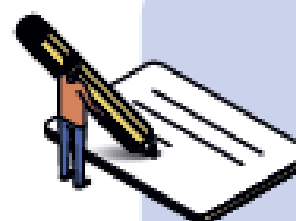
Handreiking voor AI-Geletterdheid
in het Onderwijs

AI-Geletterdheid



Fase I (Stappen 1-2): Oriëntatie en richting bepalen

In deze fase wordt verkend waar de opleiding, teams of professionals nu staan op het gebied van AI-geletterdheid en welke richting gewenst is. Dit geeft inzicht in de beginsituatie, onderliggende waarden en ambities die richting geven aan verdere keuzes.



Fase II (Stappen 3-4): Ontwerpen met visie en verantwoordelijkheid

In deze fase staat het ontwerp centraal: hoe krijgt AI een betekenisvolle plek in leren, lesgeven of organiseren? Didactische keuzes worden expliciet verbonden met ethische overwegingen en maatschappelijke verantwoordelijkheid.



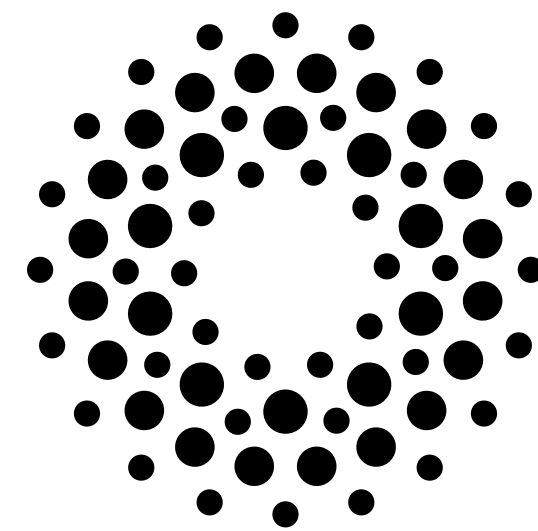
Fase III (Stappen 5-6): Implementeren en faciliteren

De focus in deze fase ligt op handelen in de praktijk. Vaardigheden worden ontwikkeld en randvoorwaarden gecreëerd, zodat professionals en teams daadwerkelijk met AI aan de slag kunnen en ondersteund worden in hun leerproces.



Fase IV (Stappen 7-8): Leren, verbeteren en verduurzamen

In deze fase worden ervaringen systematisch in kaart gebracht om te leren, aanpakken te verbeteren en succesvolle praktijken te delen en te borgen. Dit vormt de basis voor duurzame inbedding en nieuwe ontwikkelrondes.



Npuls

