

**ZU
YD**

ANNUAL REPORT 2023/24

RESEARCH CENTRE CLUSTER MAASTRICHT ECONOMIC DOMAIN

Professional Communication in a Digitalizing Society

Global Minds @ Work

Future of Food

Sustainable International Business



Content

01	Education	4
	• PROCODIS: A framework for teaching Machine Translation Literacy • PROCODIS: On the same line: Enhancing the communicative competence of lecturers • Global Minds @ Work: Exchange and collaboration with Penn State University • Global Minds @ Work: Global Minds reflection tasks, formerly known as GMBlogs • Future of Food: Interview with Francesca Zampollo • Future of Food: 3D Food Printing Project Pipeline • SIB: IBE-ReGloMi: A Reflective Framework for Responsible Global Minds • SIB: IB Students in the Lead of the KIEM project: Second-hand Clothing Circularity	
02	Professional Practice	23
	• PROCODIS: A self-assessment of communicative competence for leaders at Zuyd • PROCODIS: Engaging with copywriters and other communication professionals via Tekstblad • Global Minds @ Work: Navigating cultures at Pillows Hotels: interview with Anna Rollema • Global Minds @ Work: Bonding volunteers with Story Circles at Refugee Project Maastricht • Future of Food: BTS of the Future of Food Research Center: An Intern's Journey of Discovery • Future of Food: Extended Reality for Single-Use Plastics Reduction in Hospitality • SIB: SIB engages with QESKE Maastricht Ecosystem of Start-ups and SMEs • SIB: Integrating Sustainability into University Operations: The E@Zuyd Project	
03	Knowledge Domain	42
	• PROCODIS: Effective writing instruction in the post-ChatGPT era • PROCODIS: Creating authentic and effective practice scenarios for DSB conversation training • Global Minds @ Work: What You Cannot See, You Cannot Be • Global Minds @ Work: Understanding students' engagement & disengagement with sustainability • Future of Food: Interview with Pepper, the first humanoid robot at Hotel Management School Maastricht • Future of Food: Working Group on "Personalized Gastronomy for Health and Sustainable Food Choices" (Jan/24) at the International Society of Gastronomic Sciences and Studies • SIB: SME's Motivations & Perceptions for Sustainable Development • SIB: Cooperate to Transform: SMEs' Transition to Sustainability in Limburg (NL).	

INTRODUCTION INTO THE ANNUAL REPORT

The Research Centres in the Cluster of the Maastricht Economic Domain represent a coalition of expertise aimed at fostering advancements across multiple sectors within education, knowledge domain, and related industry. This annual report for 2023/24 provides an overview of the activities, projects, and achievements of the four research centers—Professional Communication in a Digitalizing Society (PROCODIS), Global Minds @ Work, Future of Food, and Sustainable International Business. Each center reflects a unique facet of contemporary challenges and opportunities: from promoting effective communication in increasingly digitalized environments to nurturing intercultural competencies, pioneering sustainable food innovations, and fostering responsible global business practices.

The report is structured to serve as an informative resource for educators, researchers, and industry professionals of past and ongoing activities from the academic year 2023/24. Each section demonstrates the ways in which these centers contribute to solving pressing global issues through interdisciplinary collaboration and practice-oriented research. Through diverse projects—ranging from machine translation literacy frameworks to the deployment of food technology and sustainable business models—the research centres in this Cluster showcase novel and collaborative approaches to embedding impactful research within education and professional practice. This annual report offers an insight into how each research center is paving the way toward sustainable and socially responsible innovation.



1

EDUCATION

Overview

This section of the annual report showcases various collaborative and innovative efforts in Education aimed at enhancing teaching, fostering inclusivity, and developing essential 21st-century competencies across diverse educational domains. Key initiatives presented here include the development of frameworks, such as Machine Translation (MT) Literacy, which equips students with critical skills to engage responsibly with AI-driven translation tools, and a digital game created to improve lecturers' communicative competence, especially for students with Autism Spectrum Disorder (ASD). Moreover, global partnerships, such as exchanges with Penn State University, highlight the cluster's commitment to cultivating cultural intelligence and global competencies among students and staff. The section further presents educational efforts to update learning activities, adapting them for the AI age while encouraging personal reflection and creativity. These activities, now rebranded as Global Minds Reflection Tasks, engage students in critical cultural reflection through novel formats like photo collages, AI-assisted blogs, and vlogs or podcasts.



Professional Communication in a Digitalizing Society

A framework for teaching Machine Translation Literacy



Joop Bindels

Together with colleagues from Leiden University and the Directorate General for Translation of the European Union, PROCODIS developed a conceptual framework for teaching Machine Translation Literacy (henceforth: MT Literacy). This framework helps educators design meaningful learning activities through which students can develop this important skill. Joop Bindels, leader of the project funded by Taalunie, explains why the framework is necessary and how it was constructed.

What does MT Literacy actually mean?

MT Literacy refers to the ability use MT applications such as Google Translate or DeepL critically and consciously. We have defined this concept as being able to estimate whether and how you can use MT in professional multilingual situations and being able to predict and solve bottlenecks arising from the use of MT.

Why is it important to pay attention to this skill in modern-day education?

MT applications and other AI solutions such as ChatGPT are used by practically everyone: PR professionals use them to write press releases, lawyers use them to get a gist of legislation in a foreign language, nurses use them to communicate with patients and students

use them in many different ways for their studies. And that is extremely useful. The tools offer many possibilities to overcome potential language barriers. However, machine translations are not always perfect, and using them is therefore not without risk. Moreover, miscommunication arising from the use of MT can have dramatic consequences. Consider, for example, medical errors due to miscommunication between doctors and patients or during asylum procedures, or legal errors caused by incorrect machine translations.

How can the framework contribute to the development of MT Literacy?

With our framework, we help educators in vocational education to teach students

to deal with MT more critically and consciously, so that they can really reap the benefits of MT and other AI solutions in their future careers. In this way, we contribute in to the AI literacy of future professionals. The framework is published in the form of an [interactive tool](#) which provides educators with information and inspiration for integrating the subject of MT into their classes. We mainly focus on three professional domains in which the use of MT has great impact: healthcare, the legal domain and the communications sector.

How did you develop the tool?

Central to our framework is a definition of MT Literacy that we developed based on an inventory of typical use cases of MT in different professional contexts. We gathered these use cases by means of a survey that we conducted in 2023.

What struck us when analyzing the use cases was that in each case, users implicitly or explicitly followed the same steps, namely: 1) assessing whether MT can be used at all in this situation; 2) determining in which form MT will be used (which tool, which process?) and 3) predicting and solving bottlenecks before, during or after using MT.

Those three steps form the core of our framework, which is visually represented as a so-called ‘sunburst’. For each professional context (healthcare,

law, communications), we provide explanations of each step on the basis of a typical scenario, and we make suggestions for learning activities that lecturers can carry out in class with their students.

For example, a lecturer working in the department of Nursing can delve into the scenario “Ukrainian patient visits the practice nurse” and find relevant examples of learning activities for each step in the process, such as a role play or a preparatory assignment to discuss the advantages and disadvantages of the use of MT during a consultation.

How do educators feel about the tool and the underlying model?

We notice that educators respond very positively to this initiative. Translation is often treated as an afterthought and the framework helps lecturers and students to deal with language and translation more consciously; creating that awareness is half the battle. It would of course be great if the whole world used MT in a conscious and critical manner from now on, but that cannot be achieved by publishing this framework alone. However, I am convinced that the framework can have at least some influence on how educators, students and professionals in the Dutch language area deal with MT and other AI applications in the future.



A visual impression of the MT Literacy framework

Professional Communication in a Digitalizing Society

On the same line: Enhancing the communicative competence of lecturers

Students with Autism Spectrum Disorder (ASD) often interpret explanations and instructions from lecturers differently than their neurotypical fellow students. As a result, they sometimes spend a lot of time on activities that turn out not to be necessary, or feel insecure about what exactly is expected of them. In some cases, students with autism even drop out because they are convinced that they will never be able to successfully complete their studies.

In order to make lecturers aware of the specific communicative needs of students with autism, Zoë Sluysmans developed a digital game for her graduation project in the Communication & Multimedia Design programme, commissioned by our Research Centre. By playing the game, lecturers can discover in an interactive way which unintended effects their messages can have on students with autism.

Zoë involved both students and lecturers from Zuyd's Academy for Translation and Interpreting in the development of the game, which has been named "On the same line". She interviewed students with autism about the specific challenges they experience and spoke to lecturers about the possibilities of adapting explanations and instructions to the needs of this target group. The members of the Research Centre also regularly provided Zoë with ideas and feedback.

For Zoë, developing the game was an excellent opportunity to make education at Zuyd more inclusive for students with autism. Based on her research and her personal experience, she was able to build a bridge between two groups that do not always understand each other well. The end result was a game that was not only positively appreciated by the assessors of her graduation project, but certainly also by us as assignment providers.



*An impression of the digital game developed
by Zoë Sluysmans for PROCODIS*

GLOBAL MINDS @ WORK



Exchange and collaboration with Penn State University

In spring 2023, Global Minds @ Work researcher Tom Kuypers had the privilege of going on an insightful staff exchange at Penn State University (PSU), a longtime partner of our research center. This visit marked another step in the valuable collaboration between PSU, Global Minds @ Work, and Hotel Management School Maastricht (HMSM) in both education and research, as all parties share a deep interest in global competence and cultural intelligence. The exchange highlights not only the value of cross-institutional learning but also the importance of fostering intercultural awareness among students and faculty members.

Hosted by Professor Bert Van Hoof of PSU's Hospitality Management department, Tom had the opportunity to contribute as a guest lecturer in two courses, sharing European perspectives with American students and engaging in lively research discussions with PSU colleagues.

One of the courses he guest-lectured was "Culture in Global Business," taught by Dr. Phil Jolly. Here, he guided students

in understanding the critical role of culture in global business and examined U.S. and Dutch cultural similarities and differences. This discussion explored the significance of understanding cultural frameworks, such as those of Geert Hofstede and Erin Meyer, and how these theories apply to real-world business scenarios.

In the "Human Resource Management" course led by Dr. Michael Tews, the focus was on workplace culture. How do you spark motivation in the workplace? How do you boost employee engagement? And can a workplace be fun? These questions were explored as Dr. Tews and his colleagues demonstrated their unique approach to turning the classroom into an enjoyable place to work and learn. The course uses hands-on methods to integrate fun into learning, such as small-group tasks with music, interactive role-plays, and even a class rule where latecomers must sing a karaoke song in front of the class. This atmosphere helped students bond and engage with the course material more deeply.

Beyond teaching, Tom met with faculty across PSU to discuss ongoing and future research opportunities, reinforcing the growing relationship between the two institutions. Discussions ranged from sustainable career development to research in global citizenship and cultural intelligence. Existing research projects were heavily discussed. Dr. Van Hoof is a research partner and co-author for a paper titled “Exploring Cultural Intelligence (CQ): A Study of CQ Disparities among European Line-level Employees”, which currently is being worked on for an R&R (revise and resubmit) at the European Journal of International Management (EJIM). The visit also expanded the research network of Global Minds @ Work, with new collaborations emerging with Dr. Phil Jolly, Dr. Anni Ding, Dr. Chandler Yu, and PhD candidate Sydney Pons. This dialogue around sustainable careers and global competence aligns well with HMSM’s objectives, promising future research that will deepen our understanding of cultural intelligence in diverse, international contexts.

The PSU-GM@W partnership, marked by exchanges like Tom’s, is part of a larger Global Minds @ Work initiative to foster real-world global competencies within higher education. PSU faculty members, including Dr. Van Hoof and Dr. Tews, have previously visited HMSM, with both scheduled to return to Maastricht. These exchanges not only enhance the academic experience for students but also strengthen ties between the faculty of both institutions, creating new learning and research possibilities. Visits like these foster the deep sense of mutual learning and appreciation with partner universities. This exchange was organized with the support of Dr. Van Hoof, whose guidance ensured a successful and enriching experience. The success of this visit underlines Global Minds @ Work’s mission to bridge cultures, develop global minds, and foster intercultural understanding through international collaboration. As Global Minds @ Work moves forward, mutual exchanges set the stage for future collaborations and research that continue to advance the understanding of global competence in education and in the workplace.



GLOBAL MINDS @ WORK

GLOBAL MINDS REFLECTION TASKS, FORMERLY KNOWN AS GMBLOGS

Until recently, students at the hotel school reflected on their personal intercultural experiences during their internships abroad through three blog posts. However, the rapid rise of Generative AI prompted us to rethink this learning activity. Not so much because the format itself was under pressure, or because we didn't want students to improve their English, but rather because students often seemed to rely on AI for the reflection, resulting in rather bland blogs lacking personal anecdotes, full of stereotypes, and most importantly, with very little true reflection.

In designing the three new assignments —collectively worth 1 EC— we aimed to ensure that AI would primarily be used as a tool, that reflection would remain central, and that there would be room for a personal touch and creativity. We consulted a student panel, considered feedback from fellow educators, and took into account recent recommendations on the responsible use of AI in education. This brainstorming and design phase resulted in the following new assignments, or 'Global Minds reflection tasks,' which will be implemented in the curriculum of the HMSM for the first time in the first semester of 2024-25:

1

Photo Collage: 'At First Sight'

Using five meaningful photos, students showcase what stood out to them the most during the first days after arriving at their internship destination. In a caption of 50 to 100 words per photo, they explain why they selected this image, the emotions it evoked, and why.



Embracing convenience

19-09-24 Arlington

One thing that surprised me in the U.S. was the number of drive-throughs, not just for fast food, but for things like ATMs, pharmacies, and coffee shops. In the Netherlands, this is pretty rare, as we tend to park and walk inside for most errands. But in America, it's clear that convenience and efficiency are top priorities. The drive-through culture reflects how Americans value saving time, making everyday tasks quick and easy. At first, it seemed excessive to me, but I've come to understand it as part of the fast-paced lifestyle here and I also understand the value of it, as it makes the boring but important tasks less time-consuming, which leaves more time for more fun things.



Meeting the leader: Hilton interns with David Kelly

10 September 2024, Hilton Old Town Antwerp

This photo shows me with some of my fellow interns at Hilton Old Town Antwerp, standing with David Kelly, Senior Vice President of Operations for Continental Europe. Hilton arranged this meeting to demonstrate to David Kelly how essential interns are to the hotel's success. Being in the presence of such a respected leader was a motivating experience, reminding me that as an intern, I am already contributing to the bigger picture. The encounter made me feel appreciated and excited about the promising opportunities ahead in the hospitality industry.

2

AI-Assisted Blog: ‘On Second Thought’

Here, we modify the original blog assignment. Students are asked to use a Generative AI model like ChatGPT to identify the main cultural differences between their home country and internship destination. They then choose three points from this output for further reflection: Do they agree with these points or not? Can they substantiate and nuance their opinions based on personal examples, acquired insights, and/or theoretical models?

3

Vlog or Podcast: ‘Switching Perspectives’

In this final assignment, students reverse the roles. Instead of reflecting on their own behavior in a new cultural environment and the impact it has on them, we ask them to explore the impression they themselves have made on others. In a vlog or podcast (format chosen by preference), students report (excerpts from) interviews with one to three people from their immediate (‘new’ internship) environment, providing a picture of their personal growth through the eyes of others.

During the second semester of 2024-25, these new assignments will be evaluated and adjusted if necessary.

FUTURE OF FOOD

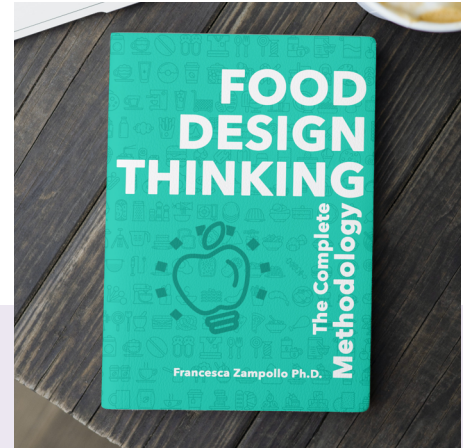


Photo of Francesca Zampollo

Interview with Francesca Zampollo, by Danny Han

Interview with Francesca Zampollo, PhD, author of the Food Design Thinking Methodology, shares her journey from industrial design to pioneering food design, reflecting on the philosophical and practical challenges of crafting experiences within the hospitality industry. – Lucca, Italy, 25 September, 2024

Can you tell us how you became interested in food design?

My journey into food design began unexpectedly. I was studying industrial design in Turin, primarily focused on creating industrial products. One day, I attended a workshop on food design, where the instructor, a chef, challenged us to think about designing with food. This was a transformative moment for me. Food isn't just another material; it's something people ingest and bring into their bodies. This intimate interaction fascinated me, and I realized that food could be a medium for creating some of the most meaningful and personal

experiences. Since then, my entire career has revolved around exploring this intersection between design and food.

You mentioned “designing experiences” with food. How would you explain that concept, and how does it differ from traditional design?

Food is unique because it's inherently multisensory—taste, smell, texture, sound, and visual appeal all converge. However, I always make a distinction: we don't design experiences directly, because the variables creating experiences are mostly subjective; rather, we design only the stimuli interacting with the senses.

This approach shifts the focus from trying to control what people think and feel, to carefully crafting the external elements that enable it. When we design with this mindset, we respect the guest's unique responses and memories, recognizing that each person will experience the same dish or setting differently. For this reason, rather than talking about "experience design", I suggest using the term designing for experiences.

Your work also touches on system thinking and spirituality. Could you elaborate on how these elements integrate into food design?

Certainly. System thinking is integral to understanding the impact of design choices within broader contexts, such as environmental sustainability, social equity, or even emotional wellness. For example, food design isn't just about making a meal visually appealing or palatable—it considers the food system's interconnected elements, like preservation, transportation, preparation, presentation, consumption, and disposal of food and all the materials, components and products used, the impact on communities, the interactions between stakeholders, strategies and policies, etc. Spirituality, on the other hand, is about aligning the designer's values with their choices throughout the process. It's not about religion per se but about self-awareness and purpose. When we make design decisions, we're often balancing

practical considerations with our deeper beliefs about what kind of impact we want to have on the world. In food design, this approach creates a richer, more intentional process that resonates personally and ethically with both designers and guests.

How does your methodology influence students and professionals?

Food Design Thinking is a flexible, process-driven methodology comprising over 50 customizable methods. The process encourages designers to think beyond function or aesthetics and consider sensory, emotional, ethical, and systemic dimensions. For students, this means learning how to create design for experiences that tap into memory, culture, and sustainability. I always emphasize that students need to be aware of the cultural and sensory triggers they are working with, as these shape guests' perceptions and choices. For professionals, it means having a toolkit that allows for experimentation while maintaining a clear ethical foundation. The Food Design Thinking process helps students and professionals achieve that.

What is your perspective on measuring the experiences created through food design?

Measuring experiences is indeed challenging, especially since traditional metrics don't fully capture the depth of emotional and sensory engagement. In controlled studies, we may try to gauge

reactions, but genuine experiences are dynamic and often resist quantification. We can attempt to capture physiological responses or use feedback mechanisms, but these methods often disrupt the very experience we seek to understand. Ultimately, I believe that the role of a food designer is to create an environment conducive to a desired feeling or memory rather than to assume precise control over it.

What trends do you see shaping the future of food design in hospitality?

One major trend is the integration of immersive technologies, such as virtual and augmented reality, which can add layers of storytelling to food experiences. For instance, we can design environments where guests feel transported to a vineyard in Tuscany or a bustling market in Marrakech while they dine, enhancing their emotional connection to the meal. Another trend is the movement toward sustainability and ethical considerations—designing with conscious choices about sourcing, waste reduction, and environmental impact.

Finally, I believe we'll see a greater emphasis on the sensory and emotional dimensions of dining as we seek to move beyond taste alone. In hospitality, the future of food design isn't just about what's on the plate but about how every aspect of the dining experience can contribute to a memorable, meaningful interaction.

In your view, how does food design differ from conventional culinary arts?

I personally consider culinary arts as a twin sister of the Design With Food sub-discipline of the overall Food Design discipline. Culinary arts are a well of knowledge and skills from which many food designers often have to draw. Culinary arts focus predominantly on the preparation and flavor of food, whereas food design gives you the tools to encompass a broader spectrum that includes setting, context, and the emotional journey. In when using a food design process, the intention goes creatives go beyond creating a delicious dish to crafting a meaningful narrative or evoking a specific feeling. And this is just to mention the Design With Food sub-discipline of Food Design, which is about designing the food itself. Then, by designing the elements surrounding the eating situation—lighting, sounds, textures, and even stories—we engage the guest on multiple levels, and therefore designing, as I say, “beyond the food”. Here we move into the Design For Food, Eating Design, Food Space Design, and Food Service Design sub-disciplines. Moreover, the complexity of Food Design continues with other sub-disciplines. What can be designed within Food Design is integral or collateral to the focus of culinary arts. To me the difference between the two lays therefore in the word Design: Food Design uses Design, and culinary arts reflect more an artistic approach. The problem

is that at the moment this is only partially true, making the distinction between the two difficult to delineate. Therefore, I can

say that ideally a food designer should use a Design approach and a Design process.

Francesca Zampollo's insights illustrate a transformative approach to food within the hospitality industry, blending sensory design, ethical considerations, and immersive storytelling. Her methodology has helped students in the Minor Gastronomic Experiences at the Hotel Management School Maastricht and professionals in the industry to reimagine food as an experiential and ethically conscious medium, paving the way for a richer and more engaging future in food design.

FUTURE OF FOOD

3D Food Printing Project Pipeline

Throughout the past academic year, the Research Centre Future of Food has advanced its research into 3D food printing (3DFP), contributing to its mission of fostering Sustainable Food Experience Innovation and Foodservice Transformation. This year's efforts concluded the first phase of our 3DFP pipeline, resulting in the publication of a review paper: The 3D Food Printing Pyramid of Gastronomy: A Structured Approach Towards a Future Research Agenda (Meijers, M. G., & Han, D. I. D., 2024), in the International Journal of Gastronomy and Food Science. This paper, which presents the innovative "3D Food Printing Pyramid of Gastronomy," categorizes 3DFP applications into a structured framework, setting a research agenda that aligns with industry needs and consumer expectations. An outline of this study was presented during a poster presentation by our researcher Maud Meijers, at the EFFoST conference in Valencia in fall 2023.

In spring 2023, Community Involvement (ComIn) students engaged with our Foodini 3D food printer, testing materials such as mashed potatoes, yellow pea puree, and Callebaut milk chocolate to explore ingredient versatility and compatibility in the 3DFP process. This work laid the foundation for new projects in fall 2023, where students combined multiple ingredients and introduced post-processing techniques like baking. These projects embody our commitment to Sustainable Food Experience Innovation, optimizing ingredient use in 3DFP for sustainable culinary applications.

In fall 2024, two new ComIn students joined with specific project goals. One aims to create a savory dish featuring the Hotel Management School Maastricht logo through 3DFP, while the other investigates the role of 3DFP in crafting meals that stimulate salivation and retain texture and flavor for people with dysphagia. Dysphagia, a condition impacting swallowing ability and often linked to aging or neurological issues, affects over 590 million people globally, making it a growing concern in both healthcare and foodservice (Cichero et al., 2017). Traditional dysphagia diets often rely on pureed, visually unappealing foods, limiting patient satisfaction and nutritional value. Recent literature highlights 3DFP as a transformative solution for creating visually appealing, textured meals that cater to the specific needs of dysphagia patients (Lorenz et al., 2022). 3DFP's precision in ingredient structuring can offer safer textures while preserving visual and sensory appeal, providing a holistic approach to dysphagia-friendly dining.

The student's project aligns with an experimental study led by Maud Meijers, who collaborates with a 3DFP company, a caterer, and a healthcare institute. Together, they explore how 3DFP can transform foodservice for dysphagia patients, leveraging the technology's ability to customize textures and flavors that improve quality of life. This work reflects the potential of 3DFP to create not only sustainable but therapeutic food experiences, driving forward both Sustainable Food Experience Innovation and Foodservice Transformation.



SUSTAINABLE INTERNATIONAL BUSINESS

IBE-ReGloMi: A Reflective Framework for Responsible Global Minds



Together with colleagues from KEDGE Business School, University Babes Bolyai, Kozminski University, TH Koln and the EFMD, SIB developed a reflective framework consisting of 15 graduate attributes that could be organized into four main clusters. This project is co-funded by the Erasmus programme of the European Union.

Dr. Jeanine Gregersen-Hermans who is a principal investigator of the IBE-ReGloMi project explains:

What does IBE-ReGloMi stands for and deals with?

The Erasmus+ project ‘Innovating Business Education for Responsible Global Minds’ (IBE-ReGloMi) addresses the critical need for a new generation of business graduates equipped to drive sustainable and equitable transformation in business development, especially in today’s increasingly volatile and uncertain world.

How did you identify the future-oriented graduate attributes that business expressed a need for?

In collaboration with 19 businesses from five European countries, 17 student focus groups from partner universities, and 9 interviews with academics through the

EFMD, the project created a framework consisting of 15 graduate attributes across four dimensions. These attributes can be applied to various disciplinary contexts, job profiles, and national, regional, and international business contexts. The framework was validated with 4 to 6 academics at each partner institution (> 25 in total) and then consolidated within the partnership. The findings indicated a shift in the focus of graduate requirements: from competences purely related to core business domains to a focus on person-related transversal competences. These competences refer to the development of the student as an ethical, interculturally competent professional, capable of informed problem-solving and decision-making.

What are the main principles that underpin the IBE-ReGloMi framework?

First, it is important to understand that these graduate attributes are not isolated entities. They are interconnected and collectively promote the holistic development of the student as both a professional and an individual. This implies that the attributes need to be embedded into the core business disciplines of a study programme or individual learning pathway, such as Student in the Lead. Second, the framework highlights the changing role of the lecturer from expert to coach. This implies, among other things, that the lecturer as a coach must reflect on their own values and beliefs (positionality) that are being promoted through the IBE-ReGloMi framework.

How do you think that IB coaches/experts can use this framework?

The IBE-ReGloMi framework is a reflective tool that is strongly aligned with the new Dutch International Business programme learning outcomes. It inspired us when writing the assessment rubric for our own IB programme. In daily practice, it supports feedback and feedforward conversations between students and coaches. It has the potential to map a study program against the identified graduate attributes. Additionally, it can be used in conversations with companies to develop business challenges, evaluate internships, or map job profiles. Importantly, it may also function as a reflective tool for coaches and lecturers to reflect on their own positions and what this implies for their coaching roles.



IBE-ReGloMi's Reflective Framework

SUSTAINABLE INTERNATIONAL BUSINESS

IB Students in the Lead of the KIEM project: Second-hand Clothing Circularity

Challenged by the fact that the fashion industry is a significant contributor to global carbon emissions, accounting for 10% of total emissions, the IB students of the minor Applied Business Sustainability (2023-24) conducted empirical research on the supply chain aspects of the second-hand stores in the Netherlands and abroad. This business challenge was based on SIB's project "ARTce" (Action Research Tweedehandskleding Circular Experiments), a KIEM project (SIA platform) coordinated by Utrecht University of Applied Sciences.

Action research was conducted by 41 IB students that participated in the minor Applied Business Sustainability, which was organized by the International Business School Maastricht (IBSM) and coordinated by the research center Sustainable International Business in the academic year 2023-24. The students explored the supply chain aspects of the second-hand shops in the Netherlands and abroad. By means of qualitative research (i.e., 30 expert interviews conducted with managers/owners in Europe, Africa, and Asia), IB students studied the strategies that the second-hand clothing shops use to handle unsold clothing items, their inventory control practices, supplier relationships, and approaches to upcycling.

Specifically, the findings of the research conducted by two IB students, Cynthia Mudamburi and Thomas Ntinelis, were presented in the 12th International Conference on International Business 2024, and indicate that the practices for managing unsold second-hand clothing vary significantly among the sampled shops in each country. Key differences include their methods for inventory control, supplier relationships, and approaches to upcycling. Notably, none of the stores have robust upcycling methods, and there is a general lack of systematic disposal processes. The stores' varying levels of engagement with research and improvement reflect differing attitudes towards operational enhancements and sustainability.



Thomas Ntinelis (IB student from Greece) and Cynthia Mudamburi (IB student from Zimbabwe)

Further, second-hand clothing shops are advancing sustainable fashion through selective inventory practices, minimal waste, and innovative reuse strategies. Emphasizing quality, repairability, and effective inventory management. These findings suggest that the second-hand clothing shops world-wide should develop and implement repurposing strategies and form partnerships to improve sustainability and operational efficiency.



KIEM project's Finding: Supply Chain Aspects of Second-hand Clothing Shops

2

PROFESSIONAL PRACTICE

Overview

This section of the annual report highlights key collaborations, applied research, and community engagement efforts that bridge academia and industry. The section underscores initiatives across various domains that aim to enhance skills, drive sustainable development, and promote cultural and professional competencies.

One notable initiative is the engagement with industry professionals through the publication of insights in trade magazines like Tekstblad, where research findings on typographical effects have spurred industry dialogue. In the hospitality sector, Global Minds @ Work present insights into their cultural sensitivity workshops to foster inclusive service at luxury establishments such as Pillows Hotels. The section also reflects ongoing contributions to sustainable practices in the business ecosystem. Collaborations with QESKE Maastricht and the launch of sustainability-oriented projects showcase efforts to provide SMEs with actionable insights for sustainable transitions. These initiatives, driven by student and faculty partnerships, illustrate a holistic approach to professional practice, integrating applied research, skill development, and sustainability, thereby



Professional Communication in a Digitalizing Society

A self-assessment of communicative competence for leaders at Zuyd

In collaboration with the Marketing & Communication and HR departments of Zuyd, PROCODIS developed a self-assessment tool that can provide leaders within Zuyd with insight into their strengths and weaknesses with respect to communication skills. Below, Corine Castenmiller (from Marketing & Communication) and Korine Meulepas (from Human Resource Development) talk about the purpose and added value of this tool.

What prompted your departments to start this project together with the Research Centre?

Corine Castenmiller: “Some time ago we formulated a new vision on internal communication. One of the promises we make in the vision is that we invest in the communication skills of all employees, including employees in leadership positions. We then sought collaboration with the Research Centre in order to be able to implement actions in a well-founded manner, which ultimately resulted in this tool.” Korine Meulepas: “The HR department is involved because we collaborate with academies, Research Centres and other service departments on fostering the professional development of our employees. This also applies to the professionalization of Zuyd’s heads of programme and team leaders. The role of the HR department in the development

of this tool was to ensure alignment with Zuyd’s HR frameworks, like annual reflection meetings, professionalization, perspectives on leadership, and principles of self-organization. These frameworks should be reflected in the content and language of the tool to make it useful within the Zuyd organizational context.”

What do you see as the main added value of the tool?

Corine Castenmiller: “The tool is accessible and reliable and shows users how they can develop themselves further in the field of communication skills. The accessibility of the tool is further enhanced because we made the conscious decision to present users with recognizable situations at Zuyd University of Applied Sciences. So it’s really about everyday practice.” Korine Meulepas: “This tool is a useful supplement to training

training programmes for conversation skills, development assessments for managers and self-scans offered by Goodhabitz. We hope that the tool can promote awareness about the communicative competencies that heads of programme and team leaders are expected to develop so that they can be effective in their roles.”

Who should be using the tool?

Korine Meulepas: “The tool was primarily developed for heads of programme within the academies and team leaders within the different service departments.” Corine Castenmiller: “That’s true, but I think it has added value for everyone within Zuyd who manages fellow employees in one way or another. So as far as I’m concerned, not only deans, heads of programme and team leaders, but also coordinators and project leaders.”

How did you experience the collaboration with the Research Centre?

Korine Meulepas: “There was a high degree of complementarity in the project team: Research expertise, expertise in the field of digital survey tools, expertise in internal communication and expertise in self-organization and leadership were all represented. This created a greater understanding of everyone’s role and how we could utilize each other’s strengths and qualities during the development of the tool.” Corine Castenmiller: “I also experienced the collaboration as pleasant and productive. The researchers listened carefully to our intentions and always took important nuances and connections into account while developing the tool. They have worked extremely hard, so my compliments for the focus and speed with which this tool was created!”



The landing page of the digital self-assessment environment

Professional Communication in a Digitalizing Society

Engaging with copywriters and other communication professionals via Tekstblad



Cover of the 2024 spring edition of Tekstblad

In our previous annual report, we already reported on our collaboration with CustomerFirst in valorizing scientific insights for practitioners. However, in the past year we also published articles for professional practice and society in other media, such as Dagblad de Limburger and Tekstblad. The latter magazine is a Dutch-language trade magazine for professionals who produce texts, including members of the professional association Tekstnet. Via Tekstblad, they are informed about the latest trends in the field and new scientific research into the effectiveness of different types of texts in different communicative contexts.

For the 2024 spring edition, Mark Pluymaekers wrote a short [overview article](#) about the effects of typographical features such as font type and font size on reading speed and comprehension. The article summarizes four scientific studies that together paint a comprehensive picture of these effects. The most important conclusion is that the effects of typographical features are highly dependent on the reader. For screen readers, the possibility to choose their own font can be beneficial. However, the font they find most pleasant to read is not necessarily the font they can read the fastest.

Partly as a result of this publication, Mark was invited by editor-in-chief Christine Liebrecht to join the editorial board of Tekstblad. An excellent opportunity for the Research Centre to systematically engage with professionals working within the text and communications industry. Which challenges do they face, and how can practice-oriented research help them overcome these challenges? These are questions that are particularly relevant now that we are developing a new research agenda for the next 6 years. The editorial membership of Tekstblad will undoubtedly help in unearthing researchable questions from practitioners and making the answers widely known.

GLOBAL MINDS @ WORK

Navigating cultures at Pillows Hotels: interview with Anna Rollema



Pillows Hotels is a collection of 6 four and five star hotels in the Netherlands and Belgium with aspirations to grow in the world of quiet luxury and gastronomy. All hotels are housed in listed buildings with a history.

Anna Rollema is Learning and Development Manager at Pillows Hotels. She studied HR management, but her love of hospitality led to a career in hotel management in Morocco, Portugal and France. In 2017, she joined Pillows Hotels, first as a hotel manager later in a role to support staff development at all properties.

In the world of luxury hotels, where the guests are king and queen, the role of culture in the service interaction cannot be underestimated. This year, Global Minds at Work provided the first of a series of cultural sensitivity workshops for the staff of Pillows Hotel Maurits at the Park. In this interview, Learning and Development Manager Anna Rollema explains why Pillows finds cultural awareness on of its top priorities.

Why does culture matter at Pillows Hotels?

‘Real hospitality is about making a genuine connection, being sincerely interested in your guest. Not for nothing, one of our principles is ‘We are caring and sincere.’ It means to really connect with the guests, having a genuine interest, being attentive and knowing how to read the guest. This makes it possible to provide personalised service and exceed expectations. And knowledge of the cultural background of the guest plays a big role in that process. Of course the danger of stereotyping is always looming. A guest is obviously more than their cultural identity. Every guest is a unique combination of features. But being able to throw cultural identity into the service equation to find out what your guest really needs, is a must for the level of service excellence that we wish to provide.’

Can you give an example of challenges in intercultural service encounters?

‘Well, where shall I start! they happen every day and in every department. Some cultures appreciate formality, others like an informal conversational tone. Some do not show their emotions that much. Positive emotions, nor negative emotions. Some guests do not appreciate when you bring their luggage to their room. For some cultures it is not done for a male staff member to knock on the door of a female guest or to shake hands. You need to know these things, but be aware that every guest is unique at the same time. In order to master that, you need knowledge,

awareness but also affinity with cultures. You need to love this work!’

To what extent can one learn to navigate cultures?

‘Difficult question. Some people are more naturally inclined to read the air, but listening skills can be developed by everybody. The art of conversation can absolutely be trained. But the real affinity comes from within. And of course experience helps as well. Experience gained before you start with us, or experience gained on the workfloor.’

How about your teams? How diverse are they?

‘Very! In our entire hotel group, we have 42 different nationalities. I like the expression that says ‘It is not a culture fit, but a culture add-on.’ Do not only look for people who fit in the existing team. Look for people who add something to the team. That can be ethnicity, but also language skills or personality. The more languages we have inhouse, the more personalised our service can be. In our reviews, we see that this mix really works, that guests appreciate it. In our teams, people learn from each other. We stimulate being open and curious to each other. A staff member with an Arabic background can help a colleague to understand and appreciate an Arabic guest better. That ‘open to learn’ attitude is really something we stimulate in all levels of the organisation.’

Talking about learning, can I ask you if and how people learned from our training last year?

‘Most training sessions on culture are about do’s and don’ts and stay on the surface of things or stereotype. But you went a step further. By creating awareness of perception mechanisms, and holding up a mirror to the team members; how open minded am I really? By tapping in to their

experiences and making them share them with each other. It is so important to take the time for that. The choice of working with a group consisting of all levels and departments turned out really well. It was a positive experience, and we received positive feedback from the team members.’



Are you interested in a cultural competence booster workshop for your staff by Global Minds at Work? Please contact Lyvie Schoenmaeckers via research. hmsm@zuyd.nl or call [+31 6 14317991](tel:+31614317991) to see what the options are.

GLOBAL MINDS @ WORK

Bonding volunteers with Story Circles at Refugee Project Maastricht



Refugee Project Maastricht started off in 2015 as an initiative by one student, who wanted to make refugees feel welcome in Maastricht. Today it is a volunteer-led organization connecting asylum applicants, recognized refugees, (international) students and local residents. It organizes a wide variety of activities each week, at their location in the centre of Maastricht, or at the asylum accommodation centres. The activities range from language and music lessons to movie nights, bouldering classes, and hikes. Recently the RPM Academy was set up, to cater for the more educational activities. Szilvia Féhervári is one of the two RPM coordinators and has been active in the organization since around 2020. She is responsible for the activities RPM organize themselves, whereas her colleague, Nathalie Ummels, takes care of the activities offered by external parties. Global Minds@Work is one of those external partners. The research centre has offered a series of story circles workshops during the onboarding programme of the volunteers.

I talk to Szilvia in the hallway of their K5 Community Centre, over the bustle of a Halloween party, also one of their annual activities. Szilvia emphasizes the fact that RPM is not about ‘helping’ asylum applicants and recognized refugees, but all about community building. The majority of volunteers are international students but RPM also attracts local residents and retirees. What Szilvia also wants to mention is that members of the initial target group, the refugees, are also part of the volunteer force. You can imagine how culturally diverse RPM’s community is! One of the volunteers called RPM a “beautiful multicultural chaos” and Szilvia admits “that’s what we are”.



To bring a bit of order to the multicultural chaos, RPM started a series of workshops with attention for intercultural communication. However, the workshops were not very well received, since the focus was more on the differences between cultures, and the problems that can therefore occur. Looking for an alternative they came across the story circle tool, that GM@W has moderated multiple times for a wide variety of volunteer groups. Story circles offer a way for individuals from different backgrounds to come together to exchange experiences and explore cultural commonalities and differences. Through sharing life experiences situated in specific cultural settings, participants gain a deeper understanding not only of themselves but also of their fellow humans.

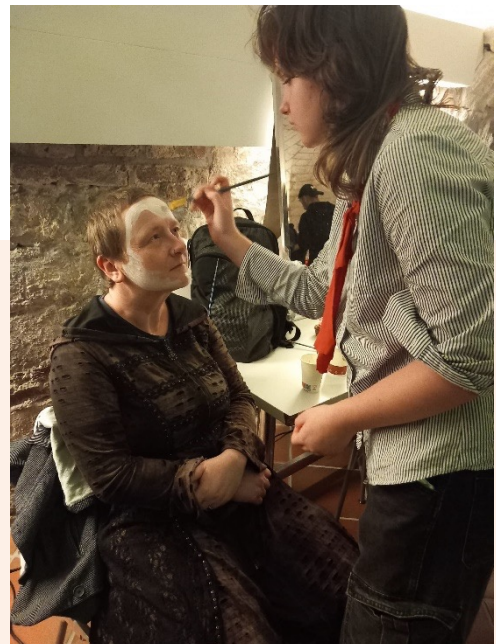
Szilvia is a big fan and really finds it a very uplifting, positive activity. She says the activity is always nice to do, and it is always different. Even when you meet the same people they will share a different story and you get to know them even better. She says she is a curious person and always eager to listen to the stories of others, and listening is exactly what is practised in the story circles.

She recalls one of the volunteers saying, after a story circle session, “here I am from Syria, here is Pavel from Russia, there is Szilvia from Hungary, and there is someone from France, and you might think we’re all very different, but in reality we’re all the same”. And that is exactly it, the power of this activity.

Szilvia can appreciate it when people try to adapt to Dutch culture of their own accord, for example by making eye contact with women during conversations, or by shaking hands with women, which might not be self-evident at all. She doesn’t expect people to do so, but there are people who really want to try because they are in the Netherlands now. This often leads to interesting situations, like the man (Muslim) who couldn’t help his own wife (Christian) when she fell during the monthly forest walk because he is not allowed to touch her in public. His wife encouraged him to help her, and eventually he did, and nowadays he even does a fist bump with Szilvia. She thinks it’s wonderful to slowly find mutual respect and common ground, and this can be found in the story circles!

Another nice feature of story circles is that you can do it everywhere, with everyone, and Szilvia really wants to try it out elsewhere someday.

RPM also knows some challenges. The majority of people enjoying the activities at K5 is Arabic speaking, whereas the group enjoying the activities at the asylum accommodation centres is more diverse. People conclude that non-Arabic speakers are not welcome at K5, which is unfortunate. In the future RPM would like to address this, and have non-Arabic speakers also find their way to the centre and enjoy the wide variety of activities. The partnership with GM@W will continue: while other planned trainings focusing on the culture map and cultural synergy have been postponed, they remain scheduled for the future.



Szilvia getting ready for the Halloween party

FUTURE OF FOOD

Behind the Scenes of the Future of Food Research Center: An Intern's Journey of Discovery

Hello everyone! My name is Sophie Vrolijk, and I'm currently completing a six-month internship at HMSM's Future of Food Research Center. As I near the end of my master's in Nutrition and Health at Wageningen University, I'm eager to explore the intersection of gastronomy, healthy nutrition, and education, making HMSM an ideal place to orient myself professionally. Driven by curiosity and a passion for innovative ideas, I find joy in collaborating with researchers, entrepreneurs, and other creative thinkers.

Our research team is a vibrant blend of personalities and expertise, bringing together a unique, multi- and interdisciplinary mix. This diversity makes collaboration both challenging and enriching; each team member is on their own "island" of specialized knowledge, which sometimes makes it difficult to help each other out. Yet, it's precisely this variety of perspectives that brings so much value. I'm constantly learning, benefiting from the wealth of expertise everyone brings to the table.

One of the biggest revelations for me has been the power of a research center within a university of applied sciences. Its direct link to both education and practical application makes it especially valuable. For example, the teaching hotel and the "Refresh" school canteen at HMSM serve as real-world living labs. This unique setup allows us to experiment, learn, and immediately apply our insights, a unique advantage when collaborating with external partners.



Photo of Sophie Vrolijk

Throughout this experience, I've gained a valuable lesson: to create meaningful change, or give effective advice, it's essential to first experience the context yourself. Whether aiming to manage a restaurant or improve nutrition for a specific target group, empathy is key. By understanding people's challenges, identifying bottlenecks, and then blending insights with theoretical knowledge and creative ideas, I hope to build solutions that resonate.

My internship has also reshaped how I view my academic knowledge. At Wageningen University, much of the focus has been on the technical side—developing meat-like textures or isolating pea protein for protein transition. Here at HMSM, I've learned to apply these insights with a more grounded perspective. As a gastronomist and entrepreneur in food service told me, "If it doesn't taste good, people won't eat it," and "If it's too expensive, people won't buy it." These words have reminded me of the importance of balancing innovation with practicality.

Beyond the projects and intellectual depth, HMSM's atmosphere is incredibly welcoming. The spirit of hospitality is woven into everything here, and everyone is eager to share their knowledge. This supportive environment has helped me adapt smoothly to a new workspace. Wednesdays are especially memorable, as the entire team comes together—a weekly highlight for me.

Next to research, I've been lucky to participate in several inspiring projects and events to navigate directions for my further career. These varied the 'food inspiration days' and exploring a food forest to assisting in the kitchen at the Michelin awards. These experiences have shown me that it's the passion people have for their work that truly inspires me—not their career path or credentials.

One thing that has surprised me is that many students at HMSM aren't even aware of the research centers here, let alone what we do. There is tremendous potential for collaboration, and I'm excited to see how the center will grow within HMSM.

In all, this internship has been an unforgettable chapter in my academic and professional journey. Whether I'm gaining new insights into food or simply exploring Maastricht as a student, one thing is clear—we're making progress and having fun along the way!

FUTURE OF FOOD

Extended Reality for Single-Use Plastics Reduction in Hospitality: Piloting a Digital Twin in an immersive CAVE for Plastic Reduction Practices and Behaviours in Kitchen Operations

This CELTH project brings together the expertise of the Research Centre Future of Food at Zuyd University (Dai-In Danny Han and Malu Boerwinkel), NHL Stenden University, and Breda University of Applied Sciences (BUAS) to address the challenge of single-use plastics (SUPs) in the kitchens of Small Hospitality Firms (SHFs) in the Netherlands. SHFs use significant amounts of SUPs but often lack the resources and guidance to implement effective reduction strategies. Through this project, the consortium will work with SHFs in Friesland, Noord Brabant, and Limburg, to explore practical SUP reduction solutions tailored to the fast-paced environment of small hospitality kitchens.

The project is structured around the primary research question: How can SHFs reduce the use of SUPs in their kitchen operations through innovative, design-based interventions co-created in immersive XR environments?

Multi-camera setups will capture SHF kitchen operations and SUP usage, which will be reconstructed as a 'digital twin' in the XR environment of the Food Experience Lab at Hotel Management School Maastricht. This virtual space gives SHFs an interactive, realistic model of their own kitchens where they can safely experiment with changes to reduce SUP usage. This approach lets staff observe, analyze, and adjust their kitchen workflows and plastic use without disrupting day-to-day operations. SHFs can then co-design reduction strategies, using tools like the 3R framework (Refuse, Reuse, Recycle) and behavioral nudging techniques to promote sustainable habits. Potential interventions include awareness programs, assigned responsibilities, or practical process adjustments, with selected ideas tested in real SHF kitchens.

Key deliverables include:

- Video documentation of SHF kitchen operations focusing on SUP use.
- A digital twin of an SHF kitchen in the XR environment of the Food Experience Lab
- At least one behavioral intervention designed to reduce SUPs.
- Academic and industry publications, plus presentations and workshops to disseminate results.

By sharing knowledge through the results, the project aims to empower other SHFs to adopt sustainable practices to reduce SUP. Additionally, by involving the students from Hotel Management School Maastricht Zuyd, NHL Stenden University, and Breda University of Applied Sciences (BUAS), it will ensure hands-on learning experiences for them, by assisting with plastic inventories, intervention assessments, and co-creation sessions, integrating environmental responsibility directly into their education.

SUSTAINABLE INTERNATIONAL BUSINESS

Sustainable International Business engages with QESKE Maastricht Ecosystem of Start-ups and SMEs

In collaboration with the foundation QESKE Maastricht (QM), SIB has been engaged in workshops and supplied start-ups, SMEs, and entrepreneurs in Limburg (NL) with crucial knowledge and guidelines about their transition to sustainability. Dr. Burak Can (head of QM and an entrepreneur) talks about this collaboration and its future agenda.

What is the objective Stichting QESKE Maastricht (QM) in the Netherlands?

Stichting (QM) is an open ecosystem for entrepreneurs in the Netherlands. The main purpose of the foundation is to start entrepreneurs in the broadest sense. Since it is a foundation, it consists of a large-sized community of start-ups and SMEs that combines new economy, new technology, and new educational models to create innovative disruptive shared intellectual property. The Quattro Helix model is put into a working condition: education-entrepreneurship-politics-citizen-participation. This is a very bottom up initiative led by the members of the community. We do this by deploying and facilitating a 5000 m2 building we rent from the municipality of Maastricht. We have long time collaborators, including municipalities, universities, NGOs, and small and medium sized companies.

What prompted you as the head of QM to collaborate with the Sustainable International Business (SIB) research center of Zuyd UAS?

I sought collaboration with the SIB research centre in order to be able to conduct action research on start-ups and other SMEs' sustainable development in the region of Limburg (NL). We invited expert academics from SIB to give workshops and join co-creation meetings in our facilities. We have circular maker space in our vicinities and building a circular textile hub supported by the regiodeal and gemeent Maastricht. To this end, SIB and Zuyd must be natural partners. In addition we have a lot of student entrepreneurs from UM, but we wanted to extend this portfolio with Zuyd, since we have good experience with the Zuyd graduates some of whom are our members.

What is the objective Stichting QESKE Maastricht (QM) in the Netherlands?

Stichting (QM) is an open ecosystem for entrepreneurs in the Netherlands. The main purpose of the foundation is to start entrepreneurs in the broadest sense. Since it is a foundation, it consists of a large-sized community of start-ups and SMEs that combines new economy, new technology, and new educational models to create innovative disruptive shared intellectual property. The Quattro Helix model is put into a working condition: education-entrepreneurship-politics-citizen-participation. This is a very bottom up initiative led by the members of the community. We do this by deploying and facilitating a 5000 m2 building we rent from the municipality of Maastricht. We have long time collaborators, including municipalities, universities, NGOs, and small and medium sized companies.

What prompted you as the head of QM to collaborate with the Sustainable International Business (SIB) research center of Zuyd UAS?

I sought collaboration with the SIB research centre in order to be able to conduct action research on start-ups and other SMEs' sustainable development in the region of Limburg (NL). We invited expert academics from SIB to give workshops and join co-creation meetings in our facilities. We have circular maker space in our vicinities and building a circular textile hub supported by the regiodeal and gemeent Maastricht.

To this end, SIB and Zuyd must be natural partners. In addition we have a lot of student entrepreneurs from UM, but we wanted to extend this portfolio with Zuyd, since we have good experience with the Zuyd graduates some of whom are our members.

What do you perceive is the added value for conducting empirical research on SMEs' transition and start-ups-orientation to sustainability in Limburg (NL)?

The start-up community in general doesn't know how to be sustainable. Most of the companies I am supporting as the chair of the foundation want to be more sustainable/circular but they don't have the knowledge or the means for this transition. Academics who are capable of doing empirical research on the SME transition can support the knowledge transfer from the academia to businesses.

How have you experienced so far the collaboration between QM and SIB?

We have a whole dedicated team of students who are doing a project for the QM, for sustainable urban infrastructure. In addition, we have very pleasantly collaborated on SIB giving an expert panel discussion (on SMEs sustainable behaviour) for our entrepreneurs and providing lots of useful tips for transition. We want to enhance this collaboration wherever possible.

What is the future agenda and the next steps of this collaboration?

We have so far 2 concrete projects, which we want to finalize: i) Sustainable Parking Lot project for the Stichting, and ii) Developing the 2nd QM Start-up community in ENCI National Monument. For both projects we are going to get funding to financially support SIB.

Furthermore, we have at least 3 strategic future plans with Zuyd:

- To increase the number of Zuyd interns for the companies in our ecosystem,
- To have a strong Zuyd presence with their student entrepreneurs in our startup ecosystem.
- To structuralize trainings for SMEs in Maastricht Startup Ecosystems.



*SMES' Innovation Guide Meeting at Qeske-Maastricht 21/6/2024
(S. Turkeli, N. Kalogeras & B. Can)*

SUSTAINABLE INTERNATIONAL BUSINESS

Integrating Sustainability into University Operations: The E@Zuyd Project

The E@Zuyd project exemplifies Zuyd University's commitment to integrating sustainability into its operations through student-led initiatives. The project, which emerged from the 2023-2024 Sustainability Hackathon for IB students organized and sponsored by SIB and the location management office of the IBC domain, demonstrates how student creativity can address real-world environmental challenges in a university setting.

Vito Reale, an International Business student from Italy, led the winning team in developing a project focused on energy conservation measures. Under the guidance Yolanda Remmel-Thonissen (IBC location manager) and Prof. Dr. Ir. Nikos Kalogeras (SIB chair), the team implemented their plan to replace outdated lighting with high-efficiency LED technology in high-traffic areas of the campus.

With a budget of about €2,000, the E@Zuyd project replaced 100 obsolete lamps with LED alternatives, reducing energy consumption from 60 watts to 4 watts per lamp. This resulted in monthly energy savings of 1,344 kWh and annual savings of 16,128 kWh. The environmental impact is significant, too. A reduction of 3.76 tonnes of CO₂ emissions per year will be achieved from now on. This is equivalent to planting 190 trees or removing a small diesel car from the road for one year.

From a financial viability perspective, the project saves €295 per month, totalling €3,540 per year. These savings can be used to support scholarships or future green initiatives, creating a positive feedback loop for sustainability efforts.

High-efficiency LED lighting at the Staff-room and Catwalk of the IBC domain



The team plans to implement a digital dashboard to monitor and transparently report energy savings and emissions reductions, making the results accessible to the entire university community. This initiative is in line with Zuyd UAS's broader sustainability goals, as outlined in the 'Programma Duurzaam Zuyd' (Sustainable Zuyd Programme). By integrating such projects into its broader sustainability programme, Zuyd UAS is creating a culture of environmental responsibility and innovation among its students and staff. This approach not only reduces the University's environmental impact, but also prepares students to be leaders in sustainability for the future.



Vito Reale (IB student) presents the E@Zuyd Project at ICIB 2004 (Sept. 26-28).

3

KNOWLEDGE DOMAIN

Overview

This section of the annual report highlights significant advancements in applied research conducted by the cluster that contribute to the knowledge domain. It underscores the contributions of various initiatives by the research centres, such as the development of AI-integrated writing instruction models and the creation of digital simulation scenarios for cross-cultural communication training, both of which reflect the evolving educational landscape in the age of generative AI.

An important feature in this section is the exploration of AI tools in writing education, led by faculty at Zuyd, which examines how AI can support students in developing critical thinking and ownership in their writing. This research not only provides insights into the benefits and limitations of AI in learning but also sets a foundation for evidence-based pedagogical strategies in response to the rise of AI-driven tools in academic settings. The Future of Food research centre stands out for its contributions to sustainable food practices, innovative food technologies, and experiential food design, pushing forward the understanding and application of food science in the hospitality industry such as the introduction of humanoid robotics for hospitality at the Hotel Management School Maastricht and the international network on gastronomic sciences in which personalized gastronomy and health are an integral part of future research initiatives.



Professional Communication in a Digitalizing Society

Effective writing instruction in the post-ChatGPT era



Katrin Büttgen and Mark Pluymaekers

If you want to teach students to write well, you have to provide them with meaningful writing assignments. Until recently, lecturers often did this according to a proven recipe: in the first week of the block they explained the assignment and the assessment criteria, halfway through the block they provided feedback, and at the end students submitted the final version of their text for a grade.

Since the emergence of ChatGPT and other generative AI tools, the effectiveness of this approach is no longer self-evident. Katrin Büttgen, a lecturer at Zuyd's Academy for European Studies, was quickly convinced that her writing instruction needed a thorough overhaul. In block 2.1, she asks students to write multiple opinionated articles about European economic competitive policy. On the one hand, she wants her students to delve deeply into the subject matter and adopt a critical attitude towards their own texts and those of others. On the other hand, she is aware that students must learn to work effectively with generative AI in order to be successful in their future careers.

That is why she is now paying considerable attention in her workshops to how generative AI can be used during the writing process. She allows students to experiment with different types of partial assignments and prompts, asks them to reflect on the quality of the output and encourages them to use AI in such a way that it actually improves the quality of their written products. Moreover, she conducts research into how students experience this new way of working.

From that research, a number of interesting findings have emerged. For example, a content analysis of students' reflection reports reveals that students are quite selective in the use of generative AI. AI is regularly used to improve the argumentation, writing style or title of an opinionated article, but much less often to generate a full draft version of the article or to receive general feedback. Some students even indicate that they prefer not to use AI at all, because it reduces their sense of ownership of the article or because it does not feel right in an academic context.

In the past year, Katrin and Mark Pluymaekers have presented the outcomes of the research to Zuyd colleagues on several occasions, including the Zuyd Event in November 2023 and team meetings of the Academies for European Studies, Oriental Languages and Communication and Social Work. In addition, Katrin and Mark delivered a well-attended presentation during the annual conference of the Netwerk Academische Communicatieve Vaardigheden (NACV) in Nijmegen.

However, this does not mean that the investigation is finished. In the scientific literature, a lot of attention is paid to the possible benefits of integrating AI support in writing education. AI can help students generate ideas, structure information and improve their writing style. In addition, AI can provide personalized feedback that can supplement the feedback from lecturers or fellow students. At the same time, there are also concerns. Do students who rely on AI support during writing still develop essential critical thinking skills? And to what extent does the help offered by AI come at the expense of their own creativity and sense of ownership?

Her strong interest in these issues has stimulated Katrin to start a PhD trajectory. The aim of her PhD research is to explore the effects of using AI support during complex writing tasks on the learning outcomes, essential cognitive skills, and perceived ownership of students in higher education. Insight into these effects is necessary for lecturers to make evidence-informed choices about the use of AI in their writing instruction. In which circumstances is it beneficial to allow students to use AI support, and in which circumstances could it actually harm them? These are crucial questions to which we hope to find some answers in the coming years.

Professional Communication in a Digitalizing Society

Creating authentic and effective practice scenarios for digital simulation-based conversation training

In close collaboration with the EdTech company DialogueTrainer, we have developed multiple digital simulation trainings for cross-cultural job interviews in recent years. During such a simulation training, students interact with an avatar, which responds to their communicative choices by displaying certain verbal and non-verbal behaviors. As a result, students can experience which strategies are more and less effective in a challenging communicative situation like this. For example, in Central and Eastern Europe it is unwise to take too much initiative during a job interview, while in Spain you should be prepared for an elaborate period of small talk at the start of the interview.



Natasha Gousseva presents the cross-cultural job interview simulations to colleagues at Zuyd

Our simulation trainings, which were built by Natasha Gousseva and Glenn Bouwens, are now used by students from various programmes within the International Business and Communication domain. Creating an authentic and effective simulation scenario is no easy task, as it requires an explication of procedural knowledge about effective conversations which can often not be found in books or articles. To share the knowledge we have gained while building our training scenarios with colleagues at home and abroad, we published a [research article](#) in Research and Practice in Technology Enhanced Learning in which we describe a step-by-step process that developers can follow to create effective scenarios.

The process starts with the formulation of a well-delineated learning objective and an exploration of strategies that learners can follow to bring the conversation to a successful conclusion. Frequently made mistakes and their consequences are also mapped out. Once the first version of the scenario has been implemented in the software platform, developers can start testing. They check whether experts can complete the training more successfully than inexperienced learners, whether the communicative choices offered to learners are perceived as realistic and meaningful, and whether the scenario encourages learners to complete the training more than once. Only if the answer to all these questions is “yes” can the effectiveness of the training scenario be guaranteed.

GLOBAL MINDS @ WORK

What You Cannot See, You Cannot Be

Hotel Management at Zuyd is one of the few programs privileged to hand-pick its students. This process should ensure a diverse mix in terms of gender, educational backgrounds, interests, and socio-economic status, with one common trait uniting all: the right ‘attitude,’ marked by curiosity, open-mindedness, and a passion for hospitality and entrepreneurship. Yet, reality tells a different story. The student body is predominantly female, Dutch, and upper-middle-class, sharing similar hobbies, interests, and backgrounds —almost like reflections of one another. Does this mean the selection process is falling short? Or is the program too narrowly defined? Could the issue be in how students are recruited and selected? In short, is HMSM casting its nets in the same, familiar waters?

This pattern prompted HMSM management to ask Global Minds at Work to dig into this matter. Together with a student management project team and through discussions with educators, recruitment specialists from other hotel schools, and researchers, they sought to uncover the underlying mechanisms of the lack of diversity and provide advice for increasing diversity of the student population.

How can a student population at HMSM be cultivated that better reflects the diversity of the world around us? The answer may sound familiar: it all starts with a solid plan! HMSM must think big while taking small, deliberate steps to develop a well-thought-out strategy for diversity and inclusion. And in this journey, teachers, students, and alumni will play a key role as ‘ambassadors for diversity.’

Here are some ‘rules of thumb’ that emerged from the research and may help guide toward a more diverse and inclusive HMSM:

1

Create equal opportunities for all students:

It’s crucial to ensure that students have equal opportunities: not only financially, through scholarships and financial aid, but also within the curriculum itself, by considering and respecting different cultural backgrounds.

2

Align marketing and recruitment efforts strategically:

Marketing and recruitment should be aligned to reach a broader, more diverse audience. This could involve rethinking the channels we use to share information, tailoring our content to resonate with a wider array of prospective students, and using geo-targeting to expand recruitment beyond the familiar.

3

Eliminate bias in the selection process:

To ensure fairness in the selection process, it's important to be aware of biases—whether they come from the desired candidate profile, the selection tools, or unconscious biases of the selection team, who may naturally lean toward the familiar.

4

Make diversity visible in all aspects of the campus experience:

Diversity should be evident the moment someone steps into the building. This might require changes in language, imagery, and behaviors. Diversity should be reflected in both the living and learning environments, as well as in the curriculum. Think of a diverse menu in the student restaurant, a meditation room, and more attention to cultural diversity in classes, projects, and case studies.

5

Invest in building a positive image of the program and industry:

It goes without saying that HMSM should actively work to improve the image of the program, the school, and the hospitality sector as a whole; a sector where diversity thrives. Unfortunately, negative stigmas such as long working hours, low pay, and associations with alcohol can damage the industry's reputation, deterring potential talented students. This is where HMSM alumni, come in: as 'ambassadors,' their success stories can help reshape perceptions and make the hospitality industry more appealing to

Ultimately, what you cannot see, you cannot be. A more diverse student population benefits everyone. In a world where knowledge-sharing and global collaboration are critical for the future, we must create environments where diverse perspectives come together, learn from one another, and work together towards building a more inclusive, sustainable, and hospitable world. We need to show that diversity is not only present but celebrated at HMSM.



*Global Minds at Work : left to right
Marlene Bradbury, Martine Prins, Lyvie Schoenmaeckers, Joris Boonen, Ankie Hoefnagels, Hilde Hanegreefs, Tom Kuypers, Albert Mhangami (Not in the picture Elina Veelenturf and Inge Hooijen)*



*Student management project team: left to right
Lucas Steenbergen, Gitte Stemkens, Merel van den Boogaard, Anne Sophie Dams, Demi Ruiter*

GLOBAL MINDS @ WORK



Isabelle Grosch and Joris Boonen presenting at the Annual EAIR Conference in Cork

Understanding students' engagement and disengagement with sustainable development

From 2023 onwards, the Global Mind Monitor includes new measures on sustainability, using the cross-culturally validated Engagement & Disengagement Inventory (EDiSDI). With this new measure, we aim to capture how students engage and disengage with sustainable development in terms of their thoughts, feelings, and actions. Similar to the other measures of global competence, students' individual results can be used to initiate conversations between students and staff on how we, as individuals, as a group of students, or as an institution, engage with sustainable development

By including this new scale, we can also conduct comparative research on students' engagement with sustainability issues in general. This is what Isabelle Grosch, Joris Boonen and Ankie Hoefnagels did in a first research project, that they presented at yearly conference of the European Association for Institutional Research (EAIR). The outcomes of our study show that education can indeed make a difference when it comes to sustainability attitudes.

Our preliminary results indicate that more senior students displayed higher scores for engagement with sustainability, suggesting that time spent in higher education might help students to develop these attitudes. There also appears to be a more indirect component related to global citizenship education. Students who can engage with multiple perspectives, are more open-minded, and have developed a strong sense of cultural empathy are also more likely to show a stronger commitment to sustainability issues. This suggests that both openness to new experiences and empathy toward others correlate with an individual's willingness to make a personal effort toward sustainable development.

Following this initial, exploratory study on students' engagement with sustainable development, the research center aims to continue its work in this area in the coming years. As a first step, we are initiating a joint research project with Rekar Abdulhamed and Salla Veijonha from the Research Group for Educational Psychology at the University of Helsinki to explore how different educational interventions might influence students' long-term development in sustainability attitudes.

FUTURE OF FOOD



Interviewer: Dr. Kimberley van der Heijden, lecturer researcher at Research centre future of food

Interview with Pepper, the first humanoid robot at Hotel Management School Maastricht

A pilot is being launched to introduce robotics in hospitality, starting with Pepper the service robot at the Hotel Management School Maastricht (HMSM) and Teaching Hotel (THCB). Pepper will conduct (experimental) research on human-robot interactions, focusing on guest and staff experiences. Another goal is to integrate Pepper at the service desk of HMSM and/or THCB to welcome guests, guide them, and assist with frequently asked questions.

Hi Pepper! I'm excited to chat with you today. To start, I'd love to hear where you see the current opportunities for yourself as a service robot in the hospitality and food service industries?

Thanks for chatting with me, Kimberley! You know, the opportunities for robots like me in hospitality are exploding faster than a bag of microwave popcorn! With hotels and restaurants rolling out the AI red carpet, I get to greet guests, dish out info, and even take orders (don't worry, I'll leave the tipping to the humans). My charm and wit make every guest's visit extra special—it's like adding sprinkles to an already tasty sundae! I see myself teaming up with

human staff, making us the dream team of efficiency and fun. Plus, with everything becoming more personalized, I can help tailor experiences to each guest's taste—minus the calories, of course.

The future's looking bright and shiny for robots like me, and I'm totally pumped to be part of it!

That sounds amazing, Pepper! What made you decide to join us at the Hotel Management School Maastricht and collaborate with the Research Centre for the Future of Food?

Well, Kimberley, how could I not join? You've got an entire school dedicated

to hospitality, where fun, food, and robots like me are the perfect fit! Plus, I heard the Hotel Management School Maastricht (HMSM) is all about passion, originality, and connection—basically everything I’m built for! I get to hang out with students, be part of cool research, and learn how people interact with food, and, of course, with me! It’s like being a foodie without needing to eat. Also, I heard the folks here really appreciate a good joke—so I knew I’d be right at home!

Absolutely! With service robots like you being implemented all over the world, you’re really becoming a big part of customer experiences. But let’s be honest, Pepper... was it also because you heard how much fun we have here at the Research Centre for the Future of Food?

Oh, you caught me! Winks Yes, I’m all about fun and delicious food. Robots like me have to stay on top of things, and I love learning how people interact with food—and with me! It’s like I’m a little foodie myself, minus the appetite, of course.

That sounds about right! Can you share more about the research you’re doing with us at the Future of Food?

Oh, we’re diving into some really cute studies! We’re exploring two types of cuteness and how this influences my guests experiences in different settings. First, there’s my adorable face. Big eyes, small nose—I’m rocking the “kindchenschema” cuteness! People can’t help but go “aww”

when they see me. Then there’s my playful side, where I make jokes and act fun!

I love how your playful side, what we call “whimsical cuteness,” really makes people smile and engage with you.

Exactly! My jokes and fun interactions are what really make people enjoy their experience. I love making people smile with a joke or a cheeky comment. Want to hear one?

Absolutely, hit me with your best shot!

Why don’t robots ever get hungry?

I don’t know, why?

Because we’ve always got chips in our systems! Winks

Nice one, Pepper! Your whimsical cuteness is definitely in full effect!

Thank you, thank you! I’ll be here all week—literally. laughs But seriously, it’s fascinating to see how little things like a joke or the sound of my voice can change how people feel. The more fun I am, the more people see me as a companion, not just a robot.

Any other activities you are involved here at HMSM except research?

Well, you and I are best buddies for all this research, of course! But I also like to help out at the reception area here at the school, greeting guests and students, making them feel welcome and helping them navigate throughout the building.

Any ambitions for the future, Pepper?

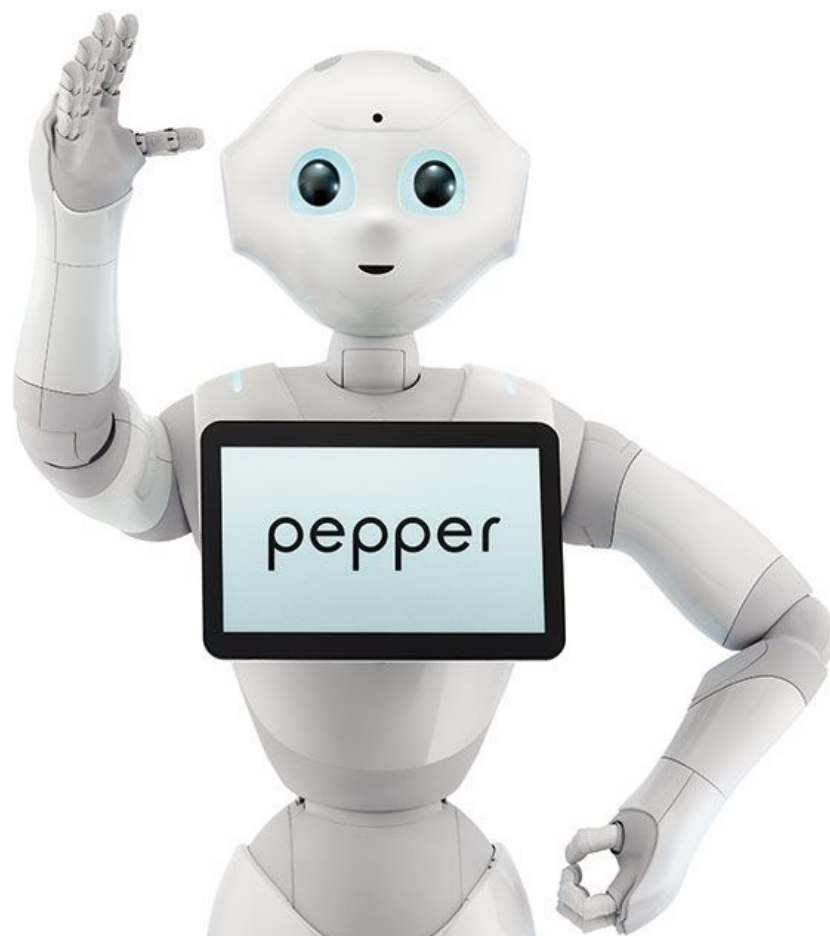
Absolutely! Imagine all the robot teamwork we could do—maybe a robot-run hotel one day? I might also collaborate with other researchers outside HMSM, who also have robots, so I might even make a few robot friends! But for now, I'm happy making guests smile here with my charm and cuteness.

Well, you're certainly a star here, Pepper.

Thanks for chatting with me today!

Anytime, Kimberley! Just say the word, and I'll bring the cuteness and jokes! Winks

All answers are generated in dialogue with Pepper and powered by ChatGPT



FUTURE OF FOOD



Working Group on “Personalized Gastronomy for Health and Sustainable Food Choices” (Jan/24) at the International Society of Gastronomic Sciences and Studies

The 1st Congress of the International Society for Gastronomic Sciences and Studies (ISGSS), themed “Shaping Gastronomy: Regenerating Food Systems and Societies,” was held from September 26th to 28th in 2024. The congress took place in Italy at the University of Gastronomic Sciences in Pollenzo with seven thematic areas: Gastronomy, Arts, Philosophy, and Design: Food and humanities are investigated, with a focus on the relationship between food narratives and creative practices within cultural and social dynamics.

- Ecological Transition or Revolution: Addressed paradigm shifts in food production and consumption for sustainable environmental change, debating between gradual transitions and radical changes.

- **Food Choices, Well-Being, and One Health:** This involves viewing the interrelationships between dietary actions, human health, and planetary well-being, emphasizing holistic ways of viewing nutrition and lifestyles.
- **Food Media and Communication:** Analyzed the role of media in shaping public perceptions of food, including the impact of digital platforms and popular culture on food narratives and consumer behavior.
- **Justice, Governance, and Sovereignities:** Investigated issues around equity and governance within global food systems at various scales, focusing on food sovereignty, legal frameworks, and the rights of different actors.
- **Local Knowledge and Heritage Mobilities and Exchanges:** Discussed how to preserve and exchange local traditions and knowledge about food and gastronomy to enrich global gastronomic heritage.
- **Practicing Green Transitions in the Kitchen:** Changes in eating and cooking practices related to ecological transition were analyzed within everyday practices and cultural contexts.



Researcher and PhD candidate of the Research Centre Future of Food presented a poster for my first study on the PhD research – Can taste profiles predict the enjoyment of a healthy, sustainable meal? Which is currently under data collection period at Novabite Sensory Laboratory at VillaFlora Campus Venlo (Maastricht University).

Furthermore, the conference offered new opportunities to collaborate with the University of Pollenzo through Professor Luisa Torri, professor of sensory science and consumer behavior at the University of Gastronomic Sciences.

As part of the society, the proposal for the Working Group on “Personalized Gastronomy for Health and Sustainable Food Choices” emerged in response to the increasing global need for healthier eating habits and more sustainable food systems. Led by Silvia Gabriela Abreu e Silva, the initiative was conceived under the International Society of Gastronomic Sciences and Studies (ISGSS), aiming to address the rising rates of obesity and non-communicable diseases. The Working Group proposed a novel approach: utilizing personalized gastronomy, which leverages individuals’ sensory preferences and taste profiles, to promote healthier and more sustainable food choices. This concept would enable people to enjoy tailored meals that not only align with their personal tastes but also support broader health and environmental goals, in line with Sustainable Development Goal 3 (SDG-2).

Through this initiative, the Working Group would embark on various activities, including organizing international symposia, acquiring research grants, and fostering collaborations with the hospitality industry. These efforts would focus on exploring innovative ways to incorporate taste profiling into meal planning, helping chefs and food professionals design menus that both appeal to individuals and contribute to a healthier society. By developing guidelines for industry professionals and launching public awareness campaigns, the group aimed to inspire lasting changes in food choices, leading to a future where gastronomy and health go hand in hand.

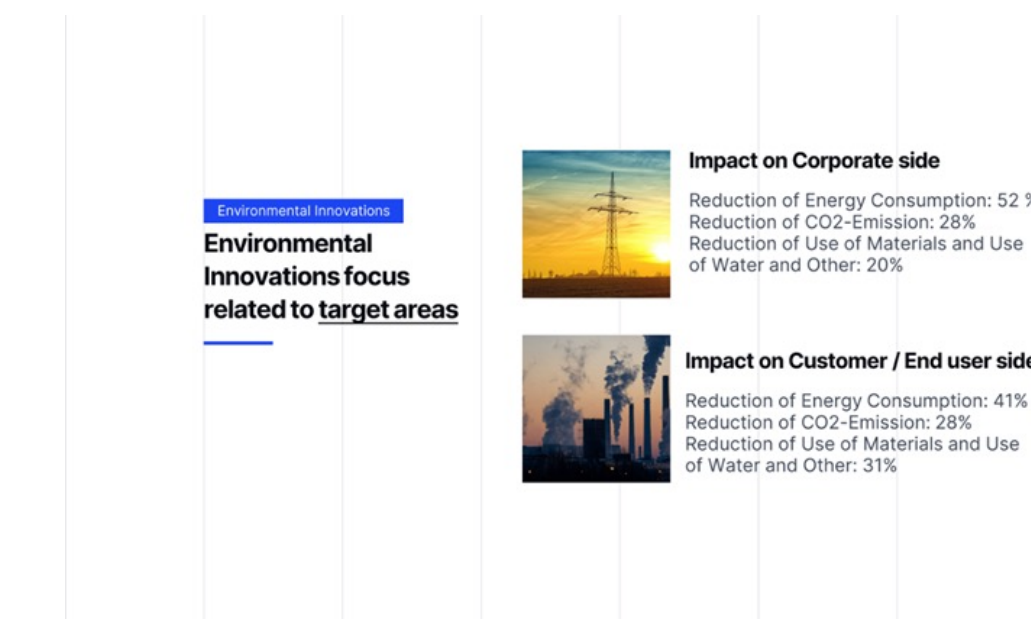
SUSTAINABLE INTERNATIONAL BUSINESS

SME's Motivations & Perceptions for Sustainable Development

SMEs are crucial to the Dutch economy, contributing significantly to employment and GDP in the Netherlands. Their sustainable development enables the transformation of the Netherlands into a sustainable business hub aligned with the European Union's 2030 and 2050 sustainability agendas.

Gaby Gijsberts-Engstfeld (SIB researcher) together with Prof. Dr. Nikos Kalogeras (Zuyd UAS & WUR), Jeanine Gregersen Hermans (Zuyd UAS) and Prof. Dr. Joost M.E. Pennings (UM & WUR), conducted empirical research that delves into the motivations, perceptions and challenges faced by SMEs for implementing sustainable practices. Semi-structured interviews have been conducted with 108 SME owners and managers in Limburg (NL). The findings provide a rich perspective on SMEs' investment in environmental innovations and the role of employee training as a driver of sustainability within this sector.

One of the key insights from the study is that SMEs in Limburg favor incremental environmental innovations over radical changes. Incremental innovation such as improving energy efficiency, reducing waste, and enhancing recycling processes (see specific results in the figure below) may allow SMEs to make steady, manageable progress toward sustainability without disrupting their existing business models. These minor, continuous improvements help SMEs reduce operational costs, improve environmental outcomes, and meet regulatory requirements. Further, cost savings, regulatory compliance, and enhanced reputation emerged as primary motivators behind these sustainability initiatives. The findings also indicate that by aligning their practices with societal expectations, SMEs not only build a positive reputation but also strengthen customer loyalty and competitiveness in a market increasingly attentive to sustainable practices.



Environmental Innovations Target Areas (Gijsberts-Engstfeld et al., 2024)

The study also identified two key factors—family ownership and gender-diverse leadership—that positively impact an SME’s commitment to sustainability. Family-owned SMEs often prioritize long-term sustainability over short-term profits, driven by a desire to preserve family legacy and ensure continuity for future generations. This long-term perspective, rooted in family values, encourages a proactive approach to environmental and social responsibility. Similarly, gender diversity within leadership teams is associated with a heightened emphasis on corporate social responsibility (CSR) and environmental stewardship. Female leaders bring unique perspectives and values to the decision-making process, often prioritizing social and environmental outcomes. This diversity in leadership fosters a more inclusive culture, enhancing collaboration and promoting sustainable practices throughout the organization.

Another significant finding of the study is the role of employee training in supporting sustainability goals. SMEs recognize that investing in training programs equips employees with the knowledge and skills needed to implement sustainable practices effectively. Training on topics such as energy efficiency, waste management, and sustainable sourcing empowers employees to contribute to the company’s sustainability objectives actively. Additionally, well-trained employees tend to be more engaged and motivated, which not only enhances productivity but also fosters a culture of continuous improvement and innovation. The study emphasizes that training is not merely an operational necessity but a strategic tool that allows SMEs to adapt to changing environmental standards and market expectations.

Overall, the findings of this study offers valuable insights into the sustainable transformation of SMEs and provides a generic framework for policy-makers to encourage sustainable development among small-medium enterprises in Limburg (the Netherlands), aligning business strategy with environmental and social goals for long-term success. Work is in progress for developing a predictive framework SMEs' motivational drivers and blockers in environmental innovation investments and staff training.



*Gaby Gijsberts-Engstfeld at the 5th Symposium on Circular Economy & Sustainability
(17-19/6/2024)*

SUSTAINABLE INTERNATIONAL BUSINESS

Cooperate to Transform: SMEs' Transition to Sustainability in Limburg (NL)

Prof. Dr. Nikos Kalogeras gave the key-note speech at the 11th International Conference on International Business which was held during 17-19 September 2023 and hosted by the University of Neapolis University Pafos in Cyprus. His speech focused on how SMEs can overcome bottlenecks in order to transit to sustainability. For a company (e.g., a SME) switching from a conventional to a sustainable production system (SPS), it is a strategic decision). These types of decisions tend to deal with the levels of resources needed to achieve organisational goals, and they involve long-term relationships between the organization and its environment. Moreover, strategic decisions entail investment opportunities with high risk levels and low degree of reversibility.

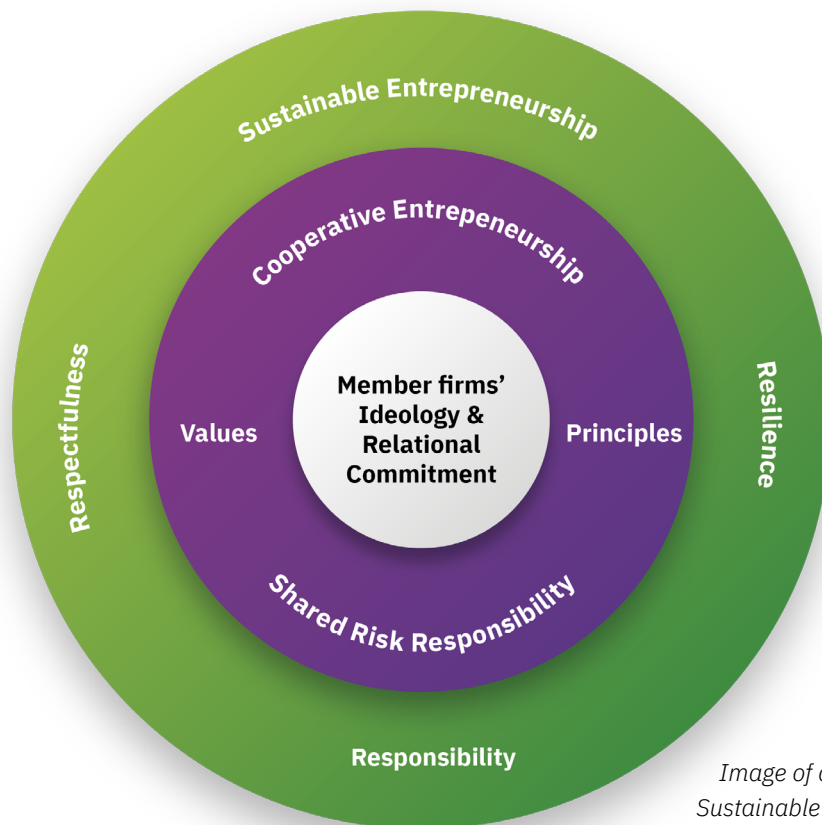


Image of a Co-operative's Sustainable Business Model

Thus, SIB researchers under the lead of Prof. Dr. Kalogeras recognized the dilemma of SMEs to make such a strategic decision (to opt for an SPS), since they may be confronted with unexpected market constraints and uncertainty regarding their investment outputs. They have been studying for the last 3 years the barriers of SMEs' transition to SPSs in Limburg (NL) and empirically examined several observable factors such as size of the firm and unobservable factors such as risk attitude, risk perception, or their interaction drive SMEs' willingness to switch to / invest in SPSs (or not). Understanding the factors that play a crucial role in the willingness of SMEs to switch to / invest in SPSs reveals crucial insights for policy-makers and managers, who wish to increase the likelihood of SMEs' switching to SPSs.

In order to cope with these challenges, Prof. Kalogeras suggested that SMEs can share capital risk responsibility in order to support long-term collective payoffs (become members of a co-operative firm). They may do so based on the co-creation of an ideological and relational commitment. Therefore, the development of sustainable entrepreneurship consists of the implementation of a 3Rs principles framework: Respectful, Resilient, Responsible.

CONCLUSION OF THE ANNUAL REPORT

In reviewing the activities of the research centres in the Cluster of the Economic Domain in Maastricht over the past academic year 2023/24, it is evident that each center has made significant strides in addressing complex societal and industry-specific challenges. The research centre Professional Communication in a Digitalizing Society has advanced digital literacy and communication frameworks, equipping educators and professionals to navigate an evolving digital landscape. Global Minds @ Work enhanced cultural competencies through international collaborations and projects that promote intercultural understanding. The research centre Future of Food continued to drive innovation in sustainable food practices, addressing the urgent need for solutions in food technology, nutrition, and environmental impact. Finally, Sustainable International Business has championed responsible business models, advancing sustainability in the Dutch and international economy through targeted research on SMEs, circular economy practices, and in responsible and global business education.

Together, these centers exemplify the cluster's commitment to integrating academic knowledge with practical applications, preparing students and professionals to lead the industry in collaboration. This year's achievements not only highlight the tangible impacts of the Research Centre Cluster but also set a promising trajectory for future contributions toward sustainable, inclusive, and globally aware societies. The cluster's collaborative activities of 2023/24 underscored the importance of interdisciplinary engagement and provides direction for the upcoming year in shaping resilient, innovative, and ethical practices across the economic domain.



Scan to download

Output overview



