

# The Path Forward

The Future of Graduate Education in the United States (excerpts).

*Commission on the Future of Graduate Education in the United States. 2010.*

Undergraduate education is important to the creation of a stable economy, providing students with foundational knowledge and work skills and offering college graduates a wide range of employment options. But graduate education goes beyond just providing students with advanced knowledge and skills—it also further develops critical thinking skills and produces innovators. It is the application of knowledge and skills in creative and innovative ways that will help ensure our country’s future economic prosperity, influence social growth,<sup>2</sup> and maintain our leadership position in the global economy. The assumption underlying this report is that the competitiveness of the United States and our capacity for innovation hinges fundamentally on a strong system of graduate education (pp. 1-2).

Over the last 20 years the structure of the economy has shifted to a knowledge-based economy favoring more educated and academically skilled workers.<sup>53,54</sup> One indicator of this shift is the earnings premium associated with education and academic skills.<sup>55</sup> This trend is expected to continue, with growth in jobs in service-providing industries and fewer jobs in the goods-producing sectors of the economy. More than half of the new jobs projected over the next 10 years will be in professional and service occupations. For example, the scientific and technical consulting industry is projected to show significant employment growth from 2008 to 2018.<sup>56</sup> More and more workers will be asked to *think* rather than *produce* in the traditional manner of manufacturing industries of the past.<sup>57</sup> While no definitive number can be provided, jobs that typically require an advanced degree are expected to increase between 2008 and 2018, with a projected estimate of 2.5 million available jobs. It is projected that the number of jobs requiring a master’s degree will increase by about 18% during this time period and those requiring a doctoral degree by about 17%.<sup>58</sup> (p. 17)

The largest occupational growth areas for master’s degree holders will be in healthcare and education. For doctoral degree holders, occupational growth areas will be in service industries in the professional, scientific, and technical arenas. While master’s programs are frequently attuned to the needs of the workplace, this is not necessarily true at the doctoral level. For many doctoral students clear career entry points are lacking, and it is critical to provide career transparency to these students. Professional development programs at the university that provide doctoral students with transferable skills valued by employers outside of the academy need to be considered. Innovative graduate programs offering internships and financial support from industry also are called for. Changes at the university, industry, and government levels are essential.

But most of all, an understanding of the role of graduate education in today’s world and in the future is required. Finding solutions for the challenges that face our nation, ensuring continued future prosperity, and maintaining our position in the global economy will require a highly skilled, creative, and innovative workforce. These creative innovators will be the product of the U.S. graduate education system. (56-57)

<sup>2</sup> Council of Graduate Schools. (2009). *Graduate education in 2020: What does the future hold?* Washington, DC: Author.

<sup>53</sup> Katz, L. F., & Murphy, K. M. (1992). Changes in relative wages, 1963-1987: Supply and demand factors. *The Quarterly Journal of Economics*, 107(1), 35-78.

<sup>54</sup> Juhn, C. (1992). Decline of male labor market participation: The role of declining market opportunities. *The Quarterly Journal of Economics*, 107(1), 79-121.

<sup>55</sup> Pencavel, J. (1991). Higher education, productivity and earnings: A review. *Journal of Economic Education*, 22(4), 331-359.

<sup>56</sup> U.S. Bureau of Labor Statistics. *Employment projections: 2008-2018 summary*.

<sup>57</sup> Council of Graduate Schools. *Graduate education in 2020: What does the future hold?*

<sup>58</sup> U.S. Bureau of Labor Statistics. *Employment projections: 2008-2018 summary*.