The first time I as a scientist engaged with society was at the Dutch Home Fair, or the Huishoudbeurs. This seemed to us a good place to engage with a wide range of people. The theme of our activity was healthy eating. We began with a mini-lecture on our scientific insights. We then ran a quiz to see what people had remembered. During the quiz, the audience were shown statements about healthy eating, and they could use green or red signs to indicate whether they thought the statements were true or false.

While we were doing this, a member of the audience caught my eye. A woman of about 50 who made a conflicting impression on me. She answered a lot of the quiz questions correctly, so she appeared to have listened carefully to the mini-lecture. But she was sat there slumped in her chair, looking fairly disinterested. A bit like when I see students drifting off during a lecture sometimes. She looked around the room, somewhat absent-mindedly, and then at her watch. She clenched her jaws to suppress a yawn.

When I think back, I think that the choice of the Huishoudbeurs was a good one in many ways, but it does seem that I may have miscalculated the effectiveness of our public engagement activity. It just so happened that there was a mobile FEBO snack vending machine by the exit to the fair. Less than half an hour after my quiz on healthy eating, I saw her standing by the FEBO vending machine with two croquettes in her left hand and a meatball and onion skewer in her right. Were these to be the last ones before going cold turkey, or had the message not really got through? I had no way of knowing, and I realised just how complex it can be to have the desired impact on an audience.

Alongside research and education, social impact is a core task of universities. As we are gathered here today, I suspect that almost everyone is involved in public engagement. We share science with a wider audience, work with social partners in research or education, involve citizens in the collection of data or work in a team in which others undertake these tasks. Therefore, I think a call for more public engagement would be superfluous. In my view, we have already gone beyond that stage. What I do find important, however, is that we successfully take the next step. In that context, I would like to talk about quality.
After all, what constitutes good public engagement? How do we define it? And what do we need to do it well? Today, as a scientific researcher in the field of public engagement, who is a little more specialised in the field of public engagement activities now than she was at the time of the Huishoudbeurs, I would like to share my views on these questions with you.

**Why good public engagement is essential**

Remember the Dutch Science Shops? They were knowledge hubs run by students and lecturers that aimed to make scientific knowledge accessible to society. They started in the 70s and sprang up all over the place in the years that followed. In the end, however, the universities no longer found social impact as important, and most of these Science Shops disappeared. This is just an example, but it illustrates just how easily the social engagement of universities can disappear. In other words, focus on public engagement is fragile.

The fact that we are making public engagement such a prominent part of this opening event must mean something. We now have momentum. This is our opportunity to embed good public engagement in our university in a lasting way. If we fail to do this, all the time and energy we are now investing in public activities will be lost. Ultimately, we will lose our enthusiasm and run the risk of losing contact with society, to the detriment of mutual trust. Then it becomes more difficult to collectively address the great issues of our time.

This risk is also being felt at national level. A National Expertise Centre for Science and Society (Nationaal Expertisecentrum voor Wetenschap en Samenleving, NEWS) is being set up with a view to strengthening contact with society. This centre does not intend to organise more public engagement activities either, but rather will work to improve the quality of such activities through knowledge sharing and collaboration. It is up to us to decide how we will approach this here in Utrecht.

Because also here in Utrecht we attempt to connect with people outside of the university. This involves talking to people, making them aware of our work, or inspiring them to collaborate. Effective communication and a solid understanding of people are at the heart of any form of public engagement. It is noteworthy, therefore, that even researchers without a background in communication and human behaviour are expected to do this. The Utrecht approach can distinguish itself by actively using academics with relevant expertise and their knowledge for this purpose.
But what is good public engagement?

Public engagement is often done based on intuition. Some scientists are naturally talented in this respect. They instinctively know how they can involve the public in their work. But by far the majority of people could use some help in this regard. Luckily, research has already provided a good deal of guidance around good public engagement.

Firstly, it is important to consider the precise objective that you want to achieve. Many people, however, start by thinking about a particular means that they want to use. That is the first pitfall. You might think, for example, that it would be a good idea to organise a knowledge quiz at the Huishoudbeurs. Only afterwards do you realise that you wanted to inspire people to behave differently, and that a knowledge quiz is not necessarily the best way to do this.

Secondly, it is important to check whether the objective has actually been achieved. But we often forget to evaluate this. That is the second pitfall. After all, if we do not measure the impact, we have no way of knowing how we can achieve our objectives better next time.

To really get people involved in the topic and the available information about it, you have to build mutual contact. Unfortunately, we are often wholly focused on conveying knowledge and how best to do this. That is the third pitfall.

If academics involved in public engagement can avoid these pitfalls, they will achieve what public engagement is actually intended for: a two-way conversation. Academics inform the public but are also informed by the public.
One of the main aims of this two-way conversation is that we, as academics, test our own assumptions, methods and interpretations on others, who may approach the topic from a fresh and relevant angle. This also increases the chance that researchers are prompted by the public to look at new research questions. Public engagement hones our scientific knowledge, as well as the quality of knowledge – and that is what we are all about.

What do we need to do it well?

I still sometimes find myself thinking back to the Huishoudbeurs. As an academic who had just started out in public engagement, there were two things I needed at that time:

Firstly, personal support and training around how to set up a public engagement activity of this kind. It would have been extremely useful to have sat down with a public engagement expert to take me through the necessary thought processes. Start with the objective, then choose a suitable way of achieving it, etc.

Secondly, the application of scientific insights about behaviour. For example, I could have benefited from studies that compare the behavioural impact of a quiz with other formats, such as group discussions. The required knowledge and methods were available. The strange thing is that although I am a behavioural scientist myself, I had not yet realised that I could draw on the insights from my own field when I started out in public engagement.

In short, it is important that we provide academics who are involved in public engagement with good support and the available academic expertise. By applying existing knowledge more effectively, and by increasing that knowledge through systematic evaluations, we can improve the quality of public engagement in a lasting way.
With the knowledge that we now have, we would do things differently at the Huishoudbeurs. We would talk less, broadcast less, listen more and ask more questions. After all, the more personal and relevant the knowledge for the public, the greater its impact will be. Changing behaviour will always be difficult. However, with a focused approach it is more likely that, rather than seeing the woman I mentioned earlier getting her lunch from the FEBO snack machine, we would see her at the salad bar opposite, spooning tomatoes onto her plate.

In addition, her heart would probably have beat a little faster for science. For sure I would have liked to measure that. My colleagues even go as far as to measure heart rate in situ. In other words, they literally measure whether certain topics make people’s hearts beat faster. Meanwhile, my heart beats faster at the thought that we can use such advanced technologies to better understand the impact of public engagement activities.
Now that we know what is needed for better engagement, the question is how it should be organised, and who should fulfil which role? Recognition and Rewards provides scope for looking at this with an open mind. The vision document provides the thought processes that we must go through:

What is the objective? *High-quality public engagement.*

Which tasks does this involve? *Support for the implementers, research to understand the impact better, effective management.*

Who is good at what?

Moreover, by moving away from the rigid distinction between academic staff and support and administrative staff, we can utilise individuals' strengths even more effectively. Support and administrative staff can be involved in academic research, and academic staff with knowledge of communication and behaviour can support their fellow academics and help them implement their public engagement activities. We accept that there should be no partitions between science and society and between the various colleagues who make the work here at the university possible. We work together.

**What can we do right now?**

YOU can approach your next public engagement activity in a systematic way. There are all kinds of resources to help you with this (in the endnotes you will find links to useful sites and sources). Also involve a public engagement expert or communication professional,

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YOU can approach your next public engagement activity in a systematic way. There are all kinds of resources to help you with this (in the endnotes you will find links to useful sites and sources). Also involve a public engagement expert or communication professional, preferably at an early stage of your project, so not only after you have thought of organizing a knowledge quiz, so to speak.

ALL OF YOU, over the coming period at work, can put public engagement on the agenda of your next team gathering or lab meeting. Discuss the objectives and the progress that you want to make and how this fits into your team ambitions.

WE, as university for the future, can engage in a dialogue around how public engagement can be an integral part of our academic work. It does not matter what we call it – education for non-academics, research in the public sphere or professional performance – as long as we recognise the importance of good public engagement. By approaching it from an academic perspective and in a scientific way.
Endnotes

i Literally hundreds of academics, museums, communication professionals and journalists voluntarily shared their ideas about the establishment of this centre, which will have an annual budget of 1 million euros. Evidently, the subject matter resonates within the academic world and the broader community.

ii The website of IMPACTLAB – a collaboration between Utrecht University, Leiden University and the Dutch Research Agenda (NWA) – features various tools and resources for conducting an effective impact assessment. https://impactlab.sites.uu.nl/en/

iii Is this Strick person saying that one-sided knowledge transfer is no longer allowed, like a knowledge quiz or the Universiteit van Nederland podcast? Absolutely not. But what I am saying is that such a form of public engagement serves a specific purpose and reaches a certain target audience. And that means we should not elevate it to the universal ideal of public engagement.


vi The site of the Centre for Science and Culture offers lots of useful information, including inspiring examples, information on funding sources and practical support. https://www.uu.nl/en/organisation/public-engagement-at-utrecht-university/what-is-public-engagement

Thanks

*Special thanks go out to Sicco de Knecht, Naomi Ellemers, Kees van den Bos and Ap Dijksterhuis for their input and insightful suggestions.*

*Illustrations: Lotte Dijkstra*