

Exploration geoscience in academia – quo vadis?

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Summary

Academia can be defined as a community involved in the pursuit of education, research and scholarship. Several academics around the world are involved in this pursuit in the field of petroleum exploration geoscience. This field has traditionally involved applied geology, geophysics, petrophysics and petroleum engineering. The exploration academic community has seen large variations in student enrollment at the undergraduate and graduate studies levels.

The past three years have seen record numbers of geoscience students graduating from the University of Calgary. Enrollments have been very high for graduating classes of 2012-2017 and they are projected to be high for the classes of 2018 and 2019. However, there will be a significant reduction in graduates in 2020 due to low first year student enrollments in Fall 2016 (at about 1/3 the “normal enrollments for 2012-2015”). This reduced enrollment is in response to the unprecedented unemployment of geoscience professionals in the petroleum during the past 3 years. In response to unemployment, we see many students applying for entry into graduate school in recent years with geoscience graduate student numbers exceeding 200 at the University of Calgary. The University has provided a “sanctuary” for geoscientists who seek to improve their skills and education - while buying time during the storms in industry. The investment of time and money in enhanced graduate school education is based on the hope that the petroleum industry will rebound and that the decrease in industry funding of university research will also not continue unabated.

Also, the question may be raised as to what the future holds for geoscience studies in the university during the coming decade. The academic community has been involved in both research and teaching to provide the optimum supplement to industry activities. Graduate studies may provide the ideal solution to the “problem of the four year phase lag” that exists between undergraduate education and employment in industry. Graduate studies and education in related fields provide solutions to this problem. However, there are troubling signs of trends within the universities themselves. During the difficult times in the private sector, the universities have increasingly depended on government funding. Given the burgeoning deficits and debts in all levels of government, it is very likely that government funding of postsecondary education will decrease in the near term, or at best only keep pace with inflation. What is to be done?

In a recent book, *The Slow Professor*, by Maggie Berg and Barbara Seeber, there is a disturbing realization of continuous increases in university administration and bureaucracy. Academics are having less time to pursue research and direct communication with students. More funding is funneled into bureaucracy and administration in the present-day university, with academics spending less time in collaboration and “thinking together” to solve research problems. The remedies proposed in *The Slow Professor* for reversing these present trends may offer hope for the university’s “return to community” during tough economic times.