A Rational Framework for Mentoring and Guiding Graduate Students

F.P.A. Demeterio III
Full Professor, Filipino Department
Director, University Research Coordination Office
De La Salle University
I believe that there is something wrong with Philippine graduate education.

In more advanced countries, graduate education is delivered by training the students at the very outset to produce knowledge through collaborative research with their mentors.

In the Philippines, we put them in classrooms first and ram additional knowledge into their throats, give them comprehensive examinations, and towards the end of their stint, require them to do research with the full knowledge that only very few of them will survive to earn their desired degrees.
Hence, instead of talking about how you are supposed to seek guidance and feedback from your mentors, I am going to talk about a rational structure, where the research interaction among graduate students and mentors continuously happen from day 1 of the graduate program to even beyond the final thesis/dissertation defense.

I am going to talk about a system that we lack in the Philippines, that made thesis/dissertation writing very difficult for graduate students, that made the Philippine graduate program very inefficient in making our graduate students earn their desired degrees, that made research in general very sparse among Filipino academics, and that made the strange norm of having research mentors who themselves are not pursuing research projects.
I will spend the forty minutes allocated to me, talking about the various models of the research university as well as of the research-informed teaching university, with the hope that you later on will pursue these models to make the lives of the succeeding generations of Filipino graduate students a lot easier than what you have experienced.

My talk therefore is not short ranged, and does not involve you as graduate students. Instead, it is long-ranged and involves you as future mentors of future graduate students.

The main problem that is ailing Philippine graduate education is the fact that we do not have real research universities. And most of us are even unaware that we need to have these research universities.
My talk this afternoon, therefore, has the following short sections:

1. Overview on Humboldt’s Philosophy of Education: the Humboldtian/German Model of Research University;
2. The American Translation of the Humboldtian Research University;
3. The British Adaptation of the Humboldtian Research University;
4. The Asian Adaptation of the Humboldtian Research University;
5. The Emerging Global Model of Research University; and
6. The Four Articulations of the Research Informed Teaching University.
The story of the invention of the German research university happened in Prussia, once the most powerful Germanic states.

The German research university was invented by Wilhelm von Humboldt in around 1810 when he founded the Prussian University of Berlin (later on named Humboldt University of Berlin).

In this model research became the method of teaching. Professors are expected to teach by showing the actual process of knowledge production to the students, through collaboration with the same students.
At the heart of the modern university is the dynamic and infinite conception of knowledge/science.

For Humboldt, teaching knowledge/science as something done and complete, is only good for the secondary school.

In the university, knowledge/science should be taught as it really is: dynamic and infinite.

This conception of knowledge/science can only be effectively taught through research.
At the heart of the modern university is the dynamic and infinite conception of knowledge/science. For Humboldt, teaching knowledge/science as something done and complete, is only good for the secondary school. In the university, knowledge/science should be taught as it really is: dynamic and infinite.

This conception of knowledge/science can only be effectively taught through research.

If in the traditional university, there was a dichotomy between teaching and research. In the modern university, research became a way of teaching.

1. The unity of teaching and research: where research is used as the pedagogical method.

There are three unities in the modern university.

- Grants
- Autonomy
- Progress
- Citizens
- The State

Monitoring Sustenance

Unity of Teaching and Research

Unity of Teachers and Students

Dynamic and Infinite Knowledge/Science

Research University

Unity of Knowledge

Freedom and Solitude
2. The unity of teachers and students, where professors are expected to do research with their students.

The students need the experience and expertise of the professors in doing research.

But the professors also need the fresh ideas and out of the box thinking of the students, as well as their youthful energies and passions.
2. The unity of teachers and students, where professors are expected to do research with their students. The students need the experience and expertise of the professors in doing research. But the professors also need the fresh ideas and out of the box thinking of the students, as well as their youthful energies and passions.

3. The unity of knowledge, where all the knowledges produced by the different faculties will not contradict with each other and will eventually form a coherent whole.
Freedom and solitude must prevail within the university, so that the professors and students will have that conducive and unhampered atmosphere for their unending quest for knowledge/science.

Freedom inside the modern university is specifically articulated as freedom to teach/research on the part of the professors, and freedom to learn on the part of the students.
Freedom and solitude must prevail within the university, so that the professors and students will have that conducive and unhampered atmosphere for their unending quest for knowledge/science.

The state, therefore, must give autonomy to the modern university. It must prevent the church from interfering in the affairs of the modern university.
Freedom and solitude must prevail within the university, so that the professors and students will have that conducive and unhampered atmosphere for their unending quest for knowledge/science.

The state, therefore, must give autonomy to the modern university. It must prevent the church from interfering in the affairs of the modern university.

To assure that this financial support will not deteriorate into a policy interference in the future, Humboldt preferred that grants should be in the form of long term land endowments. Since the modern research university is an expensive venture, the state must be willing to shoulder its whole operation.
Aside from the provision of grants and the assurance of autonomy, the state should also monitor the university to prevent its institutional structures from deteriorating.

Humboldt is particularly concerned with the recruitment of professors. If the universities are left alone to recruit its professors, they could easily degrade into the situation of nepotism and giving preferences to friends and political allies.

Thus, in the Humboldtian university, the professors are appointed by the state.
After all the trouble of putting up the modern research university, providing it with grants and autonomy, as well as monitoring its continued institutional integrity, the state finally reaps its rewards. The university provides the state with knowledge/science that it needs to fuel its socio-economic and cultural development. The university also provides the state with superior and intelligent citizens who will work for the progress and development of the state.

Humboldt believes that the research/education received by the students in the modern university would eventually provide them with the formation/cultivation (Bildung) that they will need as cultured and dedicated citizens of the state.
The University of Berlin became the model of the modern university, or more specifically the modern research university. The universities of Breslau and Bonn were the first ones to be established after this model.
Around 1850 to 1870, American academics learned about the educational revolution that happened in Germany. Thousands of them went to Germany to obtain their doctor’s degrees in the famed German universities, such as those of Berlin, Heidelberg, Leipzig and Gottingen.

From 1869 to 1909, Charles William Eliot (studied at the Marburg University) served as the president of Harvard University and led its transition from Harvard College into the leading American research university.
In 1876, the Johns Hopkins University opened under the leadership of Daniel Coit Gilman (studied at the University of Berlin). Johns Hopkins University was explicitly modelled after the German research university, and became the first modern university in America, and the first to offer graduate studies.
1885, the Stanford University was founded. Of its original 30 professors, half earned their degrees from Germany. Its original logo bears a German motto: *Luft der Freiheit weht* (the wind of freedom blows).

In 1887, the Clark University was established under the leadership of Granville Stanley Hall (studied further at the University of Berlin). To focus on research, Clark University started as a purely graduate level university. It, however, opened its undergraduate programs more than a decade after.
In 1890, the University of Chicago was founded under the leadership of William Rainey. The University of Chicago made the innovation of retaining its undergraduate program as an English style college, while modeling its graduate program on the German research university.
In the end this was how the Americans translated the Humboldtian research university: the model was predominantly applied to graduate education, while the American undergraduate education retained its old British model.

Hence, the American model of the research university is a composite of a 17th century British undergraduate base that supports a 19th century Humboldtian graduate education.

To energize this expensive model, the American research universities counted on expensive tuition fees, government endowments, private endowments, and further government grants.
The British model of the research university followed the German emphasis for research but held on to the Socratic principle of maieutic/elenchic pedagogy. In the British model, the professor individually guides, through questions, the researchers/students.
The British model, therefore, has the elements of detachment and hierarchy that are not found in the German/Humboldtian model of the research university.

The British model also continued to rely on liberal arts in order to pursue the transformation of the student (*Bildung*), unlike in the German/Humboldtian model where *Bildung* was an expected by product of intensive research.
The Asian model of the research university is also geared towards increased research productivity through the collaboration between professors and students. Japan was the most ardent follower of the German research university.

But formulated in a time when the rich and developed Asian countries were still in the process of attaining their current statures, the Asian model of the research university acknowledged that basic research be better done in the west and that Asia focus on application and improvement-based researches.
This brings the Asian model of the research university closer to industry partners than the western models that are concerned with highly theoretical and advanced researchers with no immediate economic utility.

But as some Asian countries became rich and highly developed, basic and highly theoretical researches were also pursued in their well funded and highly westernized universities.
The robust universities that initially pursued the German/Humboldtian, British/Oxbridge, American and Asian models have developmentally converge into what is known as the emerging global model of the research university, or super research university.

The characteristics of the emerging global model of the research university are:
Its mission transcends the boundaries of the nation-state and advocates for education for global perspective and the advancement of the frontiers of knowledge worldwide. Its recruitment of human resources (professors and students) is also borderless.

It is increasingly more research intensive and use scientific methods in disciplines outside the sciences.
Its faculty members are engaged in researches that are team-oriented, cross-disciplinary, international collaborations, and directed towards real-world problems.

It has intensive financial and functional partnerships with the government, private donors, corporations, and funding agencies and ventures into the utilization of innovations for profit.
It has well articulated internal organization (such as interdisciplinary centers) and well established infrastructure for research (such as advanced laboratories), and functional system for the integration of research and pedagogy.
The research-informed teaching university (RITU) is a model that emerged within the American research universities as they problematized the relationship between faculty research and undergraduate instruction.

From these American research universities, the model spread to the younger British universities that had also become research intensive at the time when higher education was already massified.

The model of RITU is composed of four different articulations specifically for undergraduate education.
FOUR ARTICULATIONS OF THE RESEARCH INFORMED TEACHING UNIVERSITY

Alan Jenkins and Mick Healey generated the four using the following x and y axis:
FOUR ARTICULATIONS OF THE RESEARCH INFORMED TEACHING UNIVERSITY

Student-focused
Students as participants

- Research-tutored
  Curriculum emphasised learning focused on student writing and discussing papers or essays

- Research-based
  Curriculum emphasises students undertaking enquiry-based learning

Emphasis on research content

- Research-led
  Curriculum is structured around teaching content

- Research-oriented
  Curriculum emphasises teaching processes of knowledge construction in the subject

Students as audience
Teacher-focused

Emphasis on research processes and problems
Student-focused
Students as participants

Research-tutored
Curriculum emphasised learning focused on student writing and discussing papers or essays

Research-based
Curriculum emphasises students undertaking enquiry-based learning

Emphasis on research processes and problems

Research-led
Curriculum is structured around teaching content

Research-oriented
Curriculum emphasises teaching processes of knowledge construction in the subject

Students as audience
Teacher-focused
I think I have explained to you:

1. Overview on Humboldt’s Philosophy of Education: the Humboldtian/German Model of Research University;
2. The American Translation of the Humboldtian Research University;
3. The British Adaptation of the Humboldtian Research University;
4. The Asian Adaptation of the Humboldtian Research University;
5. The Emerging Global Model of Research University; and
6. The Four Articulations of the Research Informed Teaching University.
A Rational Framework for Mentoring and Guiding Graduate Students

End of Presentation