

Forskningsbasert utdanning på universitetene
[Research-based education at universities]

Curt Rice, University of Tromsø

Forskningsuniversitet som studiested
[Research-intensive universities as places of learning]

University of Oslo, March 3, 2011

This week, the Research Council of Norway advertised a program they informally call SFF-3. This announcement marks the third time the Research Council will enter into a process that will have as its result the creation of new Norwegian Centers of Excellence. (Coe = SFF).

It also marks 10 years since SFF-1, the first time the SFF program was announced.

When that happened in 2001, I joined four of my colleagues to work on an application.

When we applied, we had been working closely together for several years, not least of all developing some new teaching programs.

And we were of course collaborating on our research in linguistics as well.

Research in linguistics, I might note, is really cheap.

One of my colleagues often says, only half joking, that our method is introspection. It doesn't require much more than a good chair.

And it's the low cost of our research that created one of our biggest problems with our SFF application.

Because that problem is connected to the topic of research based teaching, and because understanding that problem has influenced my thinking on that topic, I'd like to start this morning by briefly describing that problem to you.

Our problem was a result of the combined effect of doing cheap research and a budgetary requirement from the Research Council.

In particular, the Research Council had stipulated that their portion of the budget for a center should be a minimum of 6 million Norwegian crowns (MNOK) per year.

We couldn't imagine how we possibly could spend that much money.

"Maybe we should do more fieldwork. Maybe we could buy new computers for ourselves. Maybe we could even get better office chairs in which to do our introspection."

But when we wrote things like that into our budget, it didn't get us anywhere close to 6MNOK.

Eventually we realized that the only way to use that much money was through salaries.

And we were highly motivated to build a graduate school so we could think about hiring PhD students and post docs.

But when we started talking about that, our host institution, the University of Tromsø, said that they would like to help us build our center by giving us several PhD and post doc positions. They were so generous that we could get to our goals for our graduate school and still not be close to needing 6MNOK from the Research Council.

In short, no matter what we came up with, we didn't really get there, and we started to wonder if the SFF program was really meant for us.

But then we had a breakthrough. We got the idea of buying ourselves out of our teaching.

I don't even remember where we got that idea, but we figured out that if we would cover half our salaries from the SFF grant, then we could focus completely on our research and on the graduate school we wanted to build.

And that's what we did. We bought ourselves out of teaching. And we got our budget up to 6MNOK.

With the benefits of hindsight, I can tell you now that I consider that decision to be perhaps the biggest mistake of my career.

It was a mistake for two reasons. One is that we all kept teaching and supervising and doing all the kinds of work one associates with that part of the job anyway, even if it was almost exclusively at the PhD level. From this perspective, it was just a bad use of resources. We spent a lot of money and didn't get much for it.

But it was a mistake for another reason -- a much more fundamental reason.

The effect of this buy-out was to remove us from the programs we had built up together. And it removed us from engagement with the bachelor's level teaching going on around us.

This lack of engagement from the senior researchers at our SFF is part of context in which our faculty has now determined that the bachelor's program in linguistics should be eliminated.

Now, don't misunderstand me. That decision on the part of the faculty is perfectly rational.

But perhaps it wouldn't be perfectly rational today if we had done something different with the SFF grant yesterday.

Instead of buying everyone out of their teaching, we should have thought about how to build up more than just a PhD program.

We should have thought all the way through, also to the bachelor's level. We should have used that money to integrate the SFF with a complete university educational offering, from start to finish.

There was a lot of money there. We could have done something even more radical than what we actually did.

But we just didn't think of it.

The missed opportunity there is something I had the chance to think more about last year when I led a national task force at *Universitets- og høgskolerådet* [The Norwegian Association of Higher Education Institutions] that explored the topic of *forskningsbasert utdanning* [research-based education].

We delivered a report, by the way, that you can find by going to uhr.no and clicking on *utdanning*. The rest of my comments are in part based on that report, although there is much more there than what I can touch on here today.

When we started our work in the task force, we talked about all different levels of education. We asked ourselves if we should we look for new ideas and important perspectives on *forskningsbasert utdanning* everywhere in our system.

Ph.D. education can be better, we thought, but it's not very difficult to make the claim that one needs an advanced understanding of *forskningsbasert utdanning* to make PhD education work.

Master's education is in the middle, and there are many interesting things to say there, but still we imagined fairly wide agreement for the claim that Master's education has to involve research experience.

It didn't take long for us to land on the idea that we should focus on the bachelor level. Why? Because this is where we think *forbedringspotensialet* [potential for improvement] is most obvious, at least when thinking about *forskningsbasert utdanning*.

I'll say a little more about where that potential lies, but I think there is also an important political reason to include bachelor education as an important focus of any discussion about *forskningsbasert utdanning* at a *forskningsuniversitet* [research-intensive university].

Putting it a little bluntly for the sake of the discussion, I'd like to suggest that an enhanced approach to *forskningsbasert utdanning* at the bachelor level is the key to solving the biggest problem our sector faces.

There are many candidates for what our biggest problem is. Here's mine, and for me it covers many of the others:

Our biggest problem is a lack of sufficient public support for what we do.

And that lack of public support builds on an insufficient public understanding of what we do.

There may be lots of public support, but it's not as strong as for other big public projects. A lot of people have a much easier time stating the societal value of hospitals and roads than they do for *forskningsuniversiteter*.

They don't have a solid enough understanding of the value of *grunnforskning* [basic research], and that lack of understanding is our fault.

But the solution to this situation is not to write more *kronikker* [op-ed pieces] -- although I think that writing a *kronikk* now and then is a good thing to do.

Formidling [Popularization] is important, but of the basic activities carried out at a university, I would claim that it's not *formidling* that is going to win us the magnitude of public support that we really need.

And it's not *forskning* [research] either.

Our best chance to enhance our situation in the public eye is by giving our students a highly valuable *utdanning* [education].

And the unique opportunity that a *forskningsuniversitet* has is to let that highly valuable educational experience reflect our uniqueness.

And this is part of why the task force I worked with decided to focus on bachelor level education.

The bachelor level is the place where the uniqueness of the university is perhaps least well exploited. When we come here today to talk about *forskningsuniversitet som studiested*, we have to think about the bachelor level, too.

I suppose one could decide that bachelor education doesn't need to be done at a *forskningsuniversitet*, but that decision, I think, would be a complete disaster both politically and economically -- but also educationally -- and I have to hope that no one is seriously thinking along these lines.

What can a *forskningsuniversitet* offer at the bachelor level that other institutions can't? What is really our uniqueness about?

In our report, the task force put it roughly like this:

At man holder på med både forskning og utdanning på samme institusjon er kjennemerke til et universitet. [That one conducts both research and teaching at the same institution is the hallmark of a university.]

At det drives forskning og utdanning ved samme institusjon er universitetenes fremste fortrinn. [That one conducts research and education at the same institution is a university's foremost competitive advantage.]

And this led us to state our focus as follows:

Vår ambisjon er å løfte frem den nære forbindelsen mellom utdanning og forskning som et faglig og strategisk fortrinn både for akademia og for samfunnet. [Our ambition is to highlight the close connection between education and research as a scientific and strategic competitive advantage for academia and for society.]

Our work to *løfte frem* [highlight] these issues was inspired in part by a central international project on research based teaching, a project known as the Boyer Commission. Their view on the matter is that ...

"... research universities need to be able to give to their students a dimension of experience and capability they cannot get in other settings ... Research universities have unique capabilities and resources; it is incumbent upon them to equip their graduates to undertake *uniquely* productive roles."

The challenge of this quote highlights a basic challenge, namely the need to develop a deeper understanding of what a bachelor's degree is. Most of our students, after all, will stop their education there.

Most of our educational contact with society is at the bachelor's level. Our best chance to give society a better understanding of the importance of research is through contact with students at the bachelor level.

We need to be clearer with ourselves about what we think the value of a bachelor's degree is. And then we need to make that clear to future employers and society in general.

The *kvalifikasjonsrammeverk* [qualifications frameworks] give a lot of help in doing this. In our task force, we also found it helpful to look at the work of

Dannelsesutvalget [Task force on being educated]. That group tried to articulate a particular notion of being educated that included things like:

evnen til å forholde seg prøvende og nysgjerrig til omverdenen og til å stille interessante spørsmål, [the ability to interact with the world with a challenging and curious perspective, and to pose interesting questions]

evnen til å sette faktaopplysninger inn i en videre ramme, samle informasjon fra en rekke kilder, analysere, uttrykke seg presist, [the ability to place factual information into a broader context, to gather information from a variety of sources, to carry out analysis, and to express oneself precisely]

(evnen til å) arbeide selvstendig og inngå i et større fellesskap. [the ability to work independently and to cooperate with others]

Our proposal is that our students will become better at these skills through an enriched notion of *forskningsbasert utdanning*, through participation in real research projects, through simulation of research activity in education.

These are the skills that put value in an education. Research-based education in unique ways provides the kinds of basic skills that *Dannelsesutvalget* has expressed concern about.

These are the essential skills that our students need to acquire from us. We have to make sure that happens. And we have to make sure that students see their value.

I think our long-term project is to construct better, more engaged and engaging, research-based education, especially at the bachelor level.

I take this view because I believe in the value of *forskningsuniversiteter* and I want the public to believe in that, too. I think the only real chance of getting there is by educating very large segments of the population in ways that they find meaningful and valuable, and which nonetheless build on research.

The report from the task force on *forskningsbasert utdanning* is rich in discussion of what it means to do *forskningsbasert utdanning* and it's rich in discussion of *how to do forskningsbasert utdanning*.

It's not narrow or restrictive, and it leaves much to you, but it contains examples and discussions which we think can improve our sector. I won't read it to you here, but I hope you'll get a copy and read it yourselves.

I want to wrap up with a quote and two challenges.

2011 is the International Year of Chemistry, and as I was looking for a pithy quote about research, one of the best I found came from a 19th century English chemist named William Henry.

He asked, "What is research, but a blind date with knowledge?".

It's our job to set up that date for our students. Are *you* doing that?

My challenges are these:

First, to those of you who now are working on applications for SFF-3:

Think about the entire educational cycle. Think about the uniqueness of your *forskningsuniversitet*. Think about how to integrate your vision for *fremragende forskning* [world-class research] with a vision for *fremragende utdanning* [world-class education].

Second, to the University of Oslo, on your 200th anniversary:

When I and my colleagues had resources to allocate 10 years ago, we didn't do anything with bachelor education. Nothing.

I know now that this was an enormous mistake.

What was my explanation? "I just didn't think of it."

Don't let that explanation become yours.