Teaching portfolio

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1. My teaching biography

I took my PhD at NHH in 1996, and the year after started my career as associate professor at the Department of Economics. In 2005, I was promoted to Professor at NHH. I am core member of the Center of Excellence FAIR, where I am heading FAIR Insight Team, in charge of communication and applied research.

My research interests are in development economics, international economics, and behavioral economics. I have close to 40 publications in peer-reviewed journals, and have twice received the NHH publication bonus, in 2019 and in 2020. See appendix A for my CV. While the focus in this report is on teaching, I do practice research-based teaching and supervision, as explained in more detail below. Thus, my research experience is highly relevant also in the current context.

I have been supervisor for five completed PhD candidates (including NHH professor Tina Søreide and associate professor Lars Ivar Oppedal Berge), currently supervising three PhD students, and I have also supervised numerous master students in their theses work throughout my years at NHH.

I have mainly taught three courses at NHH. First, for a number of years the mandatory bachelor course in *macroeconomics*. Second, together with my colleague Bertil Tungodden, I developed the master course in Development Economics, currently an elective course in the Economics profile. Finally, since 2013, the mandatory bachelor course in *microeconomics*, SAM2, the last two years having the sole responsibility for the course. However, during my career at NHH, I have been involved in a number of courses, for instance in industrial organization and international economic at the master level, or the previous "andre avdeling". In this presentation, I will mainly use thoughts and examples based on my current course: SAM2 microeconomics.

I have also been involved in the setting up of a master program in economics in Angola, at the Catholic University in Luanda (UCAN) (see Appendix B for a letter of commitment signed by the rectors of NHH and UCAN). This was the first program of its kind, and I have been involved in teaching courses in economic development and international economics in this program.

2. Teaching philosophy

The description of my teaching philosophy will mainly be based on my current bachelor course in microeconomics, SAM2, although it applies to all my teaching.

Economic theory helps us analyze the world by giving structure to complex problems. Theory means simplification, abstracting away from a lot of detail, and by doing so having a tool which can be used to analyze a number of situations.

Theory is necessarily abstract, and in economics typically involves some use of mathematics and graphs. While the purpose of the theory is to explain the world, it can be hard for students to see the relevance of theory. And the technical language of theory can block learning.

My main teaching philosophy can be summarized as follows:

Make it simple, engaging, and relevant.

Make it simple is about seeking to capture the essence of a theory and convey it as clearly as possible. In my experience, economic theory *is* difficult to understand for first-year students, not necessarily because the math is complicated, but because it is abstract. Making it concrete, using everyday examples, helps understanding.

Make it engaging is about not only appealing to emotions such as curiosity, excitement, and joy. I try to do this both by conveying my own passion for the subject that I am teaching, and by using observations which may seem counterintuitive (I present them as “micro-mysteries” in my classes, which we shall solve using theoretical tools), as well as a dose of humor (there is a “micro-detective” who helps us solve the mysteries). I strongly believe that making the subject engaging eases learning (support for this proposition below).

Make it relevant is about showing how theory can actually be extremely helpful in making us understand interesting real-life questions. Given the abstract nature of theory, students may fail to see its practical value, and this may be de-motivating. Clearly illustrating how theory can actually help us understand complex real-life phenomena, adds interest to the subject and eases learning (again, more about this below).

An important inspiration for my “simple-engaging-relevant” philosophy is Hans Rosling, the Swedish physician and self-proclaimed edutainer. Rosling brought life to statistics by making it visual and by engaging with it. He simplifies statistics by using colorful illustration and everyday props; engaging the audience with his passion for the subject; and addressing issues which are clearly relevant to society, such as poverty and population growth. Learning, he said, is more effective when it’s fun. The props make people relax, like boxes of apple juice, and by relaxing, people are more susceptible to learning. As Rosling himself proclaimed: “Having the data is not enough, I have to show it in ways people both enjoy and understand.”

Make Teaching Fun! - Juice Box Demo by Hans Rosling

While I have not introduced props in my own teaching, which is on economic theory not statistics, I do try to present theory as simply as possible, and to show the power of theory by engaging the students in real life applications. These applications are either situations which should be familiar to the students (for instance, on how much time to spend on part-time work), or current issues (for instance, on the market power of pharmaceutical companies) or on cases from my own research (for instance, on the importance of microfinance for entrepreneurship in Africa).

There is ample support for the Rosling's approach in education science. For instance, Krashen (1982) argues that students retain what they learn when the learning is associated with strong positive emotion. Moreover, cognitive psychology studies provide clinical evidence that stress, boredom, confusion, low motivation, and anxiety interfere with learning (Christianson, 1992). In short, making learning **engaging** and fun facilitates the learning process.

There is also evidence from neuroscience that learning takes place when classroom experiences are enjoyable and relevant to students' lives, interests, and experiences (Chugani, 1998; Pawlak, Magarinos, Melchor, McEwan, and Strickland, 2003).

Judy Willis, neurologist and educator, asks in her article "The neuroscience of joyful education," how teachers can create environments where anxiety is low while providing enough challenge and novelty for suitable brain stimulation.[1] Her answer is: **Make it relevant**!

> *When stress in the classroom is getting high, it is often because a lesson is overly abstract or seems irrelevant to students. Teachers can reduce this type of stress by making the lesson more personally interesting and motivating. Ideally, students should be able to answer the question, "Why are we learning about this?" at any point in a lesson.* Judy Willis (2007)

[1] Also see her recent book, Willis and Willis (2020).

Much of this research is based on learning among children, but I do believe that the insights are applicable to learning among adults, which is of course also in line with Hans Rosling's approach.

While not claiming parity with Rosling in terms of teaching skills, students have pointed out that my lectures and teaching style are "engaging" and "relevant", as evidenced from the justification of the Bronsesvampen award from 2020, shown in Section 8 of this report.

Connection between teaching and assessment

Teaching and assessment are naturally interlinked. In SAM2 Microeconomics, I make it clear to the students in the first lecture that one key ambition of the course is to prepare them well for the exam. This is a traditional school exam, with grades A-F. The school exam is a good way to assess their knowledge of microeconomic theory, and it also serves as a strong motivator for our students who care about grades and who are also used to this assessment format. However, as explained in this report, I do not only rely on the school exam for assessment: I also use multiple choice tests and group-based work with oral presentations.

I use my lectures to present the theory, and to set the agenda, but delegate the preparation for the exam to group work led by teaching assistants and to problem solving using the assignment book, which includes fully developed solutions, accompanying my newly published microeconomics textbook. The teaching assistant-led group work has been very well received by the students: it is an opportunity to work together in groups and receive help from well-prepared and highly motivated teaching assistants, as explained above.

The exam is a powerful motivator, and it should be well aligned with the overall learning outcomes of the course. However, the end-of-semester school exam should not be the only assessment tool, for at least two reasons: it comes at the end of the semester and does not necessarily stimulate early learning (which is important since economics typically takes *time* to learn); and it does not test all learning ambitions (for instance, it tests written communication but not oral presentation).

My courses typically involve mandatory activities throughout the semester, such as group presentations or hand-ins, whereas the final grading assessment is a school exam. The reason for having mandatory activities through the semester is three-fold: first, to motivate the students to start reading early (rather than cramming everything into the few weeks before the exam); second, to give feedback to both the students and the teacher about their status of knowledge; third, to give a broader base to assess learning, beyond the school exam. Variation is important since I believe that different approaches increase learning for each student, and that students learn in different ways.

Through the mandatory activities during the course, often group based, the students learn about teamwork and their collective effort is assessed (see Riebe et al, 2016 for a review of teamwork pedagogy). Teamwork is obviously an important skill, as is oral presentations in front of an audience, but it is necessary, I believe, to also test individual knowledge through a school exam. In my experience, the traditional school exam is a strong motivator for learning, and if used wisely, it is an excellent assessment tool, in particular when combined with other tools as I do in my courses. By “used wisely” I mean that there should be a clear link between the learning goals of the course and the school exam, and that the school exam is not the only form of assessment and feedback. For instance, the «Læringsutbyttebeskrivelse» for SAM2 reads:

> Kurset gir en innføring i moderne mikroøkonomisk teori om konsumenters og bedrifters tilpasning og markeders virkemåte ved fullkommen konkurranse, monopol, og oligopol.
>
> Ved fullført kurs:
>
> **Kunnskap**
>
> - har studenten kunnskap om de mest sentrale modellene i konsument, produsent, og markedsteori;
>
> **Ferdigheter**
>
> - kan studenten anvende mikroøkonomisk teori til å analysere relevante problemstillinger;
>
> **Generell kompetanse**
>
> - kan studenten kommunisere mikroøkonomisk analyse på en klar måte.

The exam will then ask questions related to the key models in microeconomic theory, and also typically ask the students to apply them to discuss a relevant issue (so not only working out the math, but also providing a verbal discussion based on theory). Finally, the school exam gives the students an opportunity to communicate their knowledge in writing in a clear way.

3. Teaching and assessment repertoire

Course structure

In the table below I show how I have designed two of my courses, in development economics and in microeconomics (see Appendix C and D for the lecture plans).

Course	Teaching period	Mandatory activities	Exam
ECN 423* Development economics	1998-2016	• Problem sets • Group presentation	School exam
SAM4** Makroøkonomi	Ca 2002-2010	• No mandatory activities	School exam
SAM2 Mikroøkonomi	2013-current	• Multiple choice tests • Group presentation	School exam

*During the first years, the course was given in Norwegian (andre avdeling), and titled: “Næringsliv og bistand i fattige land”

** Kurset het tidligere SAM020

The table shows the variety of activities that I have used in three of the courses that I have taught. As evident from my teaching in the bachelor course in macroeconomics to the similar course in microeconomics, I have added mandatory activities. This is evident from my current course, SAM2. Below is an example of how I structure the lectures, here from the topic: producer theory. For this topic, there are three lectures, and after the series of lectures, there is teaching in groups, headed by the teaching assistants, followed by a multiple-choice test, which forms part of the course requirement.

PRODUSENTTEORI			
Onsdag 10 feb. 12:15-14:00	Forelesning 5 Mennesker og maskiner	KB5	
Fredag 12 feb. 08:15-10:00	Forelesning 6 Hva koster det?	KB6	I dag
Onsdag 17 feb. 12:15-14:00	Forelesning 7 Lønner det seg?	KB7	
Fredag 19 feb. 08:15-12:00	Gruppearbeid II		+ Multiple choice

A good structure helps the students keep track of where we are in the course and makes planning easy.[2] There are four topics in the course: consumer theory, producer theory, market theory, and strategy and game theory (See Appendix C for the lecture plan of the current version of the course).

Clearly, adding mandatory activities must be done with care: adding such in one course, can clearly crowd out attention given to other courses. There must therefore be a clear purpose behind the assignments, and they must be designed such that they take a reasonable amount of time. Let me here present two pedagogical innovations that I have introduced in my course in microeconomics, to show both the pedagogical purpose and the design.

Multiple choice

I have introduced multiple choice exercises in my course, and these serve both as feedback and as a nudge to start reading early. Specifically, there are five rounds of multiple-choice questions, covering each of the topics of the course (and a bonus round at the end covering the entire course), and with 10 questions in each round. As shown above, I close each topic with a multiple-choice test. As a course requirement, the students must have a total of 25 correct answers (out of 50 possible): this is intended to be a soft requirement, but I believe it is a good test for the students to see if they have understood the material just covered in class, and in group teaching. Feedback is given immediately after the test, in the form of the correct answers and their points. We know from the educational science literature that feedback is important. Indeed, in the words of Hattie and Timperley in their article “The power of feedback” from 2007: *Feedback is among the most critical influences on student learning*. In a large class, of more than 500 students, this way of organizing feedback is extremely effective.

[2] On the importance of a good structure, see https://www.sharodickerson.com/my-publications/the-importance-of-structure-in-learning

Note that the feedback from these tests is not just for the students: The test also gives me an opportunity to see which questions were particularly hard for the students, and I spend time in the following lecture going through these questions and explaining the correct answer.

The multiple-choice tests also work as a nudge to start reading early, rather than postponing this to right before the exam. We know from the literature on procrastination, that for many, the temptation of short-term temptations can lead to decisions which are not in our long-time interest (Kahneman, 2002). Nudges, that is non-intrusive interventions, have been found to be effective in improving decision on a number of domains, including "health, wealth and happiness", to paraphrase Richard Thaler and Cass Sunstein in their influential book "Nudge", from 2008. Of course, the use of multiple choice as a teaching tool is controversial (see for instance Scouller, 1998). However, students learn in different ways, and I believe that used together with other tools, multiple choice can be a simple and effective way of reaching the twin goals of a study-nudge and feedback. The course evaluations also suggest that most students appreciate this tool.

In the multiple-choice test in SAM2, there are five rounds, each with 10 questions, and a requirement to have 25 correct answers in total (out of 50 possible). This is a weak requirement, giving the students the possibility to skip one test if necessary, and is more in the spirit of a *nudge* than a heavy-handed requirement. Similarly, the mandatory case-project in SAM2 is a time-intensive exercise, with assignments published on Monday and the oral presentation on Wednesday. This is based on feedback from students in earlier editions, where the students were given the full week – in which case they actually *spent* the entire week on this. Moreover, the is assessment of the presentation is pass/fail, which softens the pressure.

The case project

I have developed something which I refer to as the "case project" in the course. It consists of four cases, which the students are supposed to work on in groups of around four students, and with a short deadline present to a small class consisting of other students (who have solved other cases, such that all students are exposed to all four cases), headed by a student assistant. With more than 500 students, this is a formidable logistical operation, but one which has improved over time.

The case project contains three pedagogical ambitions in one: (i) group work; (ii) applying theory to a real-life case; (iii) oral presentation. In particular the oral presentation part is quite unique in such a large course and follows up on the stated recommendation from the 2014-evaluation report of the Bachelor program. From own experience, explaining to others is the best way of learning.

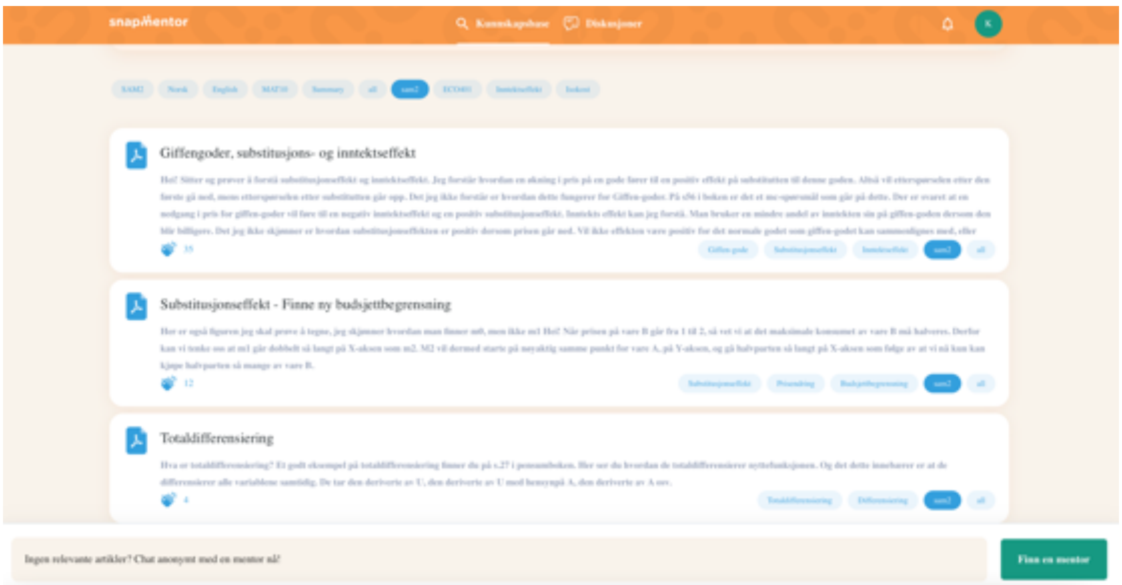
This year, we will experiment with randomly assigned groups. We have chosen to do so in light of the current situation, where the students (now in their second semester) have had limited opportunities to build friendships and study groups. Hence, to make the process as inclusive as possible, we randomize. Working with someone you perhaps do not know well can of course also be a valuable learning experience.

Group teaching
The group teaching in SAM2 is led by the teaching assistants. One model that we have used in the past is for the teaching assistants to simply present the solution to, say, previously given exam questions, with the students attending and taking notes. Much like in a normal lecture, but of course with greater opportunity to ask questions.

However, in recent years, I have tried to avoid this mini-lecture style of group teaching, and rather invited the students to solve the problem sets themselves, in groups, supervised by the teaching assistants. Clearly, this requires more effort from the students, but it also forces them to actively think about the problem at hand, and stimulates learning through dialogue (Liu, 2020). This stimulates more independent thinking and will of course be very useful at the exam. While requiring more cognitive effort, which may not always be popular, research shows that this *active learning* causes students to learn more (Deslauriers et al., 2019). This is also reflected in the "deliberate practice concept", discussed by Deslauriers et al, 2011. Stressing the importance of problem-solving and frequent feedback, they write (page 862):

> «The deliberate practice concept encompasses the educational ideas of constructivism and formative assessment. In our case, the deliberate practice takes the form of a series of challenging questions and tasks that require the students to practice physicist- like reasoning and problem solving during class time while provided with frequent feedback."

Snapmentor
This year, we have incorporated the use of Snapmentor in SAM2, a communication platform for students and student assistants, which also serves as a knowledge bank of questions and answers. While an experiment so far, which of course has to be evaluated, I believe that it can be useful, since students often have the same questions: by publishing (anonymously) the answer to a question raised by one student, you provide help to a large number of students.



4. Supervision

As mentioned above, I have been supervisor for five PhD candidates who have successfully defended their thesis and I am currently supervising three PhD students. I am also taking part in the mentor program at NHH, currently acting as mentor for assistant professor Marc Goñi. I have also supervised numerous master students in their theses work throughout my years at NHH. Many master students have written their thesis on research that I have conducted in Africa, where the students themselves have been given the opportunity to travel to Africa and do field work there. This is a win-win solution: the students get at unique experience and data for their thesis, while the research team gets extremely valuable research assistance, in terms of literature overviews, quality control of data and survey work. Other students have been involved in projects that I am conducting in Norway: right now, I am supervising two students who are writing their thesis on *nudges* for recycling, a project funded by the Research Council of Norway, in collaboration with BIR.

My philosophy when it comes to supervision is to be in close contact with the students, offering quick feedback, and also ideally involve them in on-going research projects. In this way, the students get first-hand experience in the research process, and are often also given the opportunity to interact directly with our project partners, such as businesses and public companies. When the project has more general interest, I have also in recent years sought to communicate the findings to a broader audience by publishing the findings as op-ed pieces in newspapers, often including the students as co-authors. One example is an article in Samfunnsøkonomen from 2018, co-authored by my master students Inga-Malene Huse and Elisabet Orrestad Nilsen (see first page of the article below). These students also presented the findings to an audience of teachers and administrators at HVL (Høgskulen på Vestlandet).

ARTIKKEL

KJETIL BJORVATN
Professor, NHH
INGA-MALENE HUSE
Siviløkonom, NHH
ELISABET ORRESTAD NILSEN
Siviløkonom, NHH

Er matematikk viktig for å lykkes i lærerstudiet?

I 2016 ble det innført krav om minimum snittkarakter 4 i matematikk fra VGS for opptak til grunnskolelærerutdanningene. Men hvor viktig er matematikk for suksess i lærerstudiet? Vi har undersøkt betydningen av karakterer fra VGS for karakterer og gjennomstrømming i lærerstudiet, og finner at karakterer i matematikk ikke har større effekt på studentenes prestasjoner enn karakterbakgrunn i andre fag. Derimot har studenter med programfag i matematikk generelt bedre prestasjoner i lærerstudiet enn studenter med praktisk matematikk.

INNLEDNING
Regjeringen ønsker å styrke lærerutdanningen og dermed bidra til mer kvalifiserte og faglig sterke lærere, som igjen fører til bedre undervisning (Hanushek, Piopiunik og Wiederhold, 2014). På bakgrunn av dette ble det i 2016 innført et krav om minimum snittkarakter 4 i matematikk fra videregående skole (VGS) for opptak til grunnskolelærerutdanningene (GLU 1.-7. trinn og GLU 5.-10. trinn), heretter referert til som lærerstudiet, samt lektorutdanningen. Kravet om karakteren 4 i matematikk gjelder ikke dersom man har bestått et av programfagene i matematikk, S1, S2, R1 eller R2. Om man har gjennomsnittskarakter mellom 3 og 3,99 i matematikk samtidig som man oppfyller de resterende opptakskravene, får man tilbud om å delta på et fire ukers forkurs. For å være kvalifisert for grunnskolelærer- eller lektorutdanningen må forkurset bestås ved en avsluttende prøve. Foruten kravet knyttet til matematikk, kreves også snittkarakteren 3 eller bedre i norsk og minimum 35 skolepoeng som tidligere.

I denne artikkelen ser vi på betydningen av matematikk fra videregående skole (VGS) for prestasjoner i lærerstudiet, målt både ved karakterer og studieprogresjon. Vi måler dermed ikke kvaliteten på lærerne, men kvaliteten på lærerstudentene: det virker imidlertid rimelig å tro at når studentene gjør det bedre på lærerstudiet, så vil de også bli bedre lærere, når den tid kommer.

Utvalget består av 344 studenter fra grunnskolelærerutdanningene 1.-7. trinn og 5.-10. trinn ved Høgskolen i Bergen (HiB), Høgskolen Stord/Haugesund (HSH) og Høgskolen i Sogn og Fjordane (HiSF), som i 2017 ble slått sammen til Høgskulen på Vestlandet. Vi har informasjon om studentenes bakgrunn fra VGS og deres prestasjoner på lærerstudiet, både i form av karakterer og

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5. Pedagogical materials

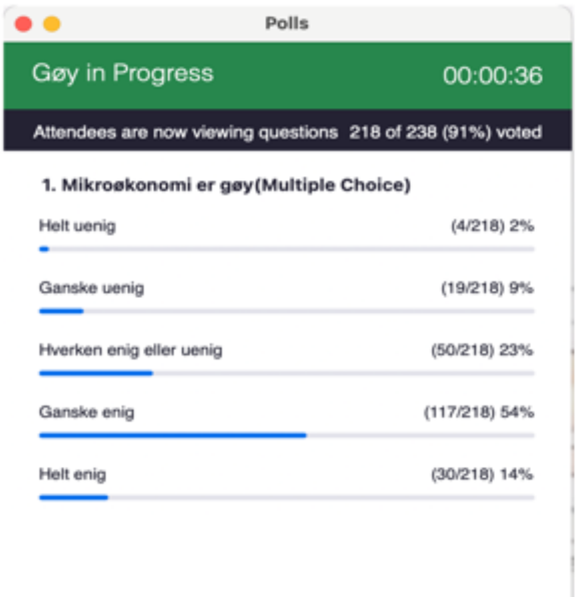
In this section I will give an overview of my most important pedagogical materials: my textbook, the course structure, multiple-choice tests, the case project, podcast, and describe how these materials have evolved over time.

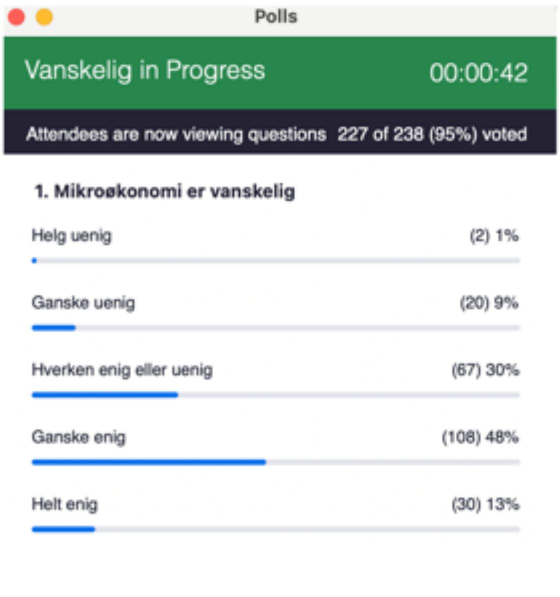
The textbook

My newly released textbook actually provides a good picture of how I think about teaching, in written form. Appendix E contains the Introduction to the book (in Norwegian) highlighting my *simple-engaging-relevant* teaching philosophy: the book is short and to the point (simple); it seeks to engage the reader by using storytelling (engaging); and examples which are close to the students' own reality (relevant).

Indeed, the book is highly innovative from a pedagogical perspective, in that, as far as I know, it is the first textbook in economics to tell a story from beginning to end, illustrated with cartoon-like figures (for instance, the main character, Anne, starts out as a first-year student at the Economic College and then, after completing her studies, takes a job at her grandfather's paper factory further north). Although the story is fiction, the setting is one which should be recognizable to the NHH student, as evident from the first page of the book (see Appendix F) introducing Anne, a first-year student at "The economic college" who studies microeconomics and thinks about how to allocate her earnings from a part-time job at the local grocery store between accommodation and leisure.

In an informal mid-term evaluation of my course SAM2 in February 2021, I asked the students (on Zoom) whether they thought microeconomics was (i) fun, and (ii) difficult. Here are the responses, showing that most found it both fun and difficult.





I also talked about the book, inviting them to send me a message if there was something they found lacking or if they found typos or other errors, and received the following encouraging messages on the chat-function

Boken er veldig god, spesielt karakterene gjør alt mer forståelig!

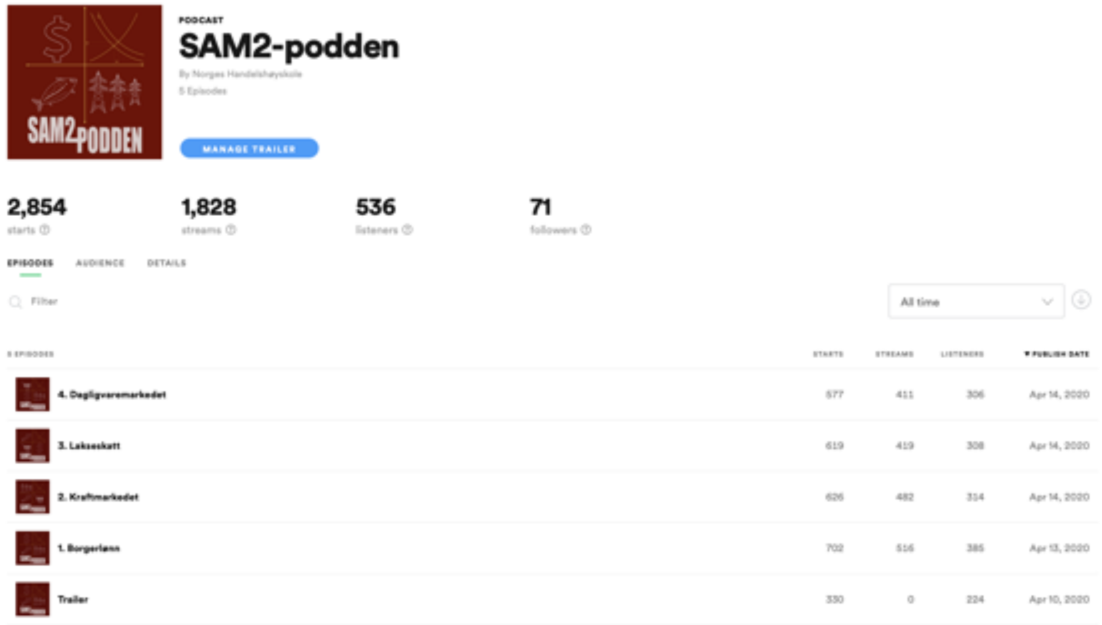
Utrolig bra bok. Enkelt å følge med på resonnementer. Eksempler fra praksis gjør det enklere å forstå.

Utrolig bra bok. Konsis og lærerik.

Veldig fornøyd med boken! Den forklarer kort og konsist, og er veldig hjelpsomt med gode eksempler :)

The podcast
Last year, I developed a podcast series called SAM2-podden, on current economic affairs which speak to the topics that we cover in the course. The project received seed funding for innovative education from the Section for Education Quality at NHH and the Department of Economics. We produced four episodes: on universal income; the power market; salmon taxation; and retail market. The episodes covered the topics of the case-project, hence supporting that teaching endeavor.

The podcast is published on (amongst other channels) Spotify and were very well received (the podcasts were specifically mentioned as background for the most recent Bronsesvampen prize). Statistics from Spotify show that the episodes were played almost 3000 times, and with more than 500 listeners (see below). As documented by Evans (2008), podcasts can be an effective learning tool. He writes (on page 491): "The study suggests that the use of podcasts as a revision tool has clear benefits as perceived by undergraduate students in terms of the time they take to revise and how much they feel they can learn. Coupled with the advantages of flexibility in when, where and how it is used, podcasting appears to have significant potential as an innovative learning tool for adult learners in Higher Education."



6. Teaching planning and contributions in own department and at NHH

During my tenure as Dean of the bachelor program, I interacted closely with all departments, and all units, of NHH. This of course also includes my own department, Economics. The Bachelor evaluation report raised a number of issues of relevance to the Economics department, for instance on its role in a business school like NHH. In my capacity as Dean, I initiated and took part in many discussions on both specific challenges, like how to deal with poor student evaluations in a particular course, and more overarching issues, like how to design the economics courses at the bachelor level to reflect the fact that economics has become a more empirical subject.

I also enjoy discussing teaching with my colleagues. For instance, SAM1 Introduction to economics precedes SAM2, and I have had in-depth discussions with my colleague Alexander Willén, who has recently taken over that course, on how to shape the course, given what I am covering in my course. I believe that my experience teaching at the bachelor level was quite helpful in this respect.

Throughout the years, I have also generally taught courses together with a colleague (for instance, I taught microeconomics together with Bertil Tungodden when we together received the Bronsesvampen in 2013). Sharing a course like this provides a natural arena for exchanging ideas about curriculum and pedagogics, and this has been a great learning experience throughout the years.

7. Education leadership and management

As Dean of the bachelor program I was heavily involved in quality control of teaching at the school, and in the development of new initiatives. Amongst other things, I was responsible for the most recent report on the Bachelor program, from 2014.[3] This is a comprehensive report, giving an overview of the status of teaching quality and making recommendations for improvements. The recommendations are based on a thorough data and information collection through benchmarking, student evaluations and input from the various departments and units at NHH. The report argues for a strengthening of communication skills and collaboration across subjects and lays the foundation for the current study plan.

One particular initiative that I carried out as Dean and that is worth mentioning in this context, is the *Pedagogical week*, in 2014. I engaged Torben Jensen, the head of Center for Undervisning og Læring (CUL) at School of Business and Social Sciences at Aarhus Universitet, to have workshops both with the individual departments as well as plenary sessions, on various aspects of teaching. The purpose was to place pedagogics higher on the school's agenda, and to convey best practice ideas about teaching from someone with an experience in working with social scientists.

Finally, I can mention that I was a member of NOKUTs committee for the national *Education quality price* in 2014 and was the leader of this committee in 2015.[4]

8. Evidence of student learning

In 2014, when I was teaching microeconomics together with Bertil Tungodden, we carried out an experiment in class to test whether an SMS-nudge could have an impact on learning. It is a well-known result in behavioral economics that people have a tendency to procrastinate. Kahneman (2011) operates with two cognitive systems: System 1 is impulsive (thinking fast), while System 2 is more reflective (thinking slow). Students may know that they should be preparing for each class, but there are many temptations that distract them from doing what they know is right: they procrastinate. So how do you get students to start reading in January when the exam is in June?

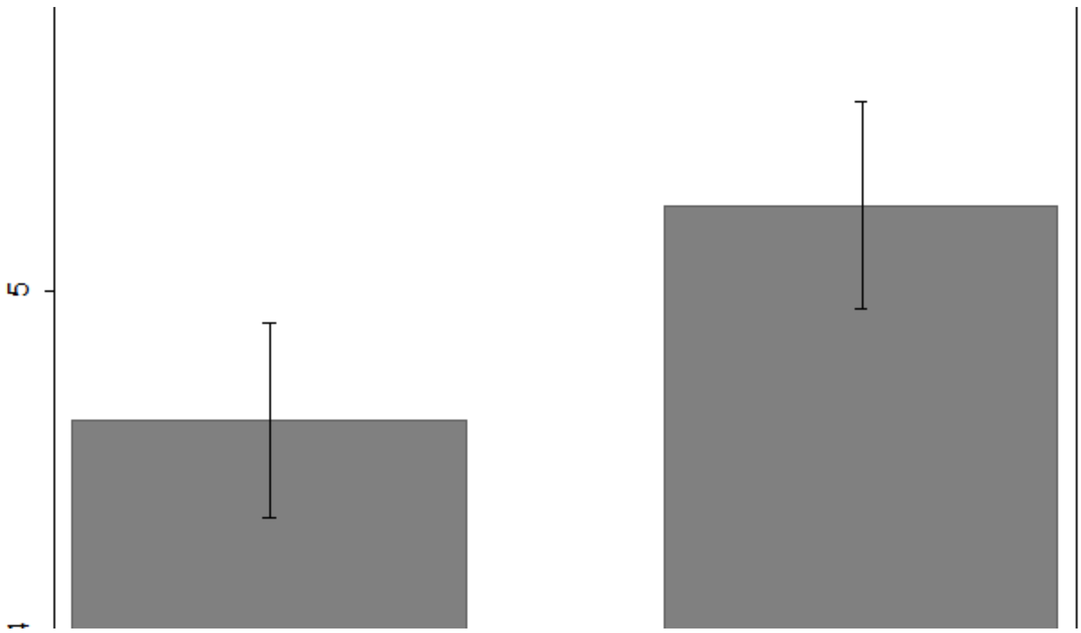
We randomized the class into two groups, with students whose last names starting with A-J being in the treatment group and K-Ø in the control group. The treatment was a short SMS sent the day before the class, with a message about what the topic of the class was, a reference to the relevant chapter in the textbook, and ending with a "welcome to class". The control

[3] See https://www.nhh.no/contentassets/eeb02348dbd0435c8317603efbf0feec/programevaluering-bachelorstudiet-i-okonomi-og-administrasjon.pdf

[4] https://www.nokut.no/norsk-utdanning/hoyere-utdanning/utdanningskvalitetsprisen-for-hoyere-utdanning/

group got no SMS from us. This we did for a few weeks, and then we carried out an unannounced multiple-choice test in class, covering both material that we had been teaching up to that point, and material from that particular class (to test if the students were prepared for class).

We find a significant difference between treatment and control group on the number of correct answers on the multiple-choice test, as shown below: the control group had around 4.5 correct answers on the test on average, while the treatment group had around 5.5 correct answers.



Control group Treatment group

We stopped the experiment after this unannounced test (sending out the text messages cost money, and we did not have the budget for it), although some students asked us to continue, telling us that the messages were useful nudges to make them prioritize studying. I have since then used this insight, and I typically send out a message to the students a day (or two) before class via Canvas, with a small teaser about what we will be covering in class and a "welcome to class".

Except for the SMS-experiment, I have not carried out randomized controlled trials in my classes which would allow me to provide hard evidence on learning. Hence, evidence on learning has to come from other sources. One source is obviously the literature, such as Deslauriers et al (2011) who ran an experiment pitching an experienced teacher with great student evaluations with a more innovative, research-based teaching style: deliberate practice. They find that the innovative approach outperformed the traditional approach on attendance, engagement and learning.

One lesson from this research is that positive student evaluations are no guarantee that things cannot be done better. Still, I would argue that positive student evaluations are better than bad student evaluations. When I now provide student evaluations and statements on teaching awards that I have received, this should clearly not be taken as scientific evidence of learning, but more as *indications* of learning. And of course, realizing that there is always room for improvement.

Below is the most recent course evaluation of SAM2, where I received a score of 4.56 on my teaching and where the usefulness of the course was given a grade of 4.85.

Summary

Agreement questions

	Mean	SD	Median
I believe the content of this course has been useful and relevant to my degree.	4.85	0.45	5.00
The lecturers presented the curriculum in an appropriate way	4.56	0.88	5.00
Overall, how satisfied are you with this course?	4.53	0.66	5.00

Teaching

	Instructor Presentation of Curriculum							
Instructor	Mean	SD	Median	1	2	3	4	5
Overall	4.56	0.88	5.00	1.82%	1.82%	9.09%	12.73%	74.55%
Kjetil Bjorvatn	4.56	0.88	5.00	1.82%	1.82%	9.09%	12.73%	74.55%

Teaching Methods

To what extent do you think that the following teaching methods contributed to your learning?

	Mean	SD	Median	n	N	%
Lectures	4.15	0.83	4.00	55	476	11.55%
Small group sessions	3.93	0.89	4.00	45	476	9.45%
Individual assignment(s)	NRP	NRP	NRP	0	476	0.00%
Group based assignment(s)	4.30	0.77	4.00	54	476	11.34%
Oral presentation(s)	3.30	0.94	3.00	40	476	8.40%
Case-based teaching	3.89	0.87	4.00	53	476	11.13%

Here are some selected comments by the students, highlighting exactly what they appreciated with the course. They emphasize the use of *diverse teaching methods*; *engagement*; the clear *structure*; *multiple choice* tests for *early reading* and *feedback*; and the use of *group teaching*.

> Beste kursopplegget så langt på NHH! Engasjerende og spennende med så mange forskjellige undervisningsmetoder, morsomme caseppgaver og bra podcaster i forkant av disse. Prakteksemplar på hvordan man lærer bort ting på en engasjerende og nyttig måte

> Synes forelesningene har vært interessante og lærerike. Liker disse mysteriene som blir presentert som gjør at vi kan knytte pensum opp mot noe som virkelig skjer. Ellers liker jeg og den gode organiseringen av faget med fem temaer som gås gjennom med to forelesninger, en gruppetime og en MC. Synes også MC er en fin måte å løse kursgodkjennelse da det tvinger oss som studenter til å henge med i faget.

> Multiple choice gav meg god motivasjon til å begynne med lesingen tidlig, noe jeg synes er bra. Det var også nyttig at de ble rettet fort slik at jeg kunne se hva jeg ikke hadde forstått. De oppgavene som var lagd til gruppetimene var også veldig nyttig. Jeg gikk igjennom de før jeg tok multiple choice, og de gav meg mer forståelse for temaet enn kun lesning gjorde

I have won the NHH prize for excellence in teaching and, three times, the students' teaching award *Bronsesvampen*. Below I show what the juries have said about these awards.

***NHHs** pris for fremragende lærerinnsats, 2005*

Hederspris til Bjorvatn

Professor Kjetil Bjorvatn ved Institutt for samfunnsøkonomi har fått Norges Handelshøyskoles pris for fremragende lærerinnsats.

Rektor Jan I. Haaland delte ut prisen på 16 000 kroner og et silketrykk til Bjorvatn under immatrikuleringsseremonien på NHH i dag.

Bjorvatn uttrykte både stolthet, glede og ikke minst ydmykhet over å bli tildelt denne æren. Han oppfordret de nye studentene til å delta aktivt i forelesningene og for all del stille spørsmål når de ikke skjønner hva som står på tavla.

- Hvis ikke du skjønner det, kan du garantere at halvparten av salen heller ikke skjønner det. Så, selv om det ikke er enkelt å stille spørsmål blant 450 studenter i aud. max, så er det veldig verdifullt, både for studentene og foreleseren, sa prisvinneren.

En fremragende foreleser
I sin vurdering av kandidatene har komiteen vektlagt Bjorvatns svært gode pedagogiske og kommunikative evner. Han utmerker seg som en fremragende foreleser på alle nivå, noe som avspeiler seg i de gode kursevalueringene han får.

- Bjorvatn er flink til å integrere praktiske problemstillinger i undervisningen, noe som virker motiverende på studentene. Han er også meget tilgjengelig for studentene og tok i vår initiativ til å avholde oppsummeringsforelesninger for studentene på SAM 010, noe som ble veldig godt mottatt, heter det blant annet i komiteens begrunnelse.

Drar til Harvard
Rektor Haaland, som selv har hatt kontor tvers over Bjorvatn, sa under tildelingen at han har vært fascinert over alle studentene som har gått inn og ut av Bjorvatns kontor, spesielt når det nærmer seg eksamen.

Bjorvatn er en svært godt likt foreleser blant studentene og har tidligere fått studentenes foreleserpris, Bronsesvampen. Årets nye studenter får imidlertid ikke sjansen til å oppleve Bjorvatns prisbelønte forelesninger dette studieåret. I morgen reiser nemlig prisvinneren til Harvard for en ett år lang forskningstermin.

Begrunnelse for tildeling av pris for fremragende lærerinnsats
Pristildelingen er basert på en samlet vurdering av lærerinnsats i vid forstand, men med spesiell vekt
på følgende syv kriterier:

- Generelle pedagogiske evner
- Oversiktlighet og kommunikasjonsevne
- Evne til å skape interesse for faget og motivasjon til selvstudium
- Evne til å belyse stoffet fra flere synsvinkler
- Innovasjon og nyskaping, herunder utvikling av nye kurstilbud
- Evne til å relatere stoffet til andre deler av studiet
- Vilje til samarbeid om pedagogiske oppgaver

The three Bronsesvampen awards

Bronsesvampen spring 2020 (for SAM2 Mikroøkonomi)
Vinneren av vårsemesterets Bronsesvamp, professor Kjetil Bjorvatn, beskrives som en foreleser med en engasjerende utstråling, og som har enormt gode ferdigheter og kunnskaper innenfor sitt fagfelt.

Denne våren har NHHS og Studentutvalget ved NHH gleden av å dele ut bachelorstudentenes forelesningspris til Kjetil Bjorvatn for faget SAM2 Mikroøkonomi.

Mottakeren av dette semesterets Bronsesvamp beskrives som en foreleser med en engasjerende utstråling, og som har enormt gode ferdigheter og kunnskaper innenfor sitt fagfelt. Bjorvatn hedres for sine gode pedagogiske evner, samt at undervisningen er tilpasset dagsaktuelle problemstillinger.

I tillegg til spennende og lærerike forelesninger, har Bjorvatn også gjort faget innovativt ved å introdusere podcast som et supplement til undervisningen. Det er ingen tvil om at Bjorvatn gjør en fremragende jobb som foreleser, og er en velfortjent vinner av Bronsesvampen våren 2020.

Bronsesvampen 2013
(for SAM010 Introduksjon til mikroøkonomi, with Bertil Tungodden)
Tradisjonen tro ble Bronsesvampen for våren 2013 delt ut under årets 17. mai-frokost. Denne gangen var det Kjetil Bjorvatn og Bertil Tungodden som stakk av med prisen for sin fremragende pedagogiske innsats i SAM010 - Introduksjon til mikroøkonomi.

Han forteller at de to fikk et stort antall nominasjoner fra studentene og at de også høstet bred støtte i resten av Fagutvalget.

- Ikke bare er de utrolig dyktige som forelesere, de har også gjort diverse grep for å støtte opp om studentene, med blant annet SMS-varsling, forteller Engesæth til Paraplyen.

- En dyktig foreleser vet likevel å ikke alltid sette seg selv i sentrum, og SAM010 er også blitt kjennetegnet av utmerkede gjesteforelesere, fortsetter han.

Bronsesvampen 2004 (mainly for course in macroeconomics, but also other courses in "andreavdeling").

Kjetil Bjorvatn, førsteamanuensis ved Institutt for samfunnsøkonomi, fikk Bronsesvampen for vårsemesteret 2004. Han får ros for sin evne til å formidle og skape interesse for fagene han underviser i.

I juryens begrunnelse heter det blant annet at "Kjetil Bjorvatn utmerket seg blant samtlige kull på første og andre avdeling og er en veldig godt likt foreleser. Han får skryt for å snakke med studentene og ikke over dem, og han har en veldig ryddig og god struktur på forelesningene sine."

http://paraplyen.prototypes.no/paraplyen/arkiv/2013/mai/bronsesvam/

9. Dissemination

As stated above, as Dean I was in charge of the comprehensive report on the Bachelor program in 2014. Moreover, together with Morten Sæthre (then PhD-student, currently Associate Professor at the Department of Economics), I published an article in *Samfunnsøkomen* on the importance of math from high-school (videregående skole) for success at the siviløkonom-study at NHH, both in terms of grades and study points at the bachelor program (see Bjorvatn and Sæthre, 2012). The study was based on background information from high-school, and similar information from the first years at NHH. The idea was to shed light on the debate about whether to introduce additional math requirements when admitting students to the NHH program, in order to ensure that students fulfill the program without delay. Our analysis points to the importance of math skills, but also to the fact that most of the variation in study progress cannot be ascribed to math. In the concluding section, we write:

> Gode matematikk-kunnskaper fra videregående skole predikerer suksess på siviløkonomstudiet, både i form av høye karakterer og god studieprogresjon. (...) Likevel, det er verdt å merke seg at størsteparten av variasjonen i karakterer og progresjon på siviløkonomstudiet ved NHH ikke kan tilskrives matematikk-kunnskapene fra VGS. En rimelig tolkning er at det som skjer på NHH spiller en vel så stor rolle som bakgrunnen fra VGS for hvor godt den enkelte student gjør det i studiet. Er han eller hun interessert i fagene? Hvor mye tid brukes det på studiet? Preges lesingen av skippertak før eksamen eller kontinuerlig oppdatering? Mye kan sikkert gjøres for å øke læringsutbyttet for de studentene som faktisk er tatt opp, for eksempel ved å bedre studievanene og ved å styrke det pedagogiske opplegget. Strengere opptakskrav er ikke eneste vei til suksess. Og for de fleste institusjoner som jo har en langt svakere søkning enn NHH, er nok ikke strengere opptakskrav en aktuell politikk. Det er åpenbart behov for mer kunnskap om hvilke tiltak som faktisk gir økt læring i et studium som siviløkonomstudiet, og vi håper denne artikkelen kan inspirere til mer forskning på dette området.

This research, then, contributes to our knowledge about what makes our students succeed at NHH, which is obviously important when thinking about which requirements to place on admission, but also to improve the quality of the study program itself.

ARTIKKEL

KJETIL BJORVATN
Norges Handelshøyskole
MORTEN SÆTHRE[1]
Norges Handelshøyskole

Matematikk som suksessfaktor i siviløkonomstudiet

Svakere matematikk-kunnskaper blant elvene som går ut av videregående skole skaper bekymring for studier hvor matematikken er et sentralt redskap, slik som siviløkonomstudiet. I denne studien analyserer vi betydningen av matematikk, og en rekke andre faktorer, for suksess på siviløkonomstudiet ved Norges Handelshøyskole (NHH). Vi finner at gode matematikkferdigheter fra videregående skole predikerer høyere karakterer og bedre studieprogresjon ved NHH. Et policyeksperiment viser at strengere opptakskrav innenfor matematikk kan gi positive effekter for karakterer og gjennomstrømming i studiet, men at effektene i stor grad er drevet av at studenter som tilfredsstiller de høyere mattekravene fortrenger studenter med tilleggspoeng.

1. INNLEDNING

Matematikk-kunnskapene blant de nye universitets- og høyskolestudentene er fallende. Norsk matematikkråds forkunnskapstest gir sammenlignbare tall fra 1984 og frem til i dag, og viser et nivå og en utvikling som gir grunn til bekymring: «Den beste gruppen på 2009-undersøkelsen skårer klart under gjennomsnittet fra 1984, og enkelte studentgrupper har resultater som er direkte foruroligende: Man forventer at lærere og økonomer skal ha et aktivt og trygt forhold til tall og talloperasjoner, men både lærerstudenter og økonomistudenter har i gjennomsnitt løst under 1/3 av oppgavene på testen korrekt.» (Nortvedt, Elvebakk og Lindstrøm, 2010).

I denne artikkelen fokuserer vi på siviløkonomstudiet ved Norges Handelshøyskole (NHH). Selv om nivået på matematikk-kunnskapene for nye siviløkonomstudenter på NHH ligger klart over landsgjennomsnittet, så er trenden på forkunnskapstesten den samme: Fra 2001 til 2009 sank skåren for NHH-studenter fra 69 % til 55 %. Mange forelesere gir uttrykk for at de matematiske ferdighetene og analytiske evnene hos mange studenter er for lave, og at dette skaper pedagogiske utfordringer. Flere har tatt til orde for at opptakskravene til matematikk må innskjerpes for å hindre at kvaliteten på studiet forringes.

Men hvor viktig er egentlig matematikk fra videregående skole som suksessfaktor for siviløkonomstudiet? Er matematikk viktigere enn andre fag, slik som norsk eller engelsk? Er matematikk viktig for alle økonomisk-administrative fag på siviløkonomstudiet, eller bare for de mest tekniske? Hvilke implikasjoner vil det ha om det ble innført strengere opptakskrav for matematikk til

[1] *Vi ønsker å takke Kjetil Sudmann Larssen, Jarle Møen, Kjell G. Salvanes og Erik Ø. Sørensen for gode diskusjoner, kommentarer og forslag.*

Moreover, I could mention that I presented by podcast-project at the NHH ped webinars on online teaching during the spring of 2020: “The making of podcasts in SAM2”, May 25, 2020.

Finally, as stated above, I have in recent years sought to disseminate findings from master-projects that I supervise, both to give the students an experience in communicating results to a broader audience, and to actually inform the public about this research.

10. Reflections on own educational development

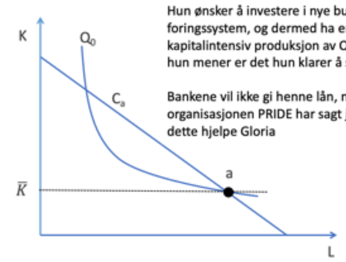
I have always enjoyed teaching. I enjoy interacting with my students and teaching assistants, and I take their feedback extremely seriously, always trying to innovate and improve. Even though I have been teaching for many years, and the *same course* for many years, I always put in a lot of work preparing for each lecture, seeking to make this year's lecture better than last year's, and updating my examples to reflect current issues. I sometimes use the video recordings of my teaching to critically reflect on the speed and rhythm of my lecturing: watching the videos can be quite revealing (and sometimes quite painful!).

The most notable recent addition to my teaching is my newly published textbook in microeconomics, based on my experience as a teacher in SAM2 at NHH. This book is a statement of my teaching philosophy of simplicity, engagement, and relevance (although I leave relevance in the meaning of *current cases* out of the book).

Last year, I developed the podcast series, and I will continue to develop new episodes over time, the ambition being to build up a library of interesting episodes over current issues of relevance to the course. This year, we are in the process of producing one episode on *vaccines* and one on *international trade in electricity*. Next year, with the continued support from the Section for Education Quality at NHH and the Department of Economics, I will produce two more episodes.

Finally, I strive to use my own research in development economics and behavioral economics in class, to show interesting applications and give the students a glimpse into research. Below are four slides from lectures this semester in SAM2 Microeconomics, where I apply theory to my own research. The first is on how access to capital is useful to optimize production; the second is to illustrate the importance of opportunity cost; the third is to illustrate other regarding preferences in an experiment on honesty; and the fourth is to show how nudging can be useful to counteract time inconsistent preferences, with an application to savings.

Kyllingproduksjon i Tanzania: hvordan kan mikrofinans hjelpe Gloria?



Gloria produserer Q_0 kyllinger, med to ansatte og kapitalutstyr $\bar{K}$.

Hun ønsker å investere i nye bur og et vann- og foringssystem, og dermed ha en mer kapitalintensiv produksjon av Q_0 kyllinger (som hun mener er det hun klarer å selge).

Bankene vil ikke gi henne lån, men mikrofinans-organisasjonen PRIDE har sagt ja....hvordan kan dette hjelpe Gloria

10

Graces valg

- Grace driver kafé, selger "soda, juice og chapati", daglig inntekt 10 000
- En dame lenger nede i gaten har kafé med samme omsetning som Grace, men betaler 5000 i leie for lokalene
- "Heldigvis eier jeg mine egne lokaler," tenker Grace
- Grace har fått tilbud om jobb som frisør, med daglig lønn 7500, men har takket nei siden hun tross alt tjener 10 000 i kiosken.

Hvilket råd vil du gi til Grace? Kiosk eller frisør?

Eksperiment

- La oss konstruere en situasjon hvor kontroll er ***umulig***
- Hvor mange vil være ærlige da?
- Vi (Bjorvatn, Ekström, Sjåstad) testet dette på et utvalg bestående av 1600 personer fra et nasjonalt-representativt utvalg i Norge (Norstat)

Mathias Ekström | Hallgeir Sjåstad | Kjetil Bjorvatn

En nudge for sparing

- Manafwa, Uganda (grensen mot Kenya)
- CARE modellen for sparing (safe med hengelås, nøklene fordelt på ulike medlemmer)
- Ukentlige møter, 30 medlemmer i hver gruppe
- Lån fra gruppen i henhold til egen sparing og behov

The same goes for supervision: I seek to include the master students that I supervise in my research projects, which I believe gives the students a unique experience (close contact with the research team and our project partners), and of course provides us in the research team with valuable research assistance.

All in all, being a good teacher is a continuous process of trial and error, carefully reading course evaluations and interacting closely with both students and colleagues. This process is what makes teaching so much fun! Conveying this excitement about the subject and the teaching to the students is an important ingredient of being a good teacher.

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11. Appendix

Appendix A

Curriculum Vitae

Personalia

Name: Kjetil Bjorvatn
Born: December 13, 1965, Lund, Sweden
Address: Øysteins gate 18, 5007 Bergen, Norway
Phone: + 47 47 25 28 61

Education and work experience

1996: PhD, NHH.

1999-2000: Researcher at the LOS-center

1997- 2005: Associate Professor in Economics, NHH

2005-present: Professor in Economics, NHH

2005-2006: Visiting scholar at the Weatherhead Center for International Affairs, Harvard University

2009-2015: Dean of Bachelor study, NHH

2011-2015 Head of FRISAM project "On the mechanics of microfinance", The Research Council of Norway

2019-2022 Head of NORGLOBAL project "Childcare for childhood and business development", The Research Council of Norway

2017-present Core member of FAIR, Head of Fair Insight Team, NHH

2017 Head of NAV R&D research project "Planlegging og påminnelser: Små dytt for å hjelpe unge videre i livet".

2017-2020: Member of Government commission "Kompetansebehovsutvalget"

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Appendix B

Letter of commitment, NHH and UCAN

NHH

UNIVERSIDADE CATÓLICA DE ANGOLA

VERITAS VITA

Letter of commitment

We, NHH Norwegian School of Economics and The Catholic University of Angola (UCAN), hereby express our commitment to cooperate in student exchange, program development, and in developing an academic partnership given the opportunity to do so under a grant from the NORPART program.

The proposed collaboration harmonizes well with the NHH's emphasis on sustainable development, and the goal of educating people who are committed, inclusive and responsible, eager to contribute to positive change both locally and globally, and with the ability to cooperate with other people across industries, cultures and national boundaries. Similarly, it fits well with the UCAN ambition of improving the quality of education, of promoting research both nationally and internationally, and of strengthening the organizational and managerial capacity for increased student satisfaction and performance.

The cooperation between NHH and UCAN dates back several years, with the signing of a Letter of Intent in 2013, to cooperate in the establishment of the Master Program in Energy and Development at UCAN. Now, this program is well established, with NHH contributing both in program design and in teaching.

The current commitment, conditional on funding, is to expand this collaboration to also include student exchange, joint supervision of master theses, faculty exchange and joint research. NHH and UCAN will contribute with teaching, research, and administrative resources to make this collaboration a success.

Sincerely,

Øystein Thøgersen	Father José Vincente Cacuchi
Rector, NHH	Rector, UCAN
Bergen, May 25, 2018	Luanda, May 25, 2018

Appendix C

Lecture plan SAM2, spring 2021

INTRODUKSJON		**Pensum**
Onsdag 20 jan. 12:15-14:00	Introduksjon til kurset	
KONSUMENTTEORI		Pensum
Fredag 22 jan. 08:15-10:00	Forelesning 1 Penger, priser og preferanser	KB 1 GLS 4
Onsdag 27 jan. 12:15-14:00	Forelesning 2 Mer om valget mellom goder	KB 2 GLS 5
Fredag 29 jan. 08:15-10:00	Forelesning 3 Konsumenter i arbeid	KB 3 GLS 13.2
Onsdag 3 feb. 12:15-16:00	Forelesning 4 Andre valg, alternativ adferd	KB4 GLS 18
Fredag 5 feb. 08:15-12:00	Gruppearbeid I	
PRODUSENTTEORI		
Onsdag 10 feb. 12:15-14:00	Forelesning 5 Mennesker og maskiner	KB 5 GLS 6
Fredag 12 feb. 08:15-10:00	Forelesning 6 Hva koster det?	KB 6 GLS 7
Onsdag 17 feb. 12:15-14:00	Forelesning 7 Lønner det seg?	KB 7 GLS 8
Fredag 19 feb. 08:15-12:00	Gruppearbeid II	
MARKEDSTEORI		
Onsdag 24 feb. 12:15-14:00	Forelesning 8 Tilbud og etterspørsel	KB 8 GLS 2
Fredag 26 feb. 08:15-10:00	Forelesning 9 Samfunnsøk. effektivitet	KB 9 GLS 3
Onsdag 3 mars	Ingen forelesning	
Fredag 5 mars 08:15-12:00	Gruppearbeid III	
MARKEDSMAKT OG STRATEGI		
Onsdag 10 mars 12:15-14:00	Forelesning 10 Monopol	KB 10 GLS 9
Fredag 12 mars 08:15-10:00	Forelesning 11 Oligopol	KB 11 GLS 11
Onsdag 17 mars 12:15-16:00	Forelesning 12 Spillteori	KB 12 GLS 12
Fredag 19 mars 08:15-12:00	Gruppearbeid IV	
CASEUKEN 22-26 mars		
Mandag 22. mars	Annonsering av case	

Appendix D

Lecture plan Development economics

ECN 423 Development Economics
Tuesday 0815-1000 Aud 22
Thursday 1415-1600 Aud 22

NHH Norwegian School of Economics
Department of Economics   Fall 2016

Part 1: Learning about development

1	Tuesday Aug 23	Introduction. (KB/PYW)
2	Thursday Aug 25	Learning about development (PYW) *(+ Deaton video)*
3	Tuesday Aug 30	Methods in Applied Microeconomics (PYW)

		Problem Set #1

Part 2: Micro perspectives

4	Tuesday Sept 6	Intra-Household Allocation (PYW)
	Thursday Sept 8	Risk Sharing and Consumption Smoothing (PYW) **NOTE: Aud 13**
5	Tuesday Sept 13	Entrepreneurship and business training (KB) *Group presentation*
	Thursday Sept 15	Lending to the poor (KB)
6	Tuesday Sept 20	Employment for female empowerment (incl Ethiopia-lab) (KB)
	Thursday Sept 22	Guest lecture on household dynamics by Sosina Bezu, senior researcher CMI
8	Tuesday Sept 27	Disability and Development (KB) *Group presentation*

		Problem Set #2

Part 3: Macro perspectives

12	Thursday Sept 29	Economic growth: Theory and Empirical Evidence (PYW)
13	Tuesday Oct 4	History, Culture and Institutions (PYW)
14	Thursday Oct 6	The Resource curse (PYW)
15	Tuesday Oct 11	Environmental Disease Burden in Developing Countries (PYW) *Group presentation*
16	Tuesday Oct 18	Institutions and corruption (JS)
17	**Wednesday Oct 19**	Education (JS) NOTE: Time 16.15-18:00, Auditorium XX
18	Thursday Oct 20	Health and development (JS)
19	Tuesday Oct 25	Aid and development (KB) *Group presentation*

		Problem Set #3

Exam: TBD

Appendix E

Introduction chapter in my textbook

Innledning

Det finnes mange lærebøker i mikroøkonomi på markedet. De fleste er på engelsk, noen er på norsk. Noen er lange, andre korte. Noen er nokså matematiske, andre mer verbale. Noen er fulle av eksempler fra virkeligheten, andre presenterer bare teorien, nærmest som en formelsamling.

Men det finnes ingen mikroøkonomibok som forteller en historie, og som til og med har et snev av romantikk (med en lykkelig slutt). Før nå! Det første du vil legge merke til når du blar i denne boken, er at den har *et persongalleri*. Her er de:

Hovedroller:

Anne

Birger

Conrad

Biroller:

Audhild (Birgers mor)

Professor Bjoren

Konkurrenten

Kanskje minner karakterene (tegnet av min far) deg om noen du kjenner? Kanskje er det noen av situasjonene du synes er morsomme eller engasjerende? For eksempel som når Birger har mer penger enn vanlig, men ender opp med å kjøpe *mindre* frossenpizza enn det han pleier. Dette er en illustrasjon på et mindreverdig gode, et viktig tema i konsumentteorien.

Tegningene, situasjonene, og dialogene er ment å gi liv til teksten og skape en nærhet til teorien, som i en mer tradisjonell lærebok kan oppfattes som nokså tørr og abstrakt. Det er enklere å lære noe som er morsomt, og bilder kan være gode mentale knagger for å huske ting. Mindreverdige goder … skal vi se – ja, det var Birger og pizzaen! Karakterene og historiene har dermed et pedagogisk formål.

Det humoristiske blikket betyr imidlertid ikke at jeg tar lett på det faglige innholdet. Boken gir kortfattet introduksjon til de mest sentrale teoriene innenfor mikroøkonomi basert på standard matematisk og grafisk metode: en ABC på 1-2-3!

Jeg har valgt å ikke ta med case og anvendelser fra virkeligheten i boken, selv om jeg jo håper at personene og situasjonene jeg konstruerer, oppleves som realistiske. De beste anvendelsene er *aktuelle*, men hva som er aktuelt, avhenger av både tid og sted. Jeg overlater til den enkelte foreleser å krydre undervisningen med egne case fra egen virkelighet.

Boken består av tolv kapitler fordelt på fire deler. Del 1 omhandler konsumentteori, del 2 produsentteori, del 3 markedsteori, og del 4 markedsmakt og strategi. Det kan selvsagt være uenighet om hvilke temaer som bør dekkes i et grunnkurs i mikroøkonomi. Jeg har valgt å fokusere på det jeg selv dekker i mitt mikroøkonomikurs på NHH (7.5 studiepoeng), og forsøker å gjøre dette så bra som mulig.

Det er fire *multiple choice*-oppgaver i hvert kapittel. Disse skal fungere som sjekkpunkter på at du har forstått det du har lest, før du går videre i teksten. Løsningen finner du på slutten av kapittelet. Jeg har også utarbeidet en egen oppgavebok med utførlige løsningsforslag og anbefaler deg å jobbe med oppgavene til hvert kapittel før du går videre til det neste.

Matematikken er i stor grad samlet i «mattebokser» som gjør det enkelt å orientere seg i fremstillingen. Videre er sentrale begreper fremhevet i margnoter, med engelsk oversettelse og kort forklaring. Jeg bruker gjennomgående engelske forkortelser på nøkkelbegreper siden disse er så innarbeidet i faget. På denne måten vil du raskt kunne se koblingen mellom fremstillingen i denne boken og den man møter i en engelsk lærebok, som er en fordel for videre studier eller dersom du reiser på et utvekslingssemester til utlandet.

Mikroøkonomi er grunnlaget for all økonomisk teori. Denne boken vil gi deg verktøyet og forståelsen som du trenger for å analysere økonomiske problemstillinger av relevans for enkeltpersoner, bedrifter og myndigheter. Boken vil også gi deg et godt faglig utgangspunkt for mer avanserte og spesialiserte kurs innenfor økonomi, og forhåpentligvis også inspirasjon til å lære mer.

Lykke til, og god fornøyelse!

Appendix F

First page of Chapter 1 in my textbook, on Consumer theory

Anne liker å bo godt, men vil samtidig ha råd til andre ting og funderer på hvordan hun skal bruke pengene sine.

Anne har deltidsjobb i Lavprisbutikken og legger merke til at når det er tilbud på bacon, så kjøper folk mer egg og mindre pancetta – og hun lurer på hvorfor det er slik.

1.1 Innledning

Anne er student på Den økonomiske høyskolen og studerer mikroøkonomi og andre spennende ting. Hun er en fornuftig person, med deltidsjobb i Lavprisbutikken og god orden på økonomien. Anne sitter på lesesalen og legger en plan for hvor mye hun skal bruke på bolig og andre ting som gir henne glede, slik som trening, mat og kultur.

Anne sitter på lesesalen og studerer boligannonser