

UNIVERSITY OF AMSTERDAM
Institute for Interdisciplinary Studies

**From science to society and
from knowledge to action.
*Bridging several gaps at once in
interdisciplinary honours education?***

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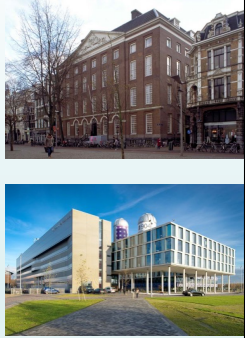
University of Amsterdam - since 1632

- Founded in 1632
- 7 Faculties
- 4 Campuses
- 41.000 students
- 5.500 international students
- 3.000 phd,
- 6.000 staff
- 73 master's (53 international)
- 62 bachelor's (14 international)

• Institute for Interdisciplinary Studies
– since 2000, at Science Park

• 2 BSc, 2 Msc, Honours, ID electives

• AUP 'Perspectives on ID' book series



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1. From Science to Society with Transdisciplinarity
2. Inner Development Goals towards Responsible Academic Citizenship
3. From Knowledge to Action(-able knowledge)
4. Keti Koti Dialogue Table for Co-Creation

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**Solving complex societal problems as a
challenge for inter- & transdisciplinary education**

United Nations SUSTAINABLE DEVELOPMENT GOALS



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**Interdisciplinarity: *scientifically robust*
knowledge by integrating multiple perspectives**

Interdisciplinary research is a mode of research in which theories, methods, tools, data etc. from two or more disciplines or research area's are integrated to develop a more comprehensive understanding or solve problems that are beyond the scope of a single discipline or research area.

(from: Keestra et al. (2022) Introduction to Interdisciplinary Research; cf. NAS 2005)

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**Integration of perspectives:
from multi- via inter- to trans-disciplinarity**

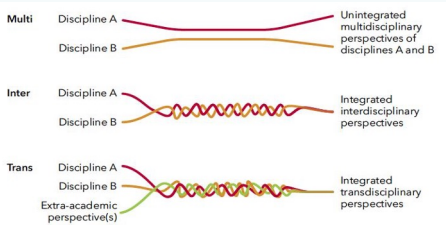


Figure 7 Multidisciplinarity, interdisciplinarity, and transdisciplinarity illustrated, highlighting the absence or presence of the integration of perspectives

(Fig. from Keestra et al., 2022)

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Trans-disciplinary research involves extra-academic partners who bring new dimensions

Transdisciplinary science involves:

- Extra-academic perspectives
- Experiential knowledge
- Values, norms, and interests
- Implementation issues

(fig. Pohl ea 2017 – in Keestra ea 2022)

Figure 9 The transdisciplinary research process integrates contributions not only from the realm of science but also from the realm of practice in all phases of the research process (Taken from Pohl et al., 2017). Reprinted with permission from the author.

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Participation in TD-projects: from manipulation to knowledge co-creation & 'citizen control'

Arnstein's Ladder of Public Participation

Table 2 Four research styles regarding two dimensions: the relationship between the degree of input of lay knowledge and the degree of focus on nondominant actors (Bunders et al. 2019)

Degree of lay knowledge input	Degree of focus on involvement of nondominant actors	
	Low	High
Low	Low	High
High	Low	High

Figure 9 (Fig.: Arnstein 1969 Ladder of participation; Bunders ea in Werlen 2015)

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Aiming for *socially* robust results: stakeholder involvement requires dialogue

Conservation project in Ethiopian national park:

- Global aims and standards
- Zoning and evacuation policy
- Livelihood and culture affected
- Conflicts of values & (human) rights.

Failed project, disengaged int'l NGO.

(Kelboro & Stellmacher, 2019)

Figure 19.1 Location of Nech Sar National Park. Source: Map compilation and Jason Chappell-Kramer (2018). CDE, University of Bern, Bern, Switzerland. Credits: CHM data by CHMmax (2018). Geomedia, ETH University of Applied Sciences, Switzerland.

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Informational diversity in inter- & trans-disciplinarity

Two dimensions of 'informational diversity':

- diversity of expertise
- social diversity

"But when members of a group notice that they are *socially different* from one another, they change their expectations. They anticipate differences of opinion and perspective. They assume they will *need to work harder* to come to a consensus."

(Phillips, 2014, 'Why diversity makes us smarter', doi:10.1038/scientificamerican1014-42; fig. Keestra, 2017; <https://tinyurl.com/Keestra-Metacognition>)

Figure 3 from "Metacognition and Reflection by Interdisciplinary Experts: Insights from Cognitive Science and Philosophy" by Michael Keestra, in *Journal of Interdisciplinary Studies* (2022) 222-229. Figure in color, with B/W version being published on p. 156.

Figure 3. An interdisciplinary team of experts develops together a more comprehensive understanding of a phenomenon – represented by the three-dimensional cube composed of different elements each of them contributes. Their joint or team metacognition and philosophical reflection upon their interdisciplinary collaboration facilitate the process of their development of an interdisciplinary integration of their distinct mental representations of the phenomenon.

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'Inner Development Goals' – supporting student development towards responsible academic citizen

Framework of IDG's:

- 23 skills and qualities
- in 5 categories
- "The IDG framework of skills and qualities relate to what is needed in order to successfully work with complex societal issues, in particular those identified in UN's Agenda 2030 and the 17 Sustainable Development Goals." (IDG 2021 report)

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BEING — RELATIONSHIP TO SELF

OPENNESS & LEARNING MINDSET

What assumptions do you have about yourself, others or situations that might hinder your openness and learning?

THINKING — COGNITIVE SKILLS

Describe a time when you've solved a problem by taking a different perspective. What sparked you to do so?

RELATING — CARING FOR OTHERS AND THE WORLD

HUMILITY

Can you give an example of feeling humbled? What did you learn from that?

COLLABORATING — SOCIAL SKILLS

Recall a time when having an open mindset helped you connect and communicate with people from diverse backgrounds.

ACTING — DRIVING CHANGE

COURAGE

Can you share a personal experience when you had the courage to challenge existing structures or views?

INCLUSIVE MINDSET & INTERCULTURAL COMPETENCE

Transition Makers

transitionmakers.nl

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IDG placemat exercise – pt 1

Why: Affective Persona Law Student

What qualities do they possess?
What is the graduate capable of?
What are the graduates' values?

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IDG placemat exercise – pt 2

Why: Affective Persona Law Student

Emily, 23 years old, is a recent law graduate from the University of Amsterdam. Her journey through the legal world is not just a tale of academic excellence, but also of personal growth and development of key skills.

Dealing with Uncertainty:

Collaboration

Courage

Empathy

Humility

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Embedding an IDG in your course(work)

IDG:

Course(s):

Existing Learning outcomes	New Learning outcome?
Which learning outcome(s) from the course are you aligning with?	Does this require changing the current learning outcome?
Tool from the Toolbox Which tool from the Toolbox would you like to use for this?	Embedding the tool How could you embed the tool in the context of your course?
Assessment How do you assess this learning objective now?	Feedback How could you customise the assessment for your needs? Could you focus on formative assessment? How do you assess the students' personal growth?
Notes What is needed to achieve this? Support from the educational programme? Coordination with the Examination Committee? Collaboration with fellow teachers?	

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Knowledge not just for knowledge's sake?

Actionability as extra epistemic criterium

(Participatory) Action Research initiated in 1970s Latin-America when researchers felt they should "produce actionable" knowledge that would serve [their] communities.

Taking these motivations seriously, researchers began to initiate their own "insertion into the social process," insisting that knowledge being *actionable* should become an important research goal

(cit. Fals Borda, 1979, in Keestra, M. (2019). Imagination and Actionability: Reflections on the Future of Interdisciplinarity; fig. Bradbury 2008).

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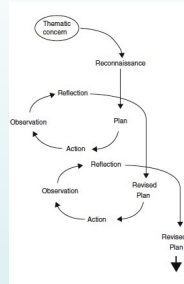
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Participatory Action Research – adjusting (and integrating) the Science Cycle

- Action research as collective (self)reflection:
- involving diversity of experts & stakeholders (transdisc.)
 - practicability of knowledge as validity criterion
 - strategies to potentiate action for social transformation
 - democratizing knowledge
 - intercultural dialogue

"Essentially action research is concerned with generating *knowledge* about a social system, while, and at the same time, attempting to *change it*." (Meyer, 2001:173; fig. in Werner (ed.) 2015).

(Danilo Streck, ITD conference 2017; Insights-blog 2017)



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Action research: joint sense-making & generation of both new knowledge and practices

- Co-developing new managerial structures by involving academics, managers, co-workers
- Developing safe house for violated women in Köln with women, government, communities
- Mitigating effects of racism on African-Americans by sharing and co-developing a healing process

"Action research as an egalitarian, collective problem-solving activity rooted in interpersonally sensitive and mutually supportive dialogue"

(Examples and quote from 'Sage Handbook for Action Research'; Bradbury, Miriv, Neilsen, Pasmore, p. 85, 2007; and Streck 2014)

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Keti Koti Table dialogue method since 2013:

- over 45.000 participants
- more than 400 collaborating organizations in NL and abroad
- dialogue method adopted for other contexts: post-colonial, community-building, polarization, campus dialogues, etc.
- 'effective social intervention' in Movisie database
- Advisory Board members of UNESCO Global Healing Initiative
- 'cultural heritage' in Amsterdam Museum
- Contributions to UNESCO symposium and book on Global Healing methods



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Dialogue to enhance mutual understanding & empathy and to mitigate discrimination & racism

In contract to polarizing discussion and debate, personal dialogue is effective due to:

- Voluntary inter-group contact
- Perspective taking
- Decreased intersubjective anxiety
- Building trust
- Empathy



(Allport 1954; Nagda & Zúñiga, 2003; Todd & Galinsky 2014; Keestra 2004; Batson & Ahmed 2009; Dhont & van Hiel 2011 – cf. Broekroelofs & Keestra [report] 2018)

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Structured dialogue at Keti Koti Table

Structured dialogue:

- time for reflection
- democratizing speech
- foregrounding listening
- attending to feelings
- joint reflection



Schema of Keti KotiTable dialogue structure

Preparation

1. Forming couples
2. Topic presentation and dialogue question
3. Silence - for 1 minute

Dialogue part I

4. First speaker - for 3 minutes
5. Silence - for 1 minute
6. Listener speaks - for 2 minutes

Dialogue part II

7. Second speaker - for 3 minutes
8. Silence - for 1 minute
9. Listener speaks - for 2 minutes

Conclusion round of dialogue

10. Shared reflection - for 5 minutes
11. Plenary discussion
12. Goodbye - and possibly change of dialogue couples

If possible

Next round of dialogue

Repeat from step 2 with next dialogue question

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Developing a research agenda with Ketikoti Table dialogue method

- What has bothered you most as a patient, or has been your focus as a researcher regarding sickle cell disease?
- What is most frustrating to you about current treatment and/or research in the disease?
- What do you both believe deserves more research attention, creates hope?

(Typically 2 questions about past & present, closing with future oriented one.)

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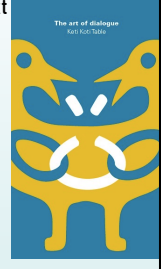


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Ketikoti Table: personal dialogue during tea?

1. Have you ever experienced a feeling of loneliness, or being excluded, within the context of the university?
Can you share the emotional impact of that experience?
-
2. Can you share a moment when you made an effort to connect with someone new at the university? How did that make you feel?
-
3. How can we support each other in creating more inclusive connections at the university? What do you need from each other? What feelings does this elicit in you?

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Empowered minds project: <https://tinyurl.com/IDG-IIS>

Handout: <https://tinyurl.com/Keesstra-Oslo-2025>

Ketikoti Table foundation: www.ketikotitafel.nl

English KKT page: <https://tinyurl.com/KKT-EN>

Special issue 'Philosophy of Interdisciplinarity'

- June 2025

workshop Between Complicity & Resistance - ITO 2024 - Nov. 5, 2024



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