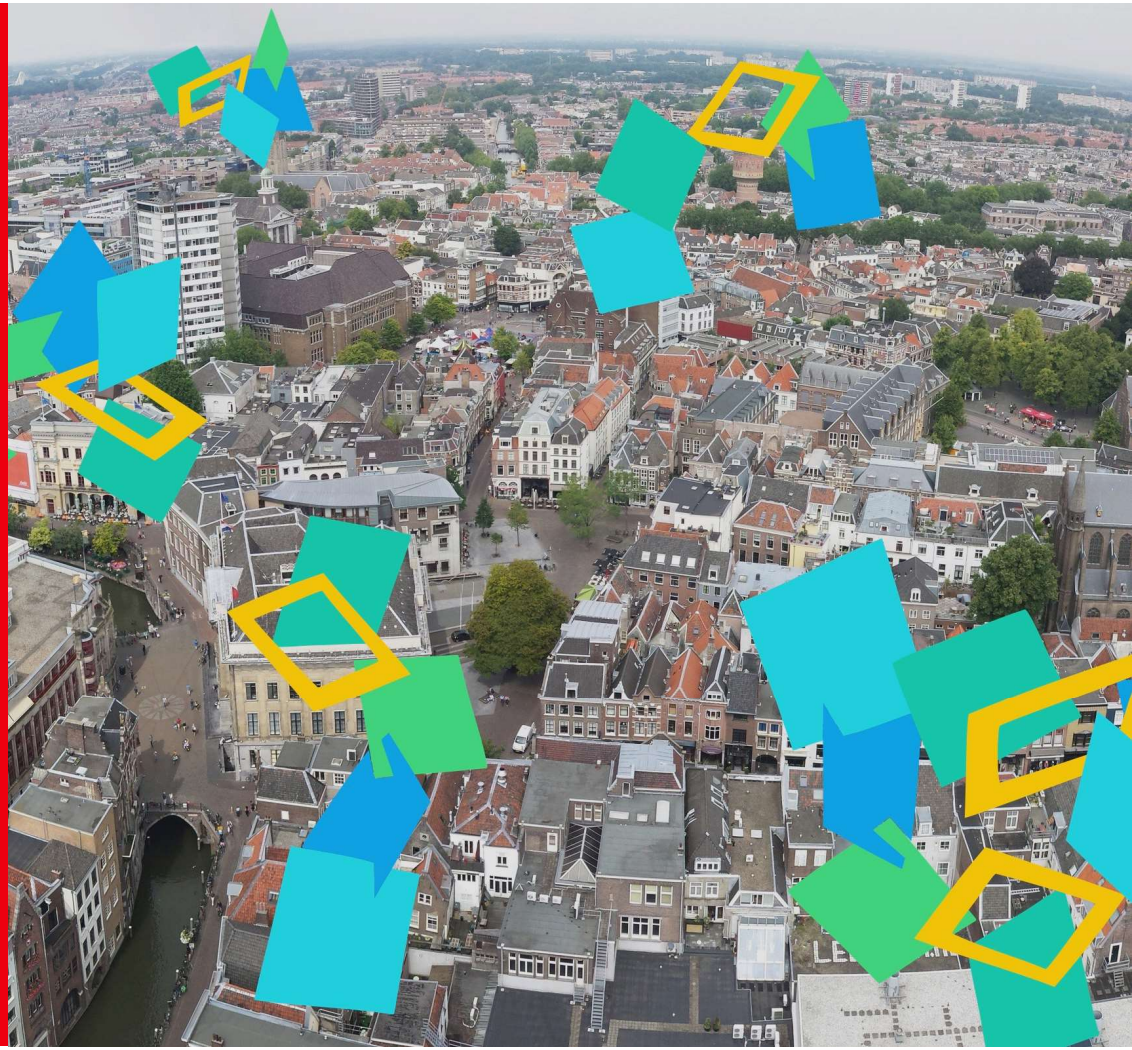
Workhop:
Design propositions of cross-boundary learning environments in health and social care



NIE Conference, 15 NOVEMBER 2023

Bouw, E., Bruijning, J., Overkamp, E., Van Ewijk, L., Van Harn, R., & Zitter, I. (2023). *Education across the boundaries of disciplines: designing in-society learning environments in health and social care* [Workshop]. NIE (National Interdisciplinary Education) conference 2023, Wageningen.

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Agenda

- Introduction
- Findings review
- HU Healthy&Well programme
- Applicability to other contexts

HU Healthy&Well

Game Changers in health and well-being: integrating education, applied research and practice to enhance quality of life in Utrecht and surroundings.

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Els Overkamp
Researcher

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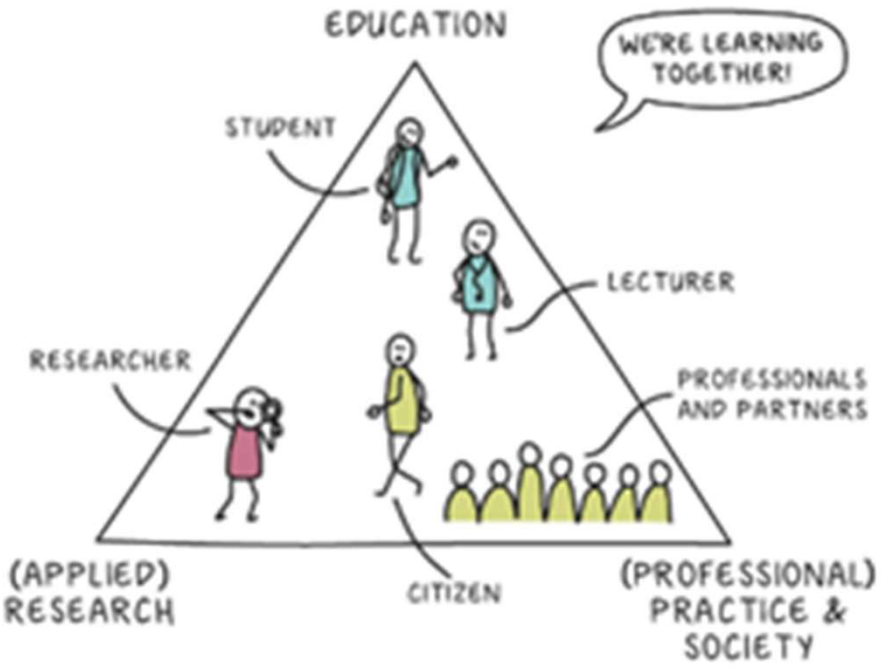
Ambition HU Healthy&Well



- Interprofessional learning in a network of connected (in-school, in-practice, in-society) meaningful learning environments in the domain of health and well-being.
- Creating a culture in which all stakeholders learn
- Creating impact:
  - Goal participation of 9.000 students in these interprofessional learning environments (34.000 total HU)
  - Currently: 1300+ Students / 80+ lecturers

HEALTHY TOGETHER

We are committed to reducing the health and welfare problems of people in the region, increasing their self-reliance and improving their lifestyle and social and physical safety.

Literature review

Multidisciplinary research team

Ilya Zitter
Professor

Vocational education

Rachelle van Harn
Researcher

Erica Bouw
Researcher

Janna Bruijning

Innovations in Preventive Care

Lizet van Ewijk
Researcher

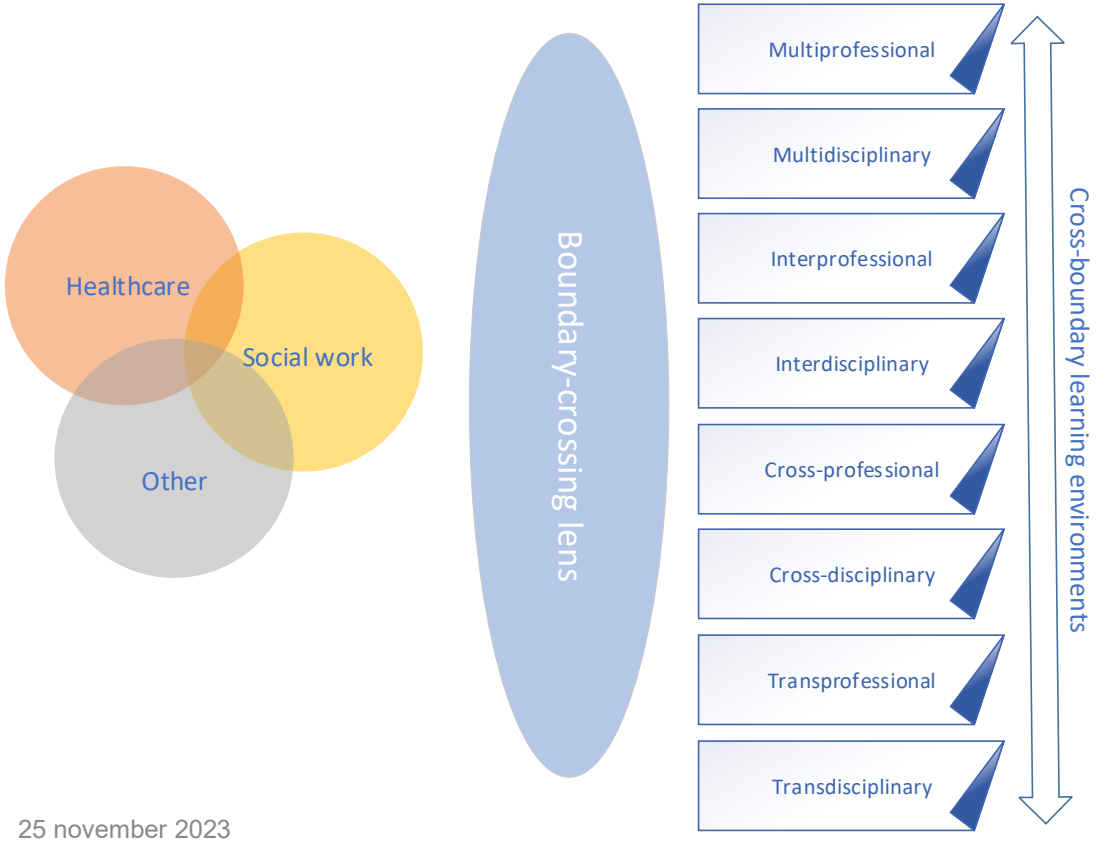
Speech and Language Therapy

Els Overkamp
Researcher

Participation, care and support

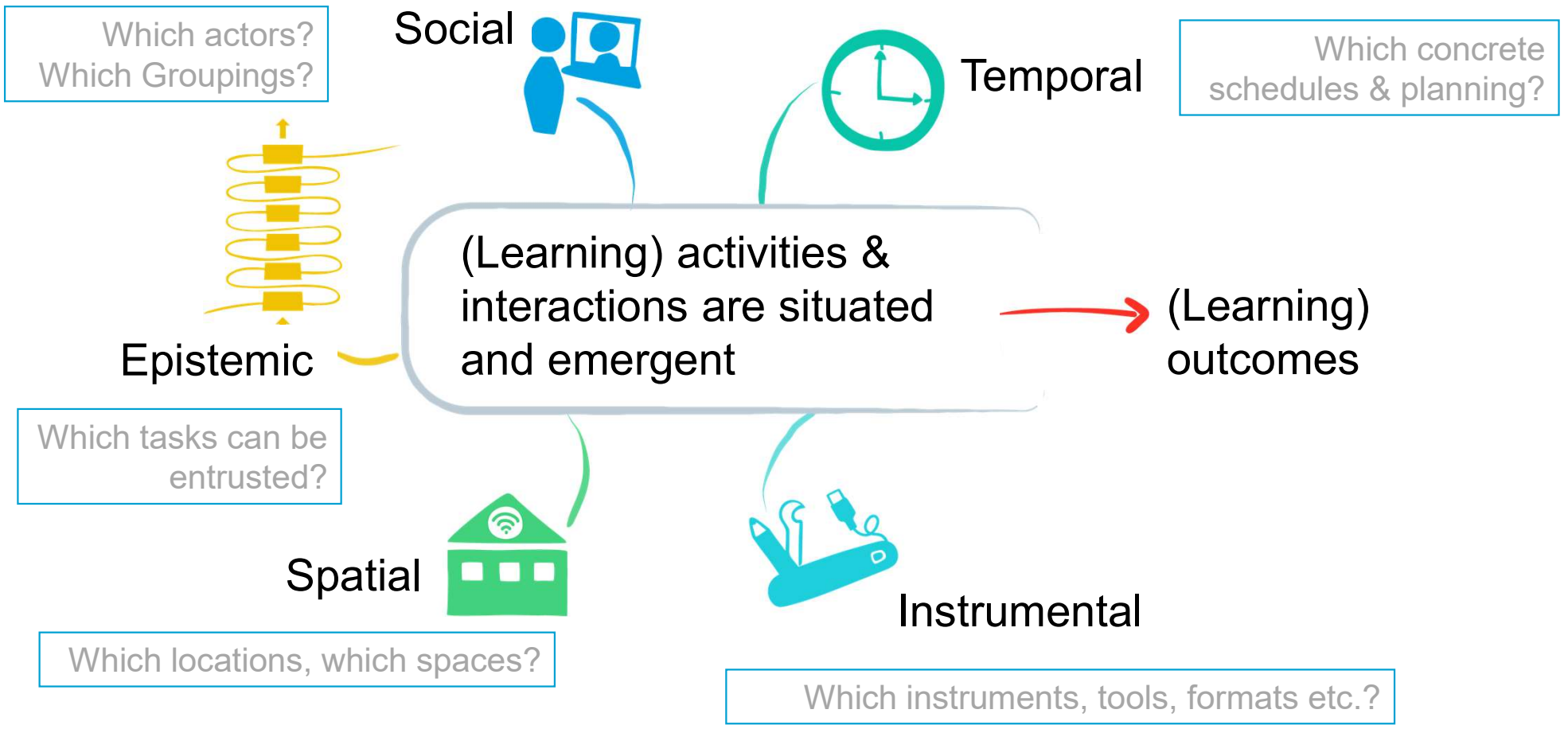
Multidisciplinary approach with a BC lens

Central question: How can we optimally design cross-boundary in-society learning environments?



1. Typical design features Multi/Inter/Cross/Trans
2. When 'in-society'
3. Effective mechanisms in the design
4. Design propositions
5. Recognizability and usability of design propositions

Learning environment and designable elements



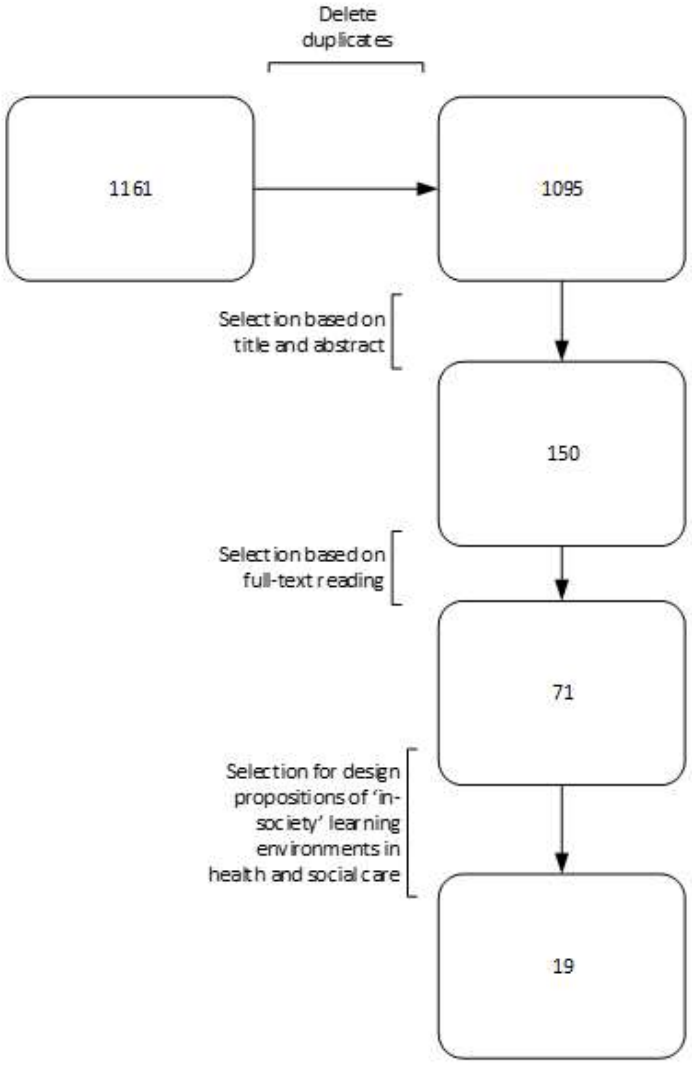
Literature review: Search strategy

Five databases: ERIC, PubMed, PsycINFO, Web of Science, and Academic Search Complete.
Combination of content search terms

Cross-boundary multi/inter/cross/trans		**Learning environment design**		**True-to-life learning**		**Educational level**		**Domain**
Cross-boundary Cross-disciplin* (cross-disciplinary OR cross-discipline) Cross-professional Interdisciplin* (interdisciplinary OR interdiscipline) Interprofessional Multidisciplin* (multidiscipline OR multidisciplinary) Multiprofessional Transdisciplin* (transdiscipline OR transdisciplinary)	AND	"Communities of practice" "Curriculum design" "Curriculum planning" "Curriculum strategies" "Educational design" "Educational methods" "Educational planning" "Educational setting" "Educational strategies" "Field experience program" "Instructional design" "Field labs" "Learning arrangement" "Learning communities" "Learning configuration" "Learning environment" "Living labs"	AND	"Authentic learning" "Contextual learning" "Cooperative education" "Experiential learning" Hands-on In-society Fieldwork Practice-based Real-world Service-learning "Service learning" "Situated learning" Society-based Work-based Work-integrated	AND	"Applied sciences" Bachelor "Further education" Graduate "Higher * education" (higher education OR higher professional education) Master "Post* education" (post-compulsory OR postgraduate OR post initial OR postsecondary) "Professional education" Universit* (university OR universities) "Vocational education"	AND	"Allied health" *care (healthcare OR "health care" OR "informal care" OR "in-home care" OR "at-home care") "community *" (community work OR community support OR community care) "Health and *"("health and wellbeing" OR "health and well-being" OR "health and well being" OR "health and welfare") Medic* (medical, medicine) Nursing "Social work"

Literature review: processing the data

- Selection in Rayyan
- Extraction by Item
- Review matrix (n = 71)
- CIMO-analysis (n = 19)
- Discuss preliminary findings with experts



Use and definition of Multi/Inter/Cross/Trans

- "multidisciplinary" and "multiprofessional“: describe **teams** of people from different disciplines/professions
- "inter" is used more frequently to refer to the type of **education**, rather than the team.
- "interprofessional“: characterizes learning environments where learners from different professions learn about, with and from each other (match with WHO, 2010)
- "cross-“: not much used, seems to indicate experience that is facilitated or the skills that are developed
- "transdisciplinary" or "trans professional" was not used in these articles (although it is used in other domains and contexts).
- Not much details on how the learning environment is designed -> subset

Sub-set of 19 journal articles

- Disciplines from **both** health and social care domains
- ‘Integrative' on the continuum between school and the outside world.
- Analysis using CIMO logic

Context Intervention Mechanism Outcome

Design propositions formulated according to this CIMO logic contain information about what to do, in which situations, with what effect and why this is happening.

CIMO example: Heath et al. (2019)

C	Wish to offer students an authentic experience and contribute to better oral health in rural children.
I	Students from different disciplines - are linked together to promote oral health and well-being in children - investigate the health resources of the communities visited and reflect on their experience - take care of children's teeth, carry out health checks and provide information on dental hygiene, nutrition, exercise and substance abuse - are involved in each other's activities, shadow each other and screen data about the children, which they share with each other
M	There is active communication between disciplines during orientation and during meals and breaks. Students delve into each other's roles and responsibilities and develop respect and appreciation for each other's expertise. Students report enjoyment of working with children, pride in community service, experiencing regional differences, learning about rural communities, valuing collaboration and applying skills in an authentic environment. (M)
O	The project provides positive results for interprofessional educational competencies and understanding of the unique patient population and their needs. Results indicate an increase in knowledge and understanding of the health needs of the population, of other professions, and of the impact of each profession on patient outcomes.

Expert sessions

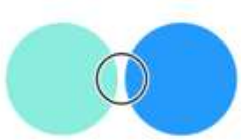
- Two (online) expert sessions in March and April 2023
- Selection: Experts with practical experience in designing, researching and/or participating in in-society learning environments
- Three design propositions presented per expert session
- Helped sharpen design propositions by discussing recognizability and usability

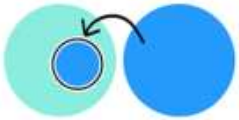
Image: Harish Sharma (Pixabay)

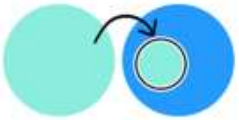
Context: three levels

- Societal level:
  - Improve health and welfare services, reduce health problems, address local issues
  - Future workforce: students gain knowledge of vulnerable groups and perhaps become enthusiastic about working with them.
  - Expose students to the problems that both clients and professionals encounter in practice
- Institutional level:
  - Overcome the problematic collaboration between actors in various organizations and disciplines
  - Break down discipline-specific silos
  - Address organizational frictions such as scheduling problems
- Course Level:
  - Address the lack of attention to interprofessional skills in existing courses
  - Provide students with 'real-life' experiences in authentic settings
  - Meet the learning needs of a heterogeneous group of students

Interventions: four manifestations







Interprofessional placement	Simulation	Service learning	Student-run clinic
Alignment between ‘school’ and ‘ work’	Incorporation ‘work’ to ‘school’	Incorporation ‘school’ to ‘work’	Hybridisation of ‘school’ and ‘work

Triggering boundary crossing mechanisms

The four boundary crossing learning mechanisms (identification, coordination, perspective making and taking, and transformation) can be triggered by having students:

- Engage in hands-on experience in life-like settings such as clinics simulations.
- Exchange perspectives, actively contribute to interprofessional teams, draw on the collective knowledge, and make decisions that influence patient care.
- Observe each other, exchange data, and share knowledge within their teams.
- Utilize boundary objects such as care plans, poster presentations, team portfolios
- Participate in self-selected projects
- Follow up on patients/clients to witness the outcomes of their interventions.
- Reflect on their experiences to deepen their understanding of interprofessional collaboration.

Outcomes

- Overall the articles report many positive outcomes related to

  a) Students' learning

  b) Health and social care
- Varying results on students' readiness to work in interprofessional teams.
- Studies report students' appreciation of authentic tasks, patient contact and indirect supervision.
- Direct contact with target groups results in more positive attitudes toward e.g. older adults
- It seems that more longitudinal and immersive experiences lead tot more transformative outcomes

HU story

- Students social work and students oral care learn together at refugee centre;
- Assumption: pleasure and enjoyment in physical activity could contribute to the wellbeing of young refugees
- The oral health of (young) refugees is worse on average than the oral health of children in the Netherlands.
- By doing these physical activities, students create a bond of trust in which they are able to teach the children and parents about oral health•
- Students are challenged to develop their boundary spanner skills during the program

Example learning environment: U on Board

Social: refugee young people, students & teachers social work, dental care

Social work: 16 hours/week, 10 weeks
Dental care: every other week
After school young people
Different periods of time young people

Guided Urban
Action sport
Tasks which can be added

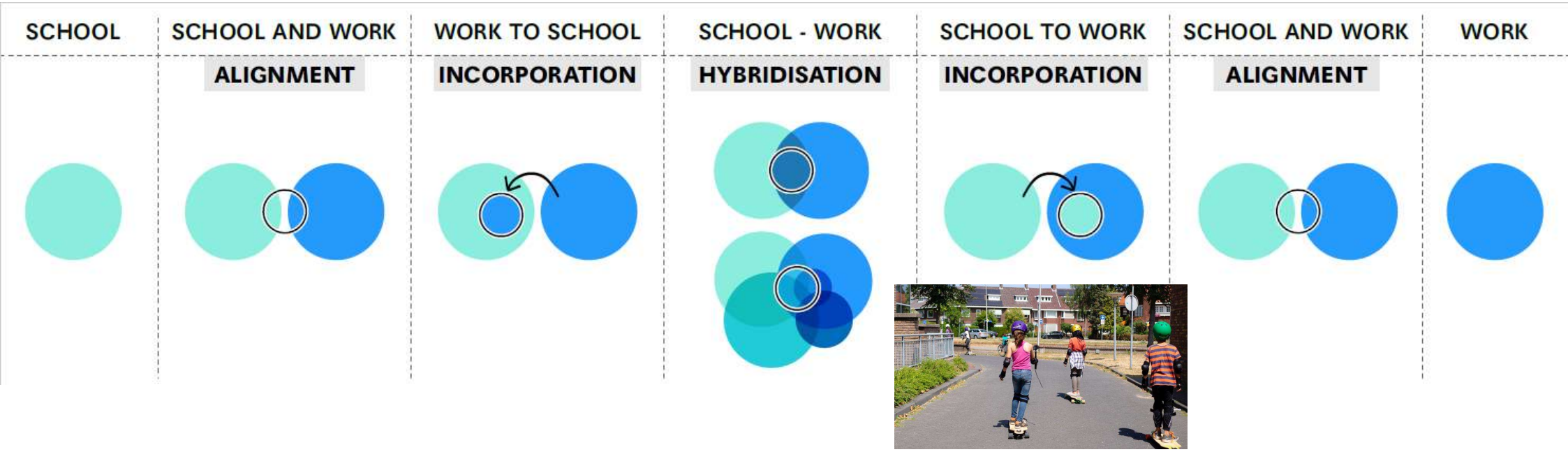
Boundary crossing competence
Positive impact on society

Asylum Seekers Centre
All outside

Sports equipment, U on Board-flags

https://www.sportanddev.org/en/article/news/refugee-young-people-and-social-work-students-pushing-more-just-board-asylum-seeker

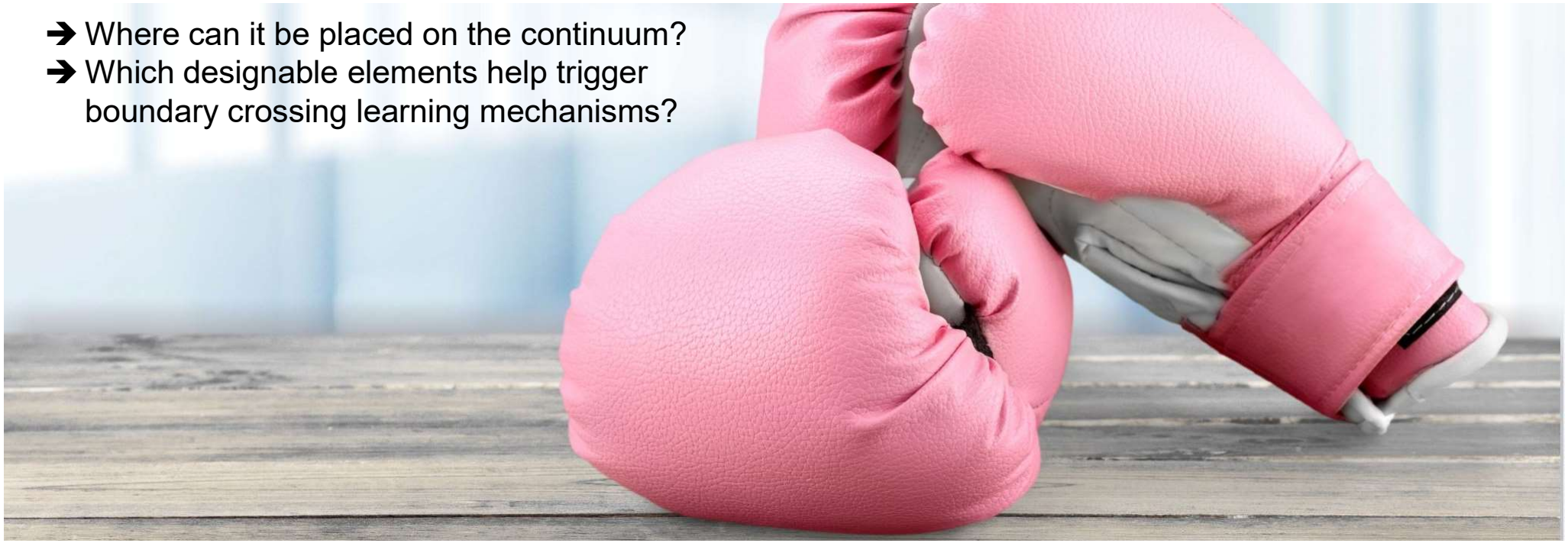
U on Board on the continuum



Bouw et al. (2021) Multilevel design considerations for vocational curricula at the boundary of school and work, Journal of Curriculum Studies, 53:6, 765-783, DOI: 10.1080/00220272.2021.1899290

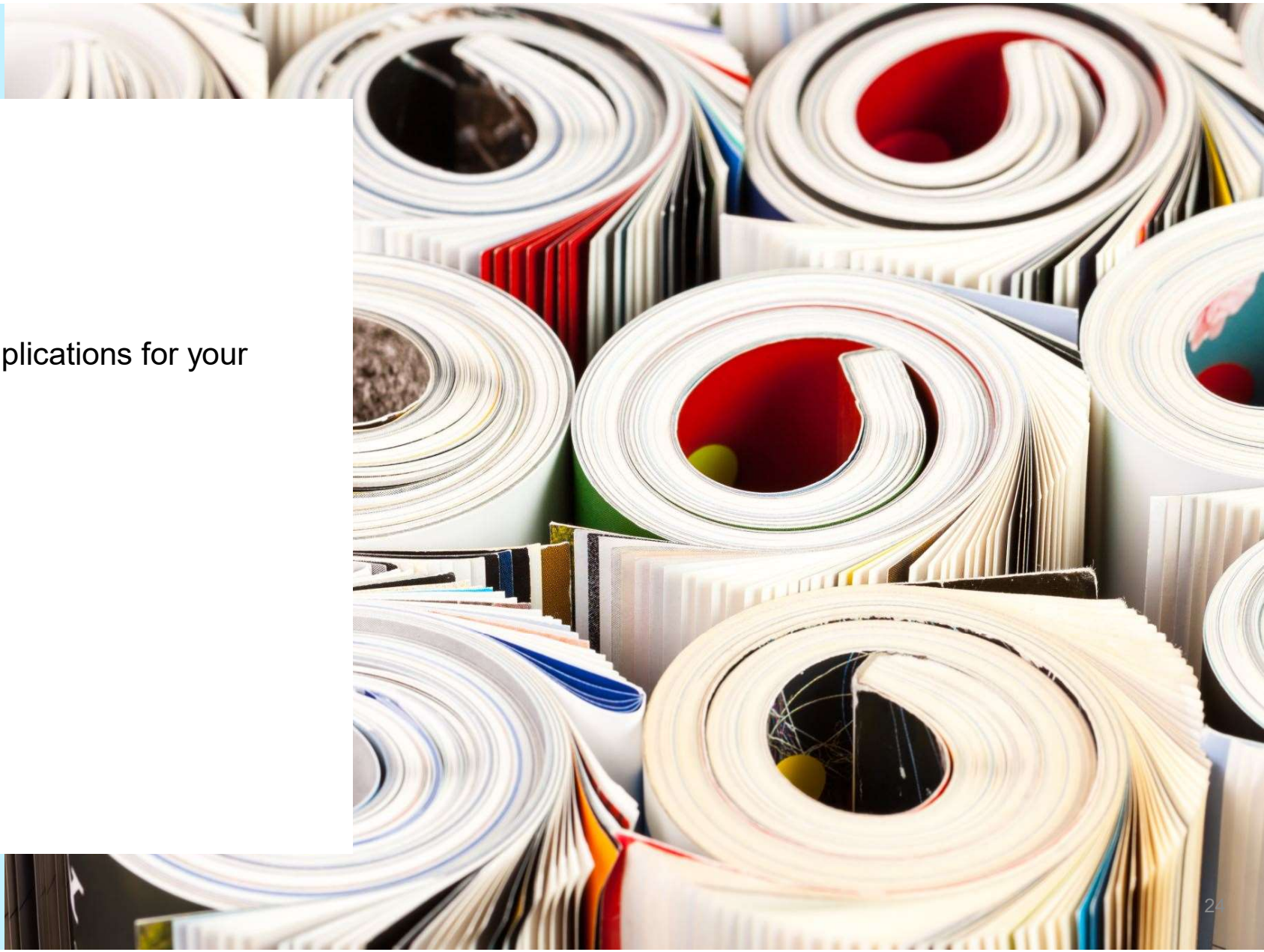
What about your cross-boundary learning environment?

➔ Where can it be placed on the continuum?
➔ Which designable elements help trigger boundary crossing learning mechanisms?



Wrap-up

Key learnings and implications for your practice?



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