

Inaugural Lecture

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From Anecdotes to Facts- From Scholarship to Action

Introduction

Thank you for appointing me to extraordinary professor in the Postgraduate school. I am truly honored and humbled.

My most heartfelt and cheerful congratulation to the launch of the postgraduate school of the University of the Free State. What an exiting event!

Thank you for providing this opportunity today for mutual acquaintance during this inaugural lecture. I must admit, I had no idea what an inaugural lecture is. In the US only the President of the country gives an inaugural speech. I consulted Google and learned from the web example of the Imperial College of London about purpose and function of the inaugural lecture.

I also learned that the root word is *agure* =forseeing the future- I will end with my vision for the PGS here at UFS.

I asked myself, what would the audience like to know from a new professor. This thinking has guided the structure of my talk today.

I will answer 4 questions:

1. What kind of a professor is this person?
2. What can she contribute to the UFS?
3. What kind of research has she undertaken? What is her particular approach to knowledge? This section will explain my title.
4. What actions can we expect from her?

Actions are driven by visions. Visions become reality if they are shared by the community, and if the community becomes co-creators in moving the visions to reality. I will conclude with my vision for the future the PGS of the UFS.

Before I begin, I would like to get an idea who is here today. Would you mind raising your hand? Academic staff? postgraduate students? undergraduates? –department administrative staff? general campus administrators? - anyone from the city community?

1. What kind of a professor is this person?

I am a person who grew up after World War II in Germany and participated in the German Student movement of the 60s. In that movement, we longed for a university education relevant to society and opposed to the destruction of others. Since then, I have been committed to educating the next generations to become effective citizens of our interconnected world.

Throughout much of my life I have been situated at the edge of two cultures. This positioning has allowed me to be an insider in one culture while simultaneously having an outsider perspective on that same culture. This inherent comparative approach gives me a critical edge because my thinking takes very little for granted or as “natural” and looks beyond traditional boundaries. This positionality allowed me to consider postsecondary education in nationally comparative terms.

After studying political science in Germany, I became an international doctoral student in the US at UC Berkeley. I experienced first hand studying and learning in a different culture, and building a community in a new environment. There I was fortunate to add another culture to

my everyday life-India. I married an international doctoral student at Berkeley, a scientist and engineer who is also a professor.

I spent a sabbatical in Japan and in Germany, and, with frequent travels throughout my career to India, Europe and beyond, moving in and out of western and non-western cultures has become a second nature, part of my every day life.

My second question:

2. What can she contribute to the UFS?

I can contribute lessons learned from 4 **distinct professional experiences**.

(1) In all, I bring with me 17 years of administrative and scholarly leadership in undertaking the conceptual and practical transformational work of organizational change at 2 US Postgraduate schools, which are called Graduate Schools in the US. 12 years at UC Berkeley as Director of Graduate research-you call it Postgraduate Research- I worked and collaborated with the then Vice Chancellor for Research and Graduate Dean, the Berkeley faculty, Graduate Council, a committee of the faculty senate, student leadership groups, and the administrative departmental program staff

- to improve the quality of mentoring,
- shorten the time to doctoral degree,
- and improve doctoral completion rates.

For 5 years I served as Associate Graduate Dean at the UW where I translated research findings into practical applications for postgraduate community. I focused on professional development for academic staff by offering invitational seminars on current issues on graduate education. I nurtured the innovative, interdisciplinary

National Science Foundation funded doctoral programs, as well as the faculty who are the pioneers of these programs. The role these faculty play is not an easy one, but together we have found methods and strategies to ease the growing pains of true interdisciplinarity within the larger institution. I introduced an annual career symposium for postgraduate students and postdocs and an annual theme – the internationalization of Postgraduate Education: Challenges and Opportunities - to the programmatic offering of the Graduate School for the UW campus.

Three LESSONS LEARNED: were important:

First,

- In developing new policies and programs all involved groups need to be consulted.
- Second: A three-pronged approach worked best based on three critical questions:
 - What do **students** require for academic success?
 - What support does the **academic staff** need in order to advise and mentor effectively and collectively?
 - How is the **support staff** in the department and in the PGS to carry out the policies and changes?
- And third, changing the attitudes of senior academic staff about the actual experience of doctoral students and their career outcomes is perhaps the most challenging task. It is a slow process of involving them in useful approaches that makes their job easier.

(2) Second, I served the **larger US graduate education community** as Dean in Residence of the Council of Graduate Schools, the professional association of US Graduate Deans in Washington, D.C. In this capacity I developed a concept and framework for an international outreach component for this national US body, initiated and formulated my first

transatlantic collaborations with the German Research Council. These initiatives have evolved in recent years and are currently thriving.

LESSIONS LEARNED:

- When both sides of an international collaboration get to know each other at each other's home territory, trans-national interaction will flourish. (guided US deans through Germany)

(3) I bring my experience at a **higher education professor** to this UFS.

Lately I focus on the impact of globalization on higher education and the rapidly increasing internationalization of doctoral education at the macro level, and the increased number of international students and international exchange activities at the micro level. I am experimenting with a pedagogy that creates an environment where international students are equal partners to US students and are fully integrated into the classroom and the wider learning community. In my teaching I make transparent the professional skills needed for postgraduate students, for example - how to structure a seminar-style class, how to work effectively in teams, how to make presentations, how to write scholarly reviews, write papers and how to get them published.

LESSIONS LEARNED:

- Switching between macro and micro level of analysis invigorates not only me, but also my students.
- Bringing intercultural awareness to the classroom is immensely satisfying to everyone

(4) And lastly I bring experience as founding and current Director of the first research center for studies on graduate education in the US and, actually, in the world, to the UFS. The Center for Innovation and Research in Graduate Education (CIRGE) at the University of

Washington, Seattle is a resource on doctoral education that establishes empirical bases for trend assessment, policy decisions, and evaluation of innovations in graduate education. It focused on US national career path studies and what doctoral program graduates can tell us about the usefulness and application of their doctoral degree. Also CIRGE focuses on interdisciplinary, innovative doctoral programs. Our mission is to discover how best to prepare PhD students to be effective leaders in research and society.

In this role, as throughout my professional life, I am an initiator, convener, and collaborative person who takes on leadership if I can bring in other people to the table. At CIRGE I developed an international network of experts in doctoral education worldwide with a membership of 45 policymakers, graduate deans, funders and researchers from all 6 continents and 16 different countries. The *Forces and Forms of Change in Doctoral Education Worldwide* network held a series of 4 weeklong biannual workshops and has begun publishing books on doctoral education worldwide. The latest such workshop took place in Malaysia 2010

LESSONS LEARNED:

- Using the approach on career path analysis from the perspective of **people who have completed their doctoral degree and are pursuing professional careers**, we can address the many myths and anecdotes told at dinner parties or perpetuated by dominant media, such as the story about the taxi driver with an English PhD.

It is this area of scholarship of mine I want you to introduce to. (Friday morning I will talk more about the international research into doctoral education.)

Before I tell you what the myths are about US PHD career path, let me ask you what are some of the myth regarding career paths of South African doctorates? Is there any connected to race and gender?

Turn to your person next you and see what you have heard about. Talk for 2 minutes – few examples

If nothing comes: let me tell you what I have heard

The assumption is that most PhDs will leave academia for more lucrative positions elsewhere, to improve both their personal quality of life as well as that of family (both parents and children). Also, standards differ between universities. At the best universities only the best become from professors. Lesser universities are more lenient. It's a supply and demand situation.

by the time that a student has completed a PhD, their debt may be huge, so they opt for better pay outside academia. However, those who were already working at a university when they started studying will most likely stay in academia.

more white male PhDs stay in academia; most black PhDs (irrespective of gender) find very highly paid positions elsewhere because there are so few; women PhDs are generally fewer and older given that they raise families before further education (and in my opinion we still deal with a rather chauvinist higher education system, which makes it more tricky for women to progress in academic careers).

The third question I thought you would be interested in is:

3. What kind of research has she undertaken?

Astonishingly, there is little actual knowledge of what happens to PhD recipients or of their employment status five to ten years after degree completion. Until very recently we were left with a perplexing problem: How can we understand the effectiveness of our education when we have no idea what happens to our PhDs? How can the next generation of academic staff improve doctoral education if we do not create a feedback loop from those who have applied their education and who, from the advantage of employment experience, can also evaluate the quality of their education? Although currently enrolled students can evaluate their experience – as is done more and more today in

institutional exit surveys – they cannot adequately evaluate the quality of their education without having had an opportunity to apply it. In order to shed light on the effectiveness of doctoral education we set out to fill in the gaps by providing empirical evidence to answer these questions.

U.S. doctoral education, for the most part, is still structured as if it were meant to prepare all doctoral students for life as a university professor; as if times have not changed and graduate students have stayed the same. (see Nerad (2009) in Ehrenberg and Kuh (eds.)) This outdated assumption is one of a number of common assumptions still in the minds of academic staff and higher education policy makers, and the dominant media perpetuates that. Most assumptions are based on anecdotal information rather than empirical data.

The most prevalent common assumptions are:

1. All students who study for a doctorate want to become professors.
2. Professorial positions are highly desirable and only the very best doctoral recipients succeed in becoming professors.
3. The career paths of these people are straight forward and smooth, moving from PhD degree completion to assistant professor, with perhaps two years of postdoctoral fellowship in between, then to associate professor, and on to full professor.
4. Embedded in the above assumption is that everybody who successfully completes the PhD will most likely choose the very best academic job offer, unconstrained by relationship and family concerns.
5. And lastly, professors enjoy the highest job satisfaction compared to any other employment group.

In the following I will present results of three comprehensive national PhD career path and educational outcome studies that have been the basis for confronting common assumptions held about PhDs and questioning whether we prepare our doctoral students adequately for the present and future in these times of globalization and increasing national interest in the role of doctoral education for the knowledge economy.

GRAPH In order to avoid misunderstanding let me point out a number of essential differences in the use of **language** related to the topic at hand. In South Africa the word **faculty** means the organizational unit that houses several departments. The word faculty in the U.S. stands for academic staff. In the U.S. the academic staff is divided into two main groups: The first group comprises those who are on the track to becoming permanent academic staff and those who are tenured. The “*tenure-track academics*” are the assistant professors. Associate and full professors are those who were successful in achieving tenure. The second group consists of academic staff that is on contract or on time-limited temporary appointments. These are the lecturers, visiting or adjunct professors, in short. They are called non-tenure track academic staff.

Empirical Findings Challenge Outdated Assumptions

GRAPH The following findings come from three national career path studies: PhDs—Ten Years Later, PhDs in Art History—Over A Decade Later, and Social Science PhDs –Five+ Years Out. The first study, PhDs—Ten Years Later, funded by the Andrew Mellon Foundation and NSF, surveyed six disciplines at 61 U.S. universities, (capturing 57% of PhDs awarded in these disciplines during the three consecutive years of 1982-85. The survey was administered in 1996-97 and had a response rate of 66% for domestic PhDs and 51% for international PhDs). The disciplines surveyed

were biochemistry, computer science, electrical engineering, English, mathematics, and political science. The second survey, funded by the Getty Grants program, was administered in 2002, and surveyed all art history PhDs who completed their degrees between 1985 and 1991. This study had a 70% response rate. The third national PhD career path study, Social Science PhDs—Five+ Years Out, was funded by the Ford Foundation, and surveyed anthropology, communication, geography, history, political science, and sociology PhDs who graduated between 1995 and 1999. The survey was conducted in 2005-06, five to nine years after degree completion. The survey population accounted for 69% of all PhDs awarded in these disciplines during the four year time period. This study yielded a 45% response rate.

The questionnaires used in all these studies collected information on the career path, the search for first job, a retrospective evaluation of doctoral education, an assessment of the usefulness of the doctoral degree, and recommendations for current doctoral programs and students. Since 2002, starting with the art history study, the survey instrument also has tracked the relationship and family path parallel to the career path.

All PhDs Want to Become Professors

GRAPH The PhDs—Ten Years Later study showed that the first commonly held assumption—which all graduate students strive to become professors—was true for only about half of the PhD recipients in the six major fields surveyed. Moreover, the variations between fields were great.

Among PhDs in English and political science, most (81% and 72%, respectively) sought an academic career, while 19% of electrical engineering and 32% of biochemistry PhDs had academic career ambitions. Among art history

PhDs, at PhD completion 71% wanted to become professors. Social Science PhDs—Five+ Years Out found that the intent to become a professor ranged from a high of 78% of historians to a low of 57% of geographers at the start of PhD studies. At PhD completion, 84% of historians and 65% of geographers wanted to become professors.

The three national PhD outcome studies reviewed here find that overall between 50-60% of respondents held faculty positions when surveyed. The other 40-50% of the PhD recipients are employed in business, government and non-profit sectors (hereafter referred to as the BGN sectors). The largest proportions of PhDs working outside academia were electrical engineers and computer scientists, followed by biochemists.

The Best Students Become Professors

GRAPH The common assumption that the “best” people—measured by traditional standards of short time to degree, and multiple publications at time of PhDs—become professors held true only for English and political science in the fields surveyed for PhD—Ten Years Later. Logistic regression analyses indicated that short time-to-degree and number of publications was not associated with tenure status at survey for PhDs in biochemistry, electrical engineering and mathematics. Shorter time-to-degree was associated with tenure at the time surveyed for computer scientists. Higher-ranking PhD programs were associated with higher likelihood of holding tenure when surveyed, however, in fields with an attractive job market outside academia such as computer science and electrical engineering; the association with rank was not significant. Among art historians time to degree was not associated with tenure status at the time of the survey, and publications were positively associated with likelihood of holding tenure for women only.

Linear and Smooth Career Paths

Another assumption, that the career path from PhD to postdoc (if expected in a field) to assistant professor, to tenured professor is the dominant pattern for PhD recipients and its primary hallmark is its linearity, proved not to be true. All three studies showed the same picture. GRAPH About one third of the PhDs began their careers in a tenure-track position, but over half of all PhDs had ended up in a tenured, or tenure-track position at the time of the surveys. This finding implies that academic career paths are not linear. Many people start out in non-tenure track positions and over a period of four or more years switch to tenure track positions. This finding underscores the need to observe PhD career paths for several years after graduation, rather than relying on surveys on doctorate employment one or two years after degree completion, in order to gain an accurate picture of the career path and career outcomes of PhDs.

Everybody Can Take the Best Job Offered

Embedded in the assumption of linearity is the fourth assumption that a person is able to fully optimize his or her career options and take the best job offered after PhD completion. Among respondents to PhDs—Ten Years Later we found that the majority of women PhDs are partnered with someone who holds a PhD, MD, or JD, compared with one third or less of the men. GRAPH In biochemistry and mathematics the difference is even greater. Seventy five percent of the women biochemists have a partner with a PhD, MD, or JD, compared with only 24% of the men. In mathematics, 84% of women had a highly educated spouse, but only 25% of men. Among art history PhDs, almost half (47%) of partnered women had partners with a PhD, MD, or JD, while only 1/3 of partnered men had such highly educated partners.

After degree completion, during the time of the job search, the challenges of being in a dual career couple emerge. Our survey included a question about the most important reasons for choosing the first job. The answers from women and men differed significantly. The women were far more concerned that their partners also had a good opportunity than were men. The difference can be explained by the fact that the women tended to live with someone who could not easily give up one job and find another a similar one in any location. The majority of men were partnered with someone who was more mobile; thus men did not need to be concerned about the partner's mobility. This finding implies that the pursuit of careers is **far more complicated for the women than for men.**

Aside: I wonder if this is also true in South Africa?

GRAPH The career path study PhDs in Art History—Over a Decade Later allowed us to shed more light into the complicated situation of dual career couples; a situation that needs to be addressed at present and in the future as the number of women PhDs increases. In the art history study we tracked the career paths simultaneously with the relationship and family paths. Both men and women named the partner as the major influence on their careers. However, the proportion of women who named the partner as the most influential factor on the career was significantly larger than that of men. Women named children only as the second factor that influenced their career. A third factor was the care-taking of a family member, including a parent, which overwhelmingly is done by women.

Comparing tenure status at the time of the survey by gender and family status among art history PhDs reveals the complex interaction of

family, gender, and careers. Women and men who remained single had the same rate of tenure. Women in stable relationships with no children received tenure at the same rate as single women. However, men in stable relationships received tenure at a significantly higher rate than single men and than women in stable relationships. Women in stable relationships with children had a lower tenure rate than women in relationships with no children. However men in stable relationships with children had the highest tenure rate. **Stable relationships and children increase men’s likelihood for a successful faculty career, while both factors decrease the chances of earning tenure for women.**

In sum, marriage patterns of women PhD holders have a significant impact on their career paths.

Faculty Enjoy the Highest Job Satisfaction

Another common assumption that faculty enjoy the highest job satisfaction also proved to be outdated. In the PhDs—Ten Years Later study managers and top executives in business, government and non-profits were the most satisfied with their employment, and not the permanent faculty. The reason for their high job satisfaction was **not salary**, but intellectual challenge of work and autonomy at the workplace. Both of these are job qualities that we traditionally have attributed to an academic work setting. Tenured professors ranked fourth in job satisfaction among those surveyed for PhDs—Ten Years Later.

GRAPH The Social Science PhDs—Five+ Years Out study compared job satisfaction on three dimensions that were constructed from 20 items with a factor analysis—on three dimensions: satisfaction with the work itself, with status, and with overall quality of life.

Employees in the BGN sector and academic staff are equally likely to be very satisfied with job status and with quality of life, BGN employees are somewhat less likely very satisfied with their work itself.

All three surveys found that in all fields, including English, PhDs employed in the **BGN sectors earned a higher salary than those in academia.**

These findings have several implications. **First**, the doctoral degree itself is put to many different uses in a variety of employment sectors. **Second**, doctoral education has been and can be the passport to a successful career path in many sectors. And **third**, the university as a workplace is for all not the most attractive destination, as commonly assumed. Such empirical information is essential in our attempt to prepare doctoral students for the future. This information tells us that PhD education proves to be useful and valuable for doctoral recipients. However, it also reveals that doctoral education needs some modification as the erroneous, but influential, assumptions mentioned earlier are still shaping curriculum, research and professional development activities.

With this excerpt from past studies I wish to persuade you in the near future to start tracking your/our postgraduates.

This brings me to the last question you may want to know:

4. What actions can you expect from me in my appointment as Professor Extraordinary in the PGS?

(1) I am committed to support and consult with PGS in any way I can and will continue to work with the entire staff (professors, administrative

staff, and students) as I have done during my visit to this campus last summer, and during the educational trip arranged for some of your campus leaders Drieke, Neil, Frans and Lise who traveled to US west-coast graduate schools to learn about different models of graduate schools, their cultures and systems.

(2) And I am ready to work on whatever emerges.

(3) I particularly will encourage the use of research to better understand postgraduate education in all its dimensions here at UFS and to use the evidence-based findings as a base for policymaking and resource allocation.

(4) I am engaged in facilitating your two campus initiatives:

- a) *Leadership for Change* Initiative on the undergraduate level;
- b) *the Prestige Scholar programs*.

UW Bothell have signed on to the Leadership for Change program and will receive your 2011 cohort in October at our Bothell campus.

5. What are my visions for the future the PGS of the UFS?

At the macro level globalization continues to change the world rapidly and demands a unique set of personal characteristics to succeed in the 21st century labor force. This includes advanced education, intellectual creativity paired with intellectual entrepreneurship and an ability to define and solve societal problems collectively in interdisciplinary teams across national boundaries. Nations around the globe have recognized the direct contribution of graduate education to the economy and have responded with a renewed interest in its transformative role. In this context, it is not enough for research universities to simply increase their doctoral degree production; but instead, they need to critically rethink whether their current mode of preparing scholars is appropriate. In my talk last August here I talked about the need for 3 type of competencies that the next generation of researchers need:

- o traditional academic competencies,

- Professional competencies,
- and intercultural competencies

My lifelong commitment to providing the kind of education helpful in preparing constructive global citizens has led me to give a great deal of thought and action in this arena. In this context, let me share with you my visions for the Faculty of Postgraduate School at UFS.

GRAPH

1. Five years from now, I see PGS of the UFS having strengthened its position as a major, driving force in the **national South African postgraduate education community** for internationalizing postgraduate education. PGS at UFS is becoming widely known for graduating exceptional professionals and scholars who are not only leaders in sustainability, but also skilled agents of change in the realm of poverty reduction and race relationship. I see these sought after graduates having a strong, positive impact as they pursue careers in universities. but also in business, industry, government, non-profit organizations.
2. In 5 years, as a result of leveraging its existing strengths in the Free State, I see the PGS supplying increased numbers of skilled postgraduates who are **intellectual entrepreneurs and risk takers with a social consciousness, who have sustainability of the systems of the planet as a core value**. These graduates will drive the new economy of the Free State in the public and private sectors: in industry, business, government, the arts and higher education. The PSG will have expanded its funding base to support its current and future levels of excellence. One measurable outcome will be increase postgraduate students.

3. Five years from now the PSG will have taken the lead in preparing graduate students who are **world citizens**, by increasing and creating new, unique and functional partnerships with major universities and research centers both in countries that are rich in social and economic resources, and in countries that have struggling economies and educational systems. These rich collaborations, beneficial to students and faculty alike, will be characterized by mutual environmental and social concerns and by broad ranging learning – from the time wisdom of indigenous peoples, to the precision of the most sophisticated scientific and humanitarian research. The emergent scientists and scholars will have enjoyed an internationalized content in their studies and research, and will have considered, as well, the local impact of their work. Full integration of modern information technology will play a vital part in reaching this vision.

4. In 5 years I see the PGS continuing along its path of **conserving what works well and experimenting to change what doesn't work well**. It will continue to seek to address the whole person of its students, professors and staff, and will enjoy a distinct reputation as an institution offering a vibrant and humane educational experience. The PGS will be known as a creative space where people willingly question assumptions and work maturely together to make the world a better place for themselves and others.

Strategies to Achieve the Goals

To accomplish this vision Neil, Jonathan and I invite all groups—academic staff, students, administrative staff, and central administration-- to the table to be participants and co-creators. Not everything can be accomplished at once. Together we need to set priorities and plan realistic annual goals. Together we need to shape the

vision to be truly ours together, and to innovate and take risks and back each other up so we can bring a common vision into rich reality.

Would you indicate by show of hands?

1. Who would like to see this vision become reality?
2. Who would like to co-create in making this vision become reality?

Wonderful to have so many willing change agents!

I will end my inaugural presentation here by thanking you for your keen attention. I look forward to our work together.

And, to keep the vision into action focus, I would ask Jonathan and Neil to briefly comment what they will contribute initially to the UFS community as co-creators with us in making this vision a reality.