

Bridging the gap between society and people with a lack in basic skills.

OUR FOCUS
18 < ADULTS > 40

Authors

Bridge Builders for Inclusive Society at Eindhoven Engine.

Design Booklet

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**We are building bridges
between society and
people with a lack of
basic skills.**



INTRODUCTION TO BASIC SKILLS

Here, an overview of facts and figures we use within our team.
Important to note, it is difficult to keep the numbers pure, due to the difficulty to measure and complexity of the problem.

The basic skills include **literacy, numeracy, and digital skills**. People with a lack of basic skills do not have the skill-level needed for a mbo study (see table next page).

A lack of basic skills causes problems to fully participate in our society, with all kinds of negative effects on a personal and societal level.

OUR FOCUS



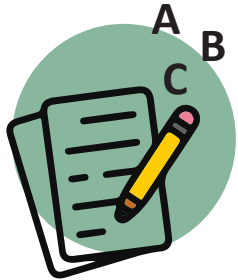
GENERAL

- 'Low-literate' ≠ 'lack of basic skills'.


 [2.5 million](#) people in the Netherlands have a lack of basic skills. The societal costs are estimated at [1.13 billion](#) per year.


 Eindhoven's population consists of [246,000 people \(in 2024\)](#).

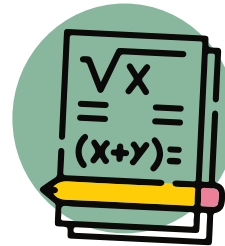
INTRODUCTION TO BASIC SKILLS



LITERACY [Reading & Writing]

 [1.8 million](#) of the working population (16-65 years) is low literate.

 Approximately, [19,000](#) people who have low basic skills, 10.000 are native Dutch speakers (NT1) and 9.000 have a migration background (NT2).



NUMERACY

- The group of people who lack numeracy skills is larger than the group of people with low-literacy.


 [2.1 million](#) of Dutch inhabitants has a lack of numeracy skills.

Table 1. Language Level Reference Framework for Language and Arithmetic

	Low-literate		Not low-literate		
NT1 Dutch as first language	Illiterate	1F	2F	3F	4F
NT2 Dutch as second language	A0	A1-A2	B1	B2	C1-C2
Similar education level		End primary school	End vmbo and mbo 1, 2, 3	End mbo-4 or havo	End vwo-hbo/ university



DIGITAL

- Digital skills include reading, writing, and calculation on digital devices and are about the understanding of the digital world.


 [Over 20%](#) of the working population experience difficulties with basic digital skills.

Table of Eindhoven municipality adapted, as cited by Guo, S., Leborgne, F., Hu, J., & Baets, W. (2024). Can AI Bridge the Literacy Gap? Developing a GPT-4 Summarization Tool for Low Literacy. Eindhoven University of Technology.



VISION

Every human has the right to be **included and self-sufficient** in this increasingly complex society. However, not everybody has the opportunity to develop appropriate basic skills.

We want to tackle this wicked problem to **bridge the gap** between society and people. To this end, we develop individualised approaches to **strengthen people's** basic skills.

Together we want to build an **inclusive society** where each human is empowered to make decisions about their own life.

MISSION

Our mission is, to explore and develop interventions that create societal impact. We work as a **navigator in the wicked problem** of lack of basic skills.

We **raise awareness** about this wicked problem and **accelerate action**. We use an equity-centred design approach, by actively working together with our target community. We believe that co-creation leads to better understanding of the problem. We use a **domain-approach** to build solutions that fit the context, we currently work in: finance, work and activities, health, and social relations.

We showcase successful pilots alongside already available tools that fit our target audiences. The developed interventions are **creative** and based on **cutting-edge technologies**, through for example gamification and artificial intelligence.

OUR DOMAINS

FINANCE



WORK AND
ACTIVITIES



HEALTH



SOCIAL
RELATIONS



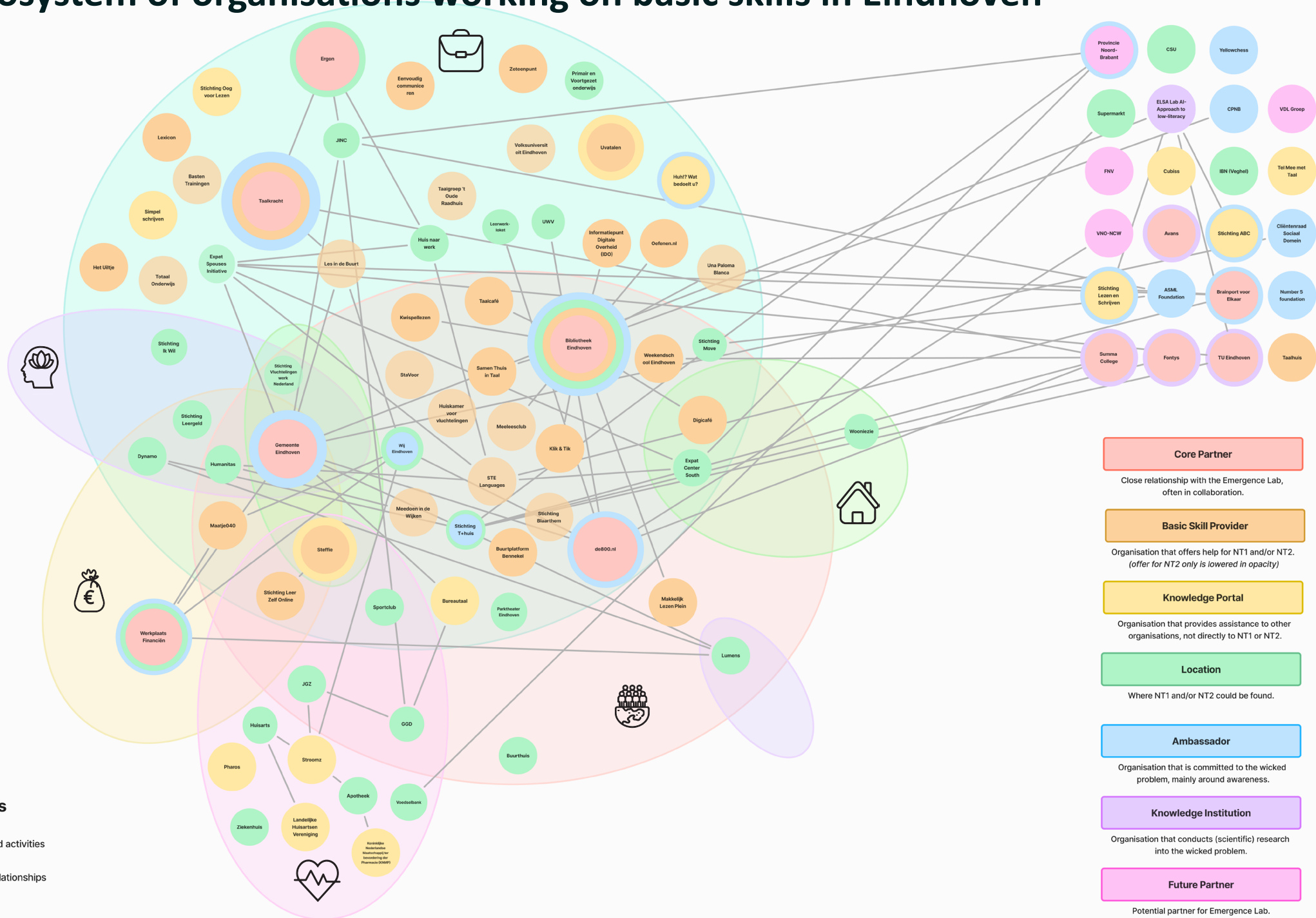
LIVING



PURPOSE



Ecosystem of organisations working on basic skills in Eindhoven



OUR DYNAMIC WAY OF WORKING

AWARENESS



Workshop: Aahh, ik snap het niet!!

Through an immersive experience, participants feel what reduced language skills mean. And how the complexity of the current help landscape actually widens the gap within society. It positively encourages participants to take action through critical reflection.

DOMAINS



Project owner. Inge

Can be seen at [dutch design week 2024](#)



Basic skills Booth

The purpose of the booth is to create awareness for the basic skills problem in the Netherlands. By walking inside, you will see three different walls. Get informed by those walls and experience what it is to lack those skills.

DOMAINS



Project owner. Shanya

AI TECHNOLOGIES



Met Mij: Mijke

Met Mij aims to smartly connect people and services, with the first step being to identify individuals' unique needs through the problem-tracking tool, Mijke. Using AI, it enhances accessibility to social services in Eindhoven, improving user engagement through innovative design.

DOMAINS



Project owners. Jéssica and Valentin



Met Mij: Smarter connection and dynamic service design

Met Mij collects data from the Eindhoven region to create a dynamic service platform with smarter connections. By integrating Large Language Models (LLMs), it automates data processing, enhancing user guidance and stakeholder collaboration. This dynamic system design ensures seamless data transfer, fostering collaboration and personalized experiences for all users and stakeholders.

DOMAINS



Project owner. Sichen

OUR DYNAMIC WAY OF WORKING

SHAME



Shame around low literacy.

There is a stigma surrounding low literacy. I would like to break a taboo with a product or service to show that no one should be ashamed that a person is low literate.

Project owner. Sera

DOMAINS



Understanding Uneasiness

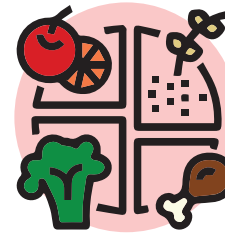
Developing a more nuanced, situated understanding of the feelings of uneasiness and stigma associated with lacking basic skills. The project's final outcome will include actionable insights that provide empathy-driven recommendations for future interventions.

Collaboration. TU/e Industrial Design - Research

DOMAINS



REACH AND ENGAGE

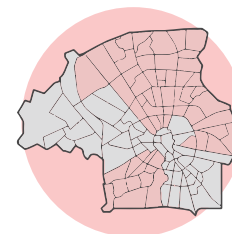


Low-threshold offer

By developing low-threshold offerings, it is possible to find people with a lack of basic skills and then motivate them to follow new learning offerings. Interactive workshops are being designed and research is being conducted into the way in which this offer can be given structurally. All this is done from a specific neighbourhood approach, in order to be closer to the target group, in collaboration with the library and YellowChess. One of the developed workshops by our team is on eating healthy, called 'Gezond Eten', covering all basic skills.

Project owners. Merel and Inge

DOMAINS



Neighbourhood Approach

Zooming in on specific city districts and neighbourhoods in and around Eindhoven. Each team will set up an action plan on how to get the local support system in contact with the people who lack basic skills.

Collaboration. Fontys - Creative Economy

DOMAINS



OUR DYNAMIC WAY OF WORKING

REACH AND ENGAGE



DOMAINS



Design for Inclusivity

Finding ways to discreetly engage people with basic skills and connect them with targeted support. The design will create a welcoming, non-stigmatizing environment that allows individuals to access resources and opportunities in a way that protects their privacy and dignity.

Collaboration. TU/e Industrial Design - Design



DOMAINS



Constructive Design Research

Showroom: Using speculative design to the future evolution of an inclusive society tailored to individuals who lack basic skills.

Field: Research on the intuitiveness, inclusiveness, and supportiveness of a user-centric service system to effectively provide access to social support services for people who lack basic skills.

Collaboration. TU/e Industrial - Research

HEALTHCARE



DOMAINS



Healthcare innovations for people with lack of basic skills.

Exploring existing healthcare technologies that are beneficial for individuals lacking basic skills can significantly improve accessibility and understanding of healthcare. These tools can help enhance their healthcare skills, overcome feelings of shame and insecurity, and promote better health outcomes.

Project owner. Thaomi



DOMAINS



Improving accessibility of GPs for people with low basic skills

Conduct research on how the general practitioners can be made more accessible through the use of innovation. This will improve the average health of this target group.

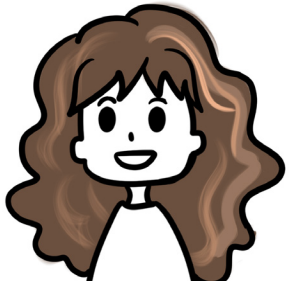
Project owner. Nina

TEAM

We work with a **diverse team**, along with target groups and experts, because of this we are able to make validated decisions. We carry out **long and short-term projects** to promote continuity with fresh perspectives. This all, enhances innovation and intelligent problem-solving in the **Bridge Builders team**.

Interested to work together? Reach out to our Project coördinator:

Merel Notten: m.j.notten@tue.nl.



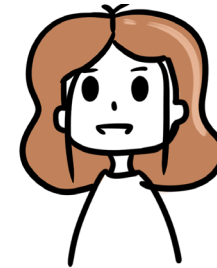
MEREL
*Project & Team
Coördinator*



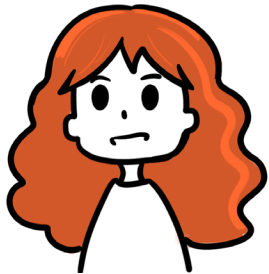
LOTTE
Program Manager



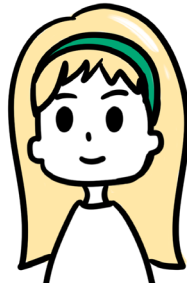
WALTER
*Wicked Problems
Officer*



INGE
*Junior Social
Designer*



EEFJE
*Pluriformity Officer in
Residence, Eindhoven
Municipality*



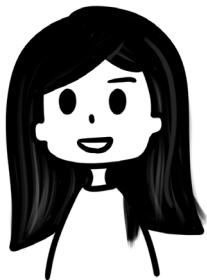
CARMEN
Expert



JOSHUA
Expert



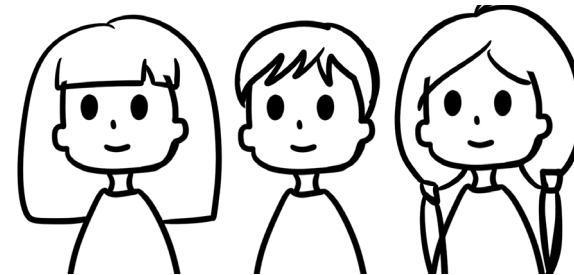
ROEL
*Technological
advisor and AI
expert*



JÉSSICA
*EngD trainee
Human-Centered
Innovation Designer*



SICHEN
*EngD trainee
UX designer and
researcher*



STUDENTS
Short-term Projects

Combining disciplines: Avans - Healthcare Technology; Avans - Business Innovation; Fontys - ICT & Infrastructure; and TU/e - Industrial Design.

DOMAIN* EXPLANATION



FINANCE. Income, expenses, spending patterns, administration, insurance and financial care for others.



WORK AND ACTIVITIES. Work, daytime activities, activities, education and training, and leisure activities.



HEALTH. Including both physical and mental health. Eating, drinking, exercising, self-care, physical contact, well-being, autonomy, illness, and disability.



SOCIAL RELATIONS. Family, relations and friends, neighbors, professional contacts, social skills, and social media



LIVING. Housing, neighbourhood/district, transportation, household activities of daily living.



PURPOSE. Drives, meaning, dreams, desires, culture and values, spirituality, and motivation.

* The domain-approach is based on the '7 Leefgebieden' described by [Movisie](#) established by Ministerie van Volksgezondheid, Welzijn en Sport in 2016.

TERMINOLOGY

Inclusive society. A society for all, in which everyone is valued and respected, regardless of their differences. Everybody has equitable access to opportunities and actively participates in all aspects of life.

Wicked problem. A problem that has no simple apparent solution. It is caused by the interaction of many stakeholders with conflicting values. This creates a 'complex' system, within which problems can only be tackled as wicked.

Self-sufficient. The quality of not needing help or support from other people.

Empowerment. The act of giving somebody more control over their own life or situation they are in.

Equity-centred design. A design approach in which traditionally marginalised voices lead the conversation to drive more inclusive and innovative solutions.

Co-creation. Participants with different roles align and offer diverse insights, usually in facilitated workshops. To get a more holistic view of what a product of service should include.

Pilot project. A small-scale preliminary experiment designed to help to check out the feasibility, effectiveness and potential outcomes of a project, before you get started.

Cutting-edge technologies. Technology at the frontiers of knowledge. Technological devices, techniques or achievements that employ the most current and high-level IT developments.

Gamification. To encourage active participation and make tasks fun and enjoyable in nongame contexts.

Artificial intelligence. Technology that enables computers and machines to simulate human intelligence and problem-solving capabilities.

Ecosystem. An ecosystem is a network of organizations, people, technology, platforms and content that are linked and interdependent.