Talent programme
Verzilver je talent

Encouraging students, teachers and entrepreneurs to focus on innovation

MeetUp 5: kick-off challenge Food for Health and Safety

Students, universities, UMC Utrecht and ministries of Economic Affairs and Climate Policy and Defence take on the Food for Health and Safety challenge.

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A new concept
A soup-making robot, food from a 3D printer and a mobile vegetable patch for fresh greens. These could be ideas dreamed up by students from Eindhoven, Utrecht and Wageningen as a new food concept for soldiers on a mission. At present, these soldiers get their meals served from an outdated mobile satellite kitchen. The Ministry of Defence has approached students to find a way of dishing up good, nutritious and tasty meals for its soldiers. General Frits van Dooren of Defence: “We’ve said: help us to develop a new concept. Bring us some surprising new ideas.”

Students from the three universities will come to the soldiers’ aid in early 2020 when they start working on the Food for Health and Safety challenge. The students will work in interdisciplinary teams, wrestling with questions like: How do you ensure that soldiers eat nutritious meals that contain enough calories? How do you transport food to the base where the soldiers are stationed? How do you present the meals? Logistics, sustainability, design, perception and health – these are all aspects that come into play. The challenge kick-off on Wednesday morning 25 September 2019 marked an important step in a unique collaboration between the Ministry of Defence, the Ministry of Economic Affairs and Climate Policy (EZK), Utrecht University (UU), Eindhoven University of Technology (TU/E), Wageningen University & Research (WUR) and the University Medical Center Utrecht (UMCU).
Each with their own expertise

The four partners are all contributing their knowledge and expertise from an exceptionally wide range of disciplines, with a focus on energy, nutrition, health and a circular society. “This brings together all the aspects you need in this dossier. I genuinely believe that we can strengthen each other in terms of knowledge,” says Van Dooren enthusiastically. He heads the Royal Netherlands Army’s Education and Training Command, responsible for all training, some training support and some knowledge production within the army and to some extent within Defence. “The request to replace the mobile kitchen came from Opleidings- en Trainingscentrum Logistiek (education and training centre for logistics at the Royal Netherlands Army).” A logical step would be to sit down and discuss things with the manufacturer of the old kitchen. The Ministry of Defence took a different approach. “We said to one other: let’s engage with new parties to see if an innovative nutritional concept can be achieved from other angles. This is fairly broad if you look at all the aspects, but that’s what makes it all the more valuable for us. We are delighted that we’re on this road together. It makes me happy,” the general says, smiling broadly.
A challenge for everyone

“Because I am focussed on the alliance between Eindhoven, Wageningen and Utrecht, the question from the Ministry of Defence seemed a perfect assignment for students from our three universities”, says Jan Haarhuis. He is responsible for Educate-it, the educational innovation programme at UU. “Both education and educational research are strengths at UU. This complex real-world problem will be approached in a challenge-based way,” Haarhuis continues. “The strength of the alliance lies in bringing together staff and students who use their basic theoretical (inquiry-based – UU) and solution-oriented (design-based – TU/E) approach. This is characteristic of broad academic and specialist technological institutions, including the special expertise in agro-technology and food sciences (WUR).”

“Students set themselves to work on a specific question. They find this challenging and motivating. They often spend more time on it because it continues to preoccupy them: they want to find a solution to the question facing them. We expect this type of education to boost the quality of education. That’s certainly something we’ll be investigating.”

Bart Koppelmans, who is doing a Master of Innovation Management at TU/E, was at the kick-off for the Food for Health and Safety challenge on 25 September. He is involved as a supervisor and coach in challenge-based education in Eindhoven. “For me, challenge-based education is a more interesting way to learn more, and to learn more broadly. It ensures that students can develop in new areas and learn what the real world is like. By engaging early in challenges of this kind, students can take a fresh look at important societal problems.”

This collaboration between the different parties is a challenge not only for students. “It’s also a challenge for us,” says Haarhuis. “The problem is being addressed by three universities and the UMC Utrecht, plus we’re working with two ministries. That calls for very close collaboration.” As well as delivering valuable and innovative concepts, this challenge offers a good case study to strengthen the alliance between TU/E, WUR, UU and UMC Utrecht.
Bringing parties together

Ineke Lemmen of the Ministry of Economic Affairs and Climate “I brought everyone together through the Verzilver Je Talent (benefit from your talent) programme.” Ineke Lemmen is the programme manager of Verzilver Je Talent. “The programme focuses on getting more students involved in innovation, and brings together students, teachers and entrepreneurs in interdisciplinary teams. They experiment collaboratively to find solutions to issues facing society.” Lemmen emphasises that the concept devised by the students must meet sustainable, social and innovative criteria. “And it must be purchasable in the market. In other words, SMEs must be able to deliver what Defence is asking for. What I’d like to say to the participants in the challenge is this: keep working collaboratively, keep evolving, and keep working with other disciplines in crossover learning. Keep questioning each other with an open mind and make sure that your innovative concept is inspiring and provides opportunities for collaboration with other ministries of defence around the world, and Europe especially.”

What is challenge-based education?

In challenge-based education, students work on authentic, real-world problems that are complex and call for a solution from different domains and disciplines. Assignments are open, with ample scope for creativity and for discovering and exploring new concepts. The client, in this case the Dutch Ministry of Defence, may stipulate basic conditions and requirements that the concept must meet. During the challenge, students can consult experts from education, industry and government. Students work on the assignment in interdisciplinary teams together with the client, supervised by a coach. In this way, they acquire not only content knowledge, but also a host of professional skills that they will need later in business.
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