



Startling results with online learning

A coach is checking whether the software has been installed correctly.

How do children and young people learn in the digital era? How should education be designed to accommodate them? These are perfect questions for Wim Veen, professor in Education and Technology at the TPM faculty. His reply? Don't dwell on the ICT paraphernalia but invest your time in flexible learning paths, creating online communities and online support. That way you can be sure that ICT in education is really of benefit. Along with colleagues, Veen set up two educational pilot projects, with remarkable results.

Veen was responsible for initiating the URWAY project for early school leavers in secondary education. His co-developers included Marja Verstelle, pedagogical advisor at Leiden University and associated with TU Delft as guest staff member. At the same time Veen was also involved in the BlendXL project, led by his TPM colleague Arnold Muhren. Together they developed e-learning models for large groups of students in science education. John Heintz, member of the academic teaching staff in the Architecture faculty put the models into practice. Two different projects for very different target groups with one thing in common: the learning outcomes were especially good.

URWAY: chat puts the fun back into learning

"A child who just sits around all day is well aware that he is a low achiever. It makes no sense to preach about the need for qualifications because he is already well past that stage. You should ask him what he wants to learn. If children continually drop out of school it is basically because they have never been presented with a learning concept that actually suits them," says Wim Veen, explaining URWAY. The project involves encouraging early

school leavers between the ages of 15 and 18 to start learning again. And it works. The project has now been running for almost three years and 120 youngsters have taken part. One third of these have now started working and another third opted to continue with a new course. These are very high figures for a group of school refusers who seemed immune to any other remedial measures taken. The remaining third are still involved in URWAY or have dropped out of the project. The project has an 11% dropout rate.

What exactly does URWAY do? Veen: "Many of these children come from difficult families or have minor behavioural problems. The induction programme is quite extensive. We then give them a computer, a printer, a webcam and an installation package for a KPN Internet connection. When all this has been installed at the school leaver's home - something we do check - a coach approaches them via online chat and asks: now what would you like to learn?" Didactic coordinator Marja Verstelle adds: "surprisingly, most participants already have an answer to that question. One girl who absolutely hated school, loves horses and is now doing an NTI course in horse care. A boy who liked the idea of working as a trucker has been learning German and French. The students do their learning on the computer at a time that suits them. Once they have earned a certificate, however modest, it gives them an enormous boost to their self-confidence. This gives them the incentive to continue learning."

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Are you sick of getting drenched on the way to work in the morning? Well your days of turning up soaked to the skin may soon be over. Fill in our questionnaire for the chance to win one of the five storm umbrellas we're giving away. At the same time you'll be helping us improve the faculty news magazine.

We really enjoy putting together the TPM Quarterly and try our best to reflect your needs and interests as a reader. But is there still room for improvement? We'd like to hear your thoughts and suggestions. Please visit the link below to fill in the questionnaire, which should only take ten minutes to complete.

We will announce the lucky winners of the storm umbrellas and publish the results of the readers' survey in the last Quarterly magazine of the year.

Thank you in advance for filling in this questionnaire. We will put your constructive comments and criticism to good use in 2010.

The editorial team

Go to:
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Take part in the
readers' survey:
Win a
storm
umbrella!

Dear first-year students,

You have already been here a while now, but I will say it anyway: welcome! There was some uncertainty as to how many of you there would be. The university administrators were becoming restless and warning that they would not be able to cope with such large numbers. But they were jumping the gun: in national terms, there are not as many students as had been predicted. Despite this, in our faculty, you are the largest year group we have ever had: more than 190. A nice number that we will certainly be able to cope with.

The faculty where you have chosen to study is not just any old place. This is the faculty of Technology, Policy and Management. One of TU Delft's most innovative, dynamic and independent clubs. Congratulations on that choice! As a sober engineer, you are probably thinking, yeah, yeah. Seeing is believing. But engineers also have their passions. They are mad about the idea of high-tech and hard science takes their breath away. They are used to congratulating each other on new discoveries.

Well, we are also a new discovery. For a start, we really do work in an interdisciplinary way. Some people consider that to be a soft approach. But what could be harder than money (economics), power (politics), property (law) or mass behaviour (psychology)? Morality and ethics also makes seriously hard demands on everyday engineering. The way in which the TPM curriculum integrates engineering disciplines with public administration, economics, philosophy, psychology and entrepreneurship is unique in the Netherlands. Aside from bringing technical discoveries and innovations to a wider public, we focus on major social issues and transformations. We talk of infrastructures and socio-technical systems (STS). As an engineer, you will soon be able to put this modern scientific approach into practice. For example when you deal with issues at ports and airports, in water, transport, gas or electricity.

And employers in the outside world will be keen to snap you up. Not only do we have a solid approach to content, we also offer teaching of the highest quality. And we will continue to do so. Because we adopt our own course and pay our own way, we can set the highest standards. We can rise above debates about student numbers and above a Minister who is interested in culture but not in university education. Above the financial crisis.

But that does not mean that we can ignore this crisis. It must be made clear what a cosmic shift we have experienced and the aftershocks that we can expect. It is clear that in the old and the new world we must prepare for what will come from the next: the Asian economies.

For you, this means that we will try to encourage limitless ambition and do our best to enable those ambitions to come true. We aim to keep you not only during the Bachelor's phase but beyond into the Master's programme, with its fascinating areas of application and international programmes. TU Delft, with TPM leading the way, has recently intensified its collaboration with the Ministry of Public Works, Transport and Water Management. This will involve master classes (for civil servants) and practical tutorials (for students) on life and mobility in the Randstad Delta. We are forging links with universities in the Far East. Our first group of students is already in Tokyo and will soon be receiving our Prime Minister and his innovation platform. In socio-technical systems, you always need to anticipate the innovations to come. That is why I congratulate you once again on your choice of course.

Prof. Theo Toonen, Dean

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Startling results with online learning

What is unique about URWAY is that school leavers are not forced to follow a course as such. It aims to encourage a desire to learn. The method used is also highly innovative. Verstelle: "All contact is via the computer. Each student is given a personal coach who maintains daily contact with them but only via chat or e-mail. The student does not even see a photograph of their coach but only an avatar. The coach introduces the student to a community zone run by experts. For example, there are communities for English or photography. They then get to know other students by chatting and e-mailing with each other. This relatively anonymous interaction is extremely effective as the students successfully motivate each other. It really is gratifying when I receive an e-mail from a student saying: now I can learn for myself."

At the end of this year, the government subsidy for the URWAY project runs out. So far the project has been running in the Leiden and The Hague region, but Verstelle and Veen are working to extend the project to other regions. Local municipalities will then have to take over funding. Veen: "I'm really optimistic about it. Around 2000 young people nationwide will be eligible to take part. These are not impressive numbers, but they are all worth the effort. I'm also learning a lot from this personally. I can use community forming and the results it achieves to develop learning concepts for others. This is especially the case because URWAY students have such outspoken opinions and let us know immediately what is and is not effective."

BlendXL: the effective use of ICT with large groups of students

Action research - the process of immediately researching which educational methods are effective and which are not - was also a central component in BlendXL. This project was based around the question: how can you successfully deploy combinations of online learning and face-to-face teaching (blended learning) when teaching extra large groups of students? The project was led by TPM's Arnold Muhren. It focused on a review of face-to-face teaching in the light of the influence of ICT. Several e-learning models developed by Muhren and Veen were piloted with large groups at five universities, including TU Delft and four institutions abroad. John Heintz, who teaches the first-year course in Building Process Management in the Architecture faculty, was happy to act as Delft's guinea pig. At the same time, he carried out his own research into the effectiveness of the BlendXL innovations. "It was a fantastic experience for me", he says.

When Heintz started the project his first-year course was attended by 450 students and took the form of a classic lecture. With support from BlendXL and Grassroots (TU Delft's ICT project) he was able to dramatically transform his method of teaching in the space of three years.

"When you have so many students on the course, it is impossible to respond to individual questions and comments, even if you divide the students into groups. There are just too many. BlendXL offered me an infrastructure for working with smaller groups. In Blackboard we have created a facility for students to evaluate each other, known as peer learning. The system signals when group assignments have to be submitted and when it is time for students to assess each other. They are also very honest when they do this. Special forms are available for this which are ultimately sent to me." These logistical tools also brought changes to the content of the lectures. Heintz: "I now give the students group assignments which

they can work on independently in the digital learning environment. It means I can focus more on individual cases in lectures since there is less need to concentrate on theory. This can be seen in the outcomes achieved but also in the effect the course has on students. In the old situation, around 20% of first-year students were successful in passing this course; now that figure has increased to about 80%. Even more importantly, the students no longer regard it as a compulsory component of their course but are starting to take an interest in the content. They have a much better idea of everything involved in creating a building. They have more awareness of the factors that need to be taken into account in their design."

In his own department, Heintz is keen to promote the concept of blended learning. "I am still very ambitious and would like to achieve much more with this. Examples might include an animation or video featuring answers to frequently asked questions that you make available via Blackboard or Youtube. There are also possibilities for more work with discussion groups where students can offer each other support. We need to continue to work on developing this but it takes time and that is not always available. I could use my research time on this."

Wim Veen also sees time constraints among teaching staff as the most significant obstacle preventing the wider introduction of blended learning. "The project has demonstrated that our decision to opt for action research has proved extremely effective. It is possible to achieve much more than you might imagine, even with large groups. But teaching staff need to shake off their old habits and gradually discover the concept that suits them best. This places demands on both teaching and research time. Ultimately it can make a real difference. At all the universities that participated, both teaching staff and students are highly enthusiastic. In Slovenia, all first-year students are now taught according to the blended learning principle. We are currently in the process of applying for new funding from the European Union to continue the project, again coordinated from Delft. We hope to have news on funding by the end of this year."

Homo Zappiens



In his book Homo Zappiens, Wim Veen examines the consequences of the convergence of three different developments: homo zappiens as a user of new technologies, technological development itself and globalisation. The convergence of these three separate trends is actually accelerating


changes in behaviour and in the way society and the economy interact.

Homo Zappiens is no longer a solitary figure at school or at university; he is also an employee, a customer and a citizen. The consequences are plain to see.

Traditional media are in decline, political parties are no longer of interest to young people and union membership is becoming a thing of the past.

Businesses are redefining their HR policy and assessing the consequences that homo zappiens will have for their relationships with customers. Even the ministries have developed initiatives such as Ambtenaar 2.0 (Civil Servant 2.0) in order to accommodate the expected shift in the relationship between citizen and government. Maarten Korz, innovation manager at Rabobank, Rink Weijs, consultant at Proven Partners and TPM student Ben Vrakking also worked on the book's development.

(Prentice Hall, Pearson, August 2009)



Rachel Carson Environmental Thesis Award for former student Perry van Overveld

“It’s a great honour.” These were the words of ir. Perry van Overveld on being awarded the Rachel Carson Environmental Thesis Award by the Association of Environmental Professionals (VVM) on 12 July. “The award is also an additional acknowledgement of my efforts and offers a great opportunity to share my work with others in the field.”

In 2008, Perry graduated cum laude in his Master’s in SEPAM (policy analysis section) and in his Master’s in Civil Engineering (health technology section). “These courses were the perfect combination for the focus on technology and policy I was looking for after my Bachelor’s in SEPAM.” He found the interface between both courses by specialising in water. Pursuing this line, he devoted his thesis to ‘Countering threats to drinking water quality - strategy formulation for enhanced protection of drinking water interests in EU decision-making’.

He explains: “Pesticides and medicines used domestically and in industry represent a threat to the quality of our surface and drinking water. It is not possible to completely remove these substances through waste water and drinking water purification. Although there is no acute danger to public health, there are numerous uncertainties waiting in the wings. This is why legislation on pollutants has been agreed at European level. In my thesis, I evaluate the decision-making processes within the European Union in the period 1990-2008 that resulted in the EU legislation. In doing so I focused primarily on the role played in these processes by technical knowledge and scientific information.”

Perry started by assessing the playing field: who influences decision-making? Who are the main actors and what are their goals? What arguments do they use? Where do they do their lobbying? This led to the key question: what factors have a decisive influence on legislation? The answers came from a literature survey and numerous interviews with members of the European Commission, the European Parliament and the Council of Europe, as well as many lobbyists such as the water boards,

environmentalists and the pharmaceutical and pesticides industry.

Multidisciplinary

“In view of the Master’s I was studying, I examined both aspects of policy analysis and the technical components. This meant that I focused more closely on the chemical and physical properties of substances than would normally be the case in this field.” Ten months of hard work have now been rewarded with public renown, a certificate and a €500 cash prize. But the young engineer is far more interested in the spin-off effects. “I was able to present my thesis at the National Environmental Day, in the presence of 150 environmental professionals. An article summarising my thesis was also published in Milieu magazine. Finally, I will soon be working with my graduation supervisors to publish a paper in a peer-reviewed international journal. These are all outstanding opportunities to share my work with others and increase my name recognition and my network.”

Perry is the second SEPAM student to secure the prestigious Carson award, having been preceded by Willemijn Oosterwijk in 2007. Is this just a coincidence? “I don’t think so: as a subject, SEPAM is ideally suited for this kind of award. This is because of its multidisciplinary approach and the fact that you systematically learn to apply a helicopter view when examining problems. This leads to clearer insights that are also understandable to lay people. In addition, in the policy analysis section I did a lot of research into current environmental issues.”

“The SEPAM course is ideally suited for this award: its multidisciplinary approach and the helicopter view applied lead to clearer insights and understanding”

Professor Henk Moll (chairman of the panel) and Peter Hermens (vice-president of VVM, Dutch Society of Environmental Professionals) present Perry van Overveld with the Rachel Carson Prize for the best thesis in environmental studies.

Perry now works as a Strategy Consultant for Deloitte. “It’s a place where you’re always challenged to go a step further which helps you develop even faster. I work together with fun and intelligent colleagues on interesting projects in a wide range of industries. I am particularly relishing this variety at the moment. Nevertheless, water remains the blue gold of the 21st century and presents important challenges both in terms of water quality and quantity. But I can always opt to pursue that route later.”

Best environmental thesis 2008

The Rachel Carson Environmental Thesis Award is an annual initiative of the Association of Environmental Professionals, awarded at its National Environmental Day. It aims to raise awareness of environmental and sustainability research conducted by students at university. The jury panel is made up of environmental professionals and academics.

Last year the prize was awarded to SEPAM student Willemijn Oosterwijk (for 2007). This year it was Perry van Overveld’s turn (for 2008). The jury praised the scientific quality of his thesis and its multidisciplinary character.

Gaining acceptance for a good idea...

No golden trophy or a wad of cash, but a 20-cm high glass column containing a symbolic strand of DNA. Professor Jeroen van den Hoven returned from New York armed with this tangible memento after being short-listed this summer for the World Technology Awards. "For me personally, it is more than a prize and really recognition of an idea...TPM is a place where these kinds of ideas can prosper and thrive," says the director of research at the 3TU Centre for Ethics and Technology.

In mid-July, Van den Hoven found himself in a gala setting, rubbing shoulders with the greatest names in world science. In New York's Time & Life Building, members of the World Technology Network (WTN) met to decide which of the nominees in a range of categories have developed the most innovative ideas of lasting significance. "The WTN is like a virtual think-tank. It is a collection of specialists combined with previous award-winners. That's what makes it so special," says Van den Hoven, who next year will also be joining the judging panel.

The idea that won him the award is that the relationship between ethics and the development of new technology should be far closer than is generally the case now. "In the development of major technical systems and infrastructure, it is essential that we take account of ethical considerations and values, such as accountability, privacy and responsibility, at an early stage. On the one hand, this calls for design that focuses on practical

ethics. It also demands sensitivity to values in designing socio-technical systems. The jury awarded me the prize for highlighting this notion and successfully developing it into a research programme and research group."

As well as being grateful for netting this prestigious prize, Van den Hoven is particularly delighted with the attention it has generated for his ideas. "It's always nice to win something, but it also goes a long way towards helping publicise this idea and ensuring it gains broader acceptance." Philosophy graduate Van den Hoven has already seen this happening. The Dutch newspaper *Het Financieele Dagblad* recently visited for an extensive interview and his desk is piled up with invitations to speak.

The award is also of benefit to TU Delft and the TPM faculty, believes Van den Hoven. "Of course it's always a pleasure to be honoured as a member of staff, but our group has also achieved a lot for the University itself. In all kinds of areas. Just look at the NWO funding the 3TU Centre (TU Delft, TU Eindhoven and University of Twente) is attracting. We are one of the nine graduate schools to have received €800,000 from Minister Plasterk (12 August)."

Van den Hoven is not someone to rest on his laurels and his ambition remains undiminished. "We are already working with Oxford University and soon hope to enter into an alliance with Yale. Ultimately, we aim to make the 3TU Centre the place where ethics and technology and applied sciences come together. Students across the world must come to recognise us as the foremost centre for this subject area."



TPM Students outsmart Microsoft



The recent student competition organised by internet agency Tam Tam asked the question: can you outsmart Microsoft? Third-year TPM students Frank Pijnenborg and Robbert Weijers decided to take on this year's challenge. This involved devising the most useful useless application. They came up with the idea of the website 'nstrakteert.nl' and... netted the first prize.

order to claim a refund. It was especially designed for those actually in the train. But it also proved of benefit to those with a public transport pass, who had not even travelled by rail. Ultimately it is impossible to tell whether or not you have been on the journey."

Not amused

Obviously the Dutch railways did not let this go without comment. Frank: "I was standing in a Do It Yourself centre when somebody called me claiming to be from a major company. He congratulated

Frank and Robbert were both board members in the student association of Systems Engineering, Policy Analysis and Management, Curius. When Tam Tam approached them to publicise their competition among TPM students, the two friends decided to have a go themselves. The big idea occurred to them while they were on the train. "We heard people talking about the Dutch railways refund scheme for anyone with a valid ticket whose train is delayed for more than thirty minutes. That's when the idea came to us."

The result was the website nstrakteert.nl (Dutch railways giveaway), featuring a daily list of all railway delays. "Anyone who visited the site, could easily find a train journey that was delayed. It was then a simple process of completing the relevant form in

us on the prize but was clearly not amused! We were on the wrong track and would have to re-route to avoid a collision with a legal freight train. We had to take the website offline by nine-thirty that evening. After consulting with the law lecturer, we changed it to Isjouwtreinvertraagd.nl. This enables travellers who have been delayed to check how late the train was and complete the relevant form online. The Dutch railways are satisfied with that. We may even work with them on future projects."

The application was both useful and useless. "It was useful because it was an easy way of earning money. If every student claimed for a delay every day, it would mount up to a whopping €150,000. Its uselessness quotient is also high. The Dutch railways were never going to put up with it for long. Besides that, it involves fraud, which is illegal, and the new public transport pass scheduled for introduction in 2011 will provide full details of train travellers' journeys. In any case, the original website no longer works."

From eleven entries, the top three were short-listed to give a presentation at Tam Tam on 10 July. Seventy percent of the votes came from an expert jury, with the public accounting for the remaining 30%. "To be honest, we suspected that the jury would select us as the winner. We had received a lot of media coverage, including on the Radio 538 morning show. Surprisingly, the jury did not put us first. Luckily we were saved by the public!"

During the post-awards drinks a member of the jury explained that Frank's and Robbert's website looked pretty rudimentary. Especially in comparison with the other two entries, which are state-of-the-art. But their presentation was excellent: with much less focus on the technical aspects. "Ultimately it shows that it all comes down to the bigger picture. Here at TPM, we not only learn how to compile a report, but also how to sell it. That's what makes the difference."

Should major infrastructure projects be decided solely on social cost-benefit analyses?

In June the Veerman Committee issued its recommendations on the continued construction of the new North/South Metro line in Amsterdam. Based on its research, which included a cost-benefit analysis, the Committee recommended that construction work should continue on the new Metro line. This has provoked a debate about the merits of the recommendation and the quality of the evidence on which it was based. But it also raises a more fundamental question: should major infrastructure projects be decided solely on social-cost benefit analyses?

"Although I am largely in agreement with this proposition, I find it impossible to answer with an unequivocal yes. I should start by making it clear that I find the role of cost-benefit analysis extremely important. After all, it is the most important tool we have for deciding whether or not an infrastructure project should be given the go-ahead. It attempts to identify all the positive and negative effects before a decision is made to green-light the project.

Despite this, politicians often attempt to sidestep the importance of this kind of analysis. They prefer to cite such issues as 'regional impact'. But these effects and other social effects are actually included in a social cost-benefit analysis. It also takes account of environmental impact, such as fine particulates and CO2 emissions and issues such as safety and sustainability. Ultimately, politicians will have to make their own assessments. They need to be able to realise the project based on political considerations, rather than solely on the results of cost-benefit analyses. In the end, these are political decisions.

Unfortunately, people often tend to base their assessments on incomplete data. For example, the recent recommendation issued by the Veerman Committee to continue with the construction of the North/South Metro line in Amsterdam was based on a cost-benefit assessment compiled by the Committee itself. I believe it contained a number of fundamental errors. It did not include any comparisons with credible alternatives, which is actually essential. The benefits to society were also presented in too positive a manner and passenger numbers were probably significantly overestimated. The figures were based on forecasts from 1993 when public transport was expected to see growth of 88%. In the end, the increase was a mere 10%.

Community funding

In my opinion, the report by the Veerman Committee pre-empted its own conclusion. There should be a new, reliable cost-benefit analysis carried out in accordance with the proper guidelines. This should aim to enable a retrospective assessment



'IT IS THE MOST IMPORTANT TOOL WE HAVE'

Mig de Jong

of what went well and what didn't, so that we can improve future decision-making. Besides, projects like the North/South Metro line in Amsterdam involve serious sums of money and community funding. The way this has been handled has done nothing to improve people's confidence in politicians and planners.

The North/South line is not an exceptional case. Empirical research has shown that the costs are often overestimated and the benefits exaggerated in major construction projects. In rail projects in particular, these are often overestimated, by the average of 45%. This says a lot about the political pressure to push through this type of project. Major projects such as these actually involve an inherent paradox. The more positive the impression created, the greater the likelihood of a project being given the go-ahead. It is therefore in the interest of proponents of a project to present as positive a picture as possible and this will inevitably lead to disappointments in the end. Often the process is unconscious, and has been called planning optimism; occasionally it is done deliberately, when it is known as strategic misrepresentation.

I think it is a great shame because this issue can obstruct the development of future infrastructure projects. Take the Amsterdam Metro for example. It has been a highly sensitive issue since the 1970s when many homes were demolished to enable its construction. For years, it was impossible to raise the subject of the Metro in Amsterdam politics. The current controversy has increased the likelihood that it will continue to be a no-go area for the next thirty years. The chance of an effective East/West connection is therefore tantamount to zero. This is a great pity, because it is badly needed. The resulting lack of confidence in decision-makers is another issue altogether.

Nowadays cost-benefit analyses are an integral part of the planning procedure for major infrastructure projects. It was partly as a result of these that the rail link between the North of the Netherlands and the Randstad (Zuiderzeelijn) failed to be given the go-ahead. The analyses showed that there were too few benefits to justify the expense. When the project was scrapped, part of the money intended for the project was transferred to the provinces involved. This was used on a wide variety of projects, none of which was assessed by means of a cost-benefit analysis. In the end, the benefits of these projects will also turn out to be disappointing, so this was a missed opportunity.

Mig de Jong is an expert in transport planning and a PhD candidate in the Transport and Logistics Organisation Section at TPM. His key areas of interest include mega-projects, infrastructure, station area development, traffic forecasts and transport policy. The subject of De Jong's doctorate is about successfully developed large-scale transport infrastructures. He also works as a consultant for a range of organisations.

Interviewee withdraws

An individual involved in public administration was approached for an interview to present the other side of the argument. This person withdrew from the interview a few days before going to press because of the political sensitivity of the subject matter and the council enquiry into decision-making about the Amsterdam Metro being held at the time of the interviews.

For this reason, the proposition is presented in a different form in this edition only.

North/South line Amsterdam, Metrostation Vijzelgracht

Artwork: Non-fiction, Office for Cultural Innovation



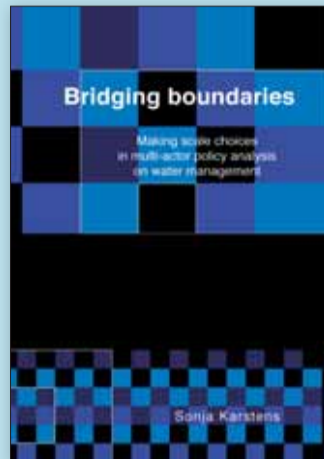
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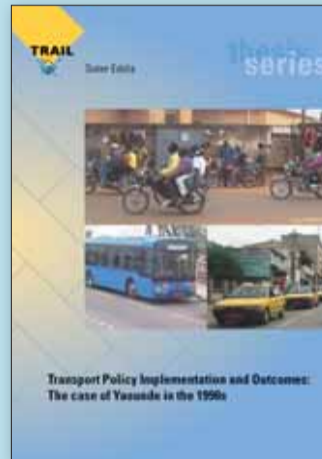
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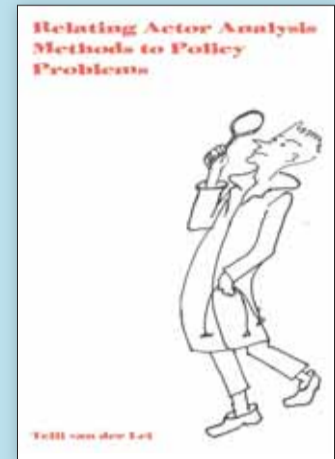
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TELLI VAN DER LEI

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20 October 2009, Delft

Basic Teaching Qualifications now also available for experienced university teachers

TPM recently piloted its very first BTQ programme for experienced university teaching staff. Seven people took part all of whom had more than ten years' teaching experience. At a special event held at the start of July, the academics were presented with their certificates by Dean Theo Toonen.

BTQ stands for Basic Teaching Qualifications. The project was originally developed to enable new or inexperienced university teachers to acquire the competences they need to effectively

carry out their teaching duties. At TPM, all new teaching staff with less than five years' teaching experience must secure the BTQ certificate within two years. Alongside the regular BTQ, there are also intermediate and senior programmes designed to help more experienced teachers develop their teaching skills. "Although it is not compulsory, we very much recommend it," says TPM's Director of Education Els van Daalen.

Compared with other faculties at Delft, TPM achieves only average BTQ uptake, but this must improve. Toonen adds: "the quality of teaching is becoming an increasingly important issue and this trend is set to continue." Van Daalen, who also participated in

the senior BTQ, says: "continued professional development can only be a good thing. BTQ helps teaching staff to take the time to assess their teaching and what they want to achieve." A key component of the didactic qualification is the writing of a personal vision of one's own teaching. "This really provides food for thought. It is equally interesting and educational to discover how other participants may have a completely different perspective even though they teach the very same subject. The seven visions we came up with were all completely different," says Van Daalen.

Fun?

As part of the BTQ, participants compile a portfolio of evidence, self-reflection and assessments. As a group, they recount how they acquired specific competencies, their own view of their teaching and how others (students, colleagues, managers, supervisors, etc.) see it. Course participant Roland Ortt says: "I always thought that my lessons were fun. But watching a video of my tutorial soon changed that. I also had to think really seriously about my vision of education... It is something you do implicitly when you are teaching. The BTQ encourages you to express your vision in explicit terms and compare it with that of others."

According to those taking part in the BTQ programme, the key benefit of the didactic qualification lies in the fact that 'real educational improvements develop from the grass roots'. "It was extremely useful providing and receiving feedback," said Ortt during the certificate award ceremony. His colleague Bert Enserink said: "Learning is a social activity. It is not something that you do with your head alone - you also learn through action. To achieve this, effective student-teacher interaction is extremely important. The input provided by students is almost as valuable as that of the teaching staff."



Senior BTQ course participants celebrate as they receive their certificates: Vincent Marchau, Pieter Bots, Els van Daalen, Marijn Janssen and Roland Ortt. Paulien Herder and Bert Enserink were not present when the picture was taken.

Professor profile

NAME

Prof. Hans de Bruijn

POSITION

Hans de Bruijn is Professor of Policy Analysis and Management at TPM. He focuses on management and complex decision-making processes in the public sector and the public/private interface. He is also associated with the Netherlands School of Public Administration and is Governance Programme Manager at the Netherlands Institute for City Innovation Studies.

Tell us about your personal life

"I am married and have two daughters aged 16 and 14. I don't really have any hobbies as such; there are no particular activities which have held a long-time interest for me. In the last year or so, I have been to the theatre a lot. It's been fascinating partly because I am working with actors in my teaching, but this period in my life is now reaching an end. Otherwise, I like to withdraw completely from my very busy diary. I really like being able to shut the whole world out. I love being mentally unavailable! That's one of the main reasons I go on skiing holidays."

What you enjoy most about your work?

"My writing, based on rigorous thought processes. I like to try to write in such a way that my message can be understood by people in the real world and it means something to them. This often has the pleasant side effect of being invited to give lectures, workshops, advice or take part in panels after one of my books is published. I really enjoy interacting with readers as it helps broaden my understanding. It's also very gratifying when people tell me that they find a book to be a real eye-opener. The fact that my books sell well is also great, of course. But I do enjoy variety. Six years ago I wrote the book *Prestaties afspreken doe je zo* (This is how you negotiate performance agreements). This could have kept some people busy for another fifteen years, but not me. I like to move on to new areas and to keep pace with the social agenda. My latest book, *Barack Obama en de kunst van de politieke toespraak* (Barack Obama and the art of the political speech), is an example of that. It just comes from inside. It is part of something bigger. I would hate not to be able to publish. I believe the art of being a good professor is not to allow oneself to withdraw into solely managerial activities, but to stay focused on your real duties."

Why Delft?

"All of us here are experts in public administration but it is nice to be able to combine this knowledge with disciplines of a more technical nature. At TPM we also focus on the major issues on the social agenda, such as traffic congestion, water management and sustainable exploitation of natural gas resources. It is also pleasant to be part of such an outstanding team of experts. According to the Netherlands Institute of Governance, we actually rate the best."

Teaching?

"I really enjoy teaching. It actually seems to get more enjoyable all the time especially when teaching practitioners. You can see the relevance of the work that you do. I also get a kick out of the craft of teaching."

Your best characteristic?

"I just asked my secretary. She says I am very easy going."

Your worst characteristic?

"I am rather impatient by nature. I have also noticed that I have a tendency to give up if the transaction charges are too high, as it were. In other words, if something is too much trouble, I just can't be bothered. It may be because I come from a family of merchants. In our world, the idea was to buy goods and to sell them on as quickly as possible. It's in the blood. I can't stand it if something takes ages before you see the results."

Source of inspiration?

"I don't really have answers for this type of question. The world is all about variety. In life, you find things that you like and they become your thing. I can't think of a single event or person or book that I might regard as my source of inspiration. I have an eclectic working style and philosophy fits in well with that. I've always been fascinated by books about the 1920s and 30s. Karl Mann and Stefan Zweig gave a perfect description of how a prosperous, developed and intellectual culture slowly but surely slid into the abyss and there was nothing anyone could do about it. That is something I find quite alarming. It has left me with a dislike of ideology. Like no other, my generation has been confronted with the downfall of the great ideas and with great ideals which were used to legitimise the most gruesome practices. There is no doubt that this has a major impact on the way I think about politics but it also filters through into my research work: changes will happen, rarely influenced by the big ideas, but much more by trivialities. Changes are the product of insignificant actions by equally insignificant people."

Key issues on the political agenda?

"I believe that society adopts its own path, so I don't find it easy to answer this type of question. Some problems resolve themselves if they are kept off the agenda and off the political radar. I prefer politicians who just get on with their work and understand that it is better if certain subjects remain out of the political arena. This may have something to do with my dislike of the big ideas I mentioned earlier... At the same time it's important to move on and make room for new ideas and understanding. In the post-postmodern era, it is clear that people are once more in search of a big idea."

Your life philosophy?

"In private, of course, I do think about life's big questions, but it's not something I talk about. It's just too personal. At work, my motto is: do your best and don't look back."



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Curius



From left to right: Joost Zielhorst, Board Member for External Affairs; Timo van Dam, Board Member for Bachelor's Programme; Minke van der Kleij, Secretary; Renée Bekker, President; Rens Valk, Treasurer; Tim Vink, Board Member for Master's Programme and Careers

Last year proved to be yet another exciting year for the Curius student association. Events ranged from study trips to Australia and London to smaller-scale fun activities in and around the faculty. As the new academic year begins, the time has come to welcome a new board with all the new and interesting adventures that entails.

In the first two weeks as the 17th board, we have certainly had a lot on our plate. Almost as soon as we took over, our base exploded. The windows, computers and the floor were covered in mess. The good news is that we survived and now have a brand-new base. We have already had time for some activities, including two outings with the Master's students. These proved highly successful, and the Master's students turned out to be a really fun bunch.

But sometimes it is the little things that provide the greatest pleasure. It's great to see the amazing effect a photoplay machine can have on people. Whereas in the past it was the coffee that proved the great attraction in the Curius base, now the students head straight for the photoplay machine, determined to achieve a high score.

Also the quest for new members for the several Curius committees can lead to no end of hilarity. In order to select committee members we organise a hunt throughout the faculty, at which the potential members need to find us at the end. On one occasion, we were convinced they had found us, but it actually turned out to be the plumber. He was astonished to find five people staring at him with beaming faces.

Approaching people to become committee members can also be problematic. On occasions, the responses received to our text messages include such comments as "Are you taking the mickey?" Or "Who on earth is MANIUS?!!!" [editor: Manius Curius was a Roman general and politician from the early third century BC, the prototype TPM student!]. A typical beginners' mistake.

We should also mention the boy from Kazakhstan, lost at Delft station, who came across Hugo Priemus. Hugo Priemus very generously escorted him to us, where he was able to enjoy a cup of coffee and recover from his culture shock. [editor: Hugo Priemus was faculty dean at TPM from 2003 to 2008].

We have had so many interesting and bizarre experiences in such a short time that we are starting to wonder what we have let ourselves in for. But let there be no doubt: as the 17th board, we are ready for the challenge!



The 17th Board of SVTB Curius

TPM's educational programmes

- **BSc Systems Engineering, Policy Analysis and Management ('Technische Bestuurskunde', TB)**
- **MSc Systems Engineering, Policy Analysis and Management (SEPAM)**
- **MSc Management of Technology (MoT)**
- **MSc Engineering and Policy Analysis (EPA)**
- **MSc Transport, Infrastructure and Logistics (TIL) (in cooperation with the Faculty of Civil Engineering & Geosciences and the Faculty of Mechanical, Maritime and Materials Engineering)**
- **MSc Information Architecture (IA) (in cooperation with the Faculty of Electrical Engineering, Applied Mathematics and Computer Science)**
- **MSc Geomatics (in cooperation with the Faculty of Civil Engineering & Geosciences and the Faculty of Aerospace Engineering)**

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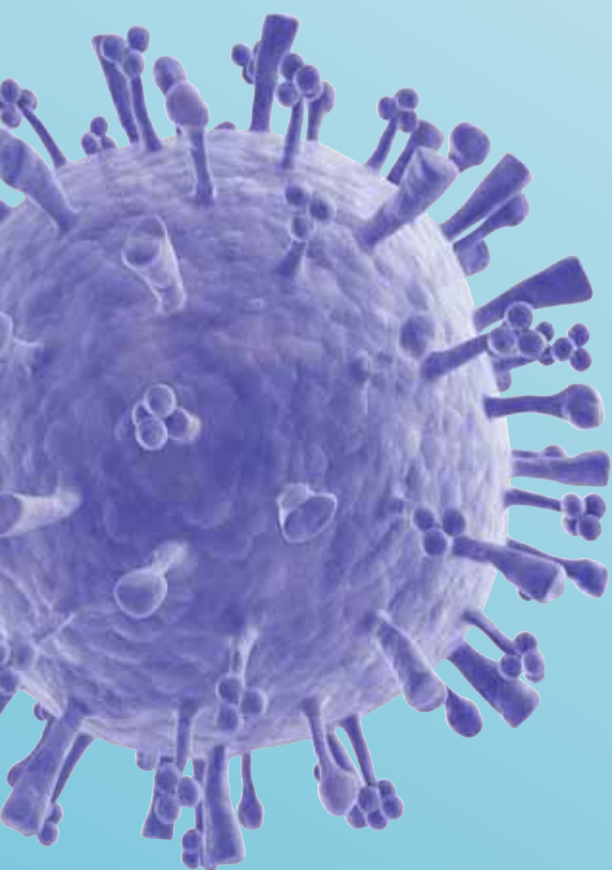
Did you thoroughly read the available information and are you considering enrollment in a TPM-programme? Are you not sure your educational background is sufficient? Then please contact one of our study advisors:

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Ask TBM

The world is in the grip of a pandemic flu and in many countries there has already been a run on the drug Tamiflu. As things currently stand, H1N1 has been relatively mild and Tamiflu has not proven to be especially effective. But what approach should be adopted with scarce medicines in a more serious situation? What criteria should you apply in deciding who gets priority? Should it be down to chance, a person's status in society, their age, or whether or not they have children, etc.?

We put the question to Sabine Roeser, researcher and assistant professor in the Philosophy section.



According to some utilitarian philosophers, in such situations you should always aim to achieve the maximum happiness or utility for the greatest possible number of people. But what would create the maximum possible happiness or utility in this situation? Should you apply a lottery, in which everyone has an equal chance? Or should people be accorded different weightings, because some are of greater benefit to society than others? For example, is a homeless person with no family worth less than the director of a major company who is also the mother of three children? The problem with utilitarianism is that it permits us to use certain people to achieve something good for other people. But look at the following example:

'A surgeon walks into the hospital as a nurse rushes forward with the following case. "Doctor! An ambulance just pulled in with five people in critical condition. Two have a damaged kidney, one a crushed heart, one a collapsed lung, and one a completely ruptured liver. We don't have time to search for possible organ donors, but a healthy young man just walked in to donate blood and is sitting in the lobby. We can save all five patients if we take the needed organs from this young man. Of course he won't survive, but we will save all five patients." (Marc Hauser. 2006. Moral minds: The nature of right and wrong. Harper Perennial. New York., 32)

Most people find this example particularly poignant. Of course it is not permissible to sacrifice the life of an innocent person in order to save the lives of a few others. This harks back to the ideas of Immanuel Kant who said that you owe respect to other persons. But take a look at another example:

'A trolley is running out of control down a track. In its path are 5 people who have been tied to the track. Fortunately, you can flip a switch, which will lead the trolley down a different track to safety. Unfortunately, there is a single person tied to that track. Should you flip the switch?' Philippa Foot, *The Problem of Abortion and the Doctrine of the Double Effect in Virtues and Vices* (Oxford: Basil Blackwell, 1978)

In this situation, most people do find it acceptable to apply utilitarian reasoning. Neurological research carried out by Joshua Greene has demonstrated that people use the rational part of their brain to make utilitarian judgements and the emotional part when making Kantian ones. According to Greene, this shows that utilitarianism is superior to Kantianism.

However, on balance I would say that there are good reasons why in some situations we apply utilitarian reasoning and Kantian in others. In the example with the tram, the death of one person is the unintended side-effect of saving the lives of the other five, whereas in the hospital example using the one person to save the other five would clearly be intentional. Far from being irrational, our moral intuitions and emotions actually provide a source of moral knowledge in complex situations. When considering risks to society it is often impossible to avoid utilitarian reasoning but we should always be aware of its limitations and as far as possible take account of people's rights.

Roeser, S. (2009), 'Intuitions, Emotions and Gut Feelings in Decisions about Risks: Towards a Different Interpretation of 'Neuroethics', The Journal of Risk Research (forthcoming in a special issue on 'The Philosophy of Risk')