Examples of how forward-leaning academic libraries are attracting students include the following:

•The Grand Valley State University Library's Knowledge Market provides students with peer consultation services for research, writing, public speaking, graphic design, and analyzing quantitative data. Among a number of specialized spaces, the library offers rooms devoted to media preparation, digital collaboration, and presentation practice.

•The libraries of North Carolina State University (NCSU) offer makerspace areas where students get hands-on practice with electronics, 3D printing and scanning, cutting and milling, creating wearables, and connecting objects to the Internet of Things. In addition, NCSU students can visit campus libraries to make use of digital media labs, media production studios, music practice rooms, visualization spaces, and presentation rooms, among other specialized spaces.

•The Ohio State University Library Research Commons offers not only a Writing Center, but also consultation services for copyright, data management plans, funding opportunities, and human subjects research. Specialized spaces in the library include conference and project rooms, digital visualization and brainstorming rooms, and colloquia and classroom spaces.

#### **REIMAGINING LIBRARIES**

By thinking beyond the book, as they reimagine libraries, academic librarians are adding onto, and broadening a long learning tradition, rather than turning their backs on it. In the words of Sam Demas, college librarian emeritus of Carleton College:

For several generations, academic librarians were primarily preoccupied with the role of their library buildings as portals to information, print and later digital. In recent years, we have reawakened to the fact that libraries are fundamentally about people—how they learn, how they use information, and how they participate in the life of a learning community. As a result, we are beginning to design libraries that seek to restore parts of the library's historic role as an institution of learning, culture, and intellectual community.

Any academic library able to live up to so important a role will never outlive its usefulness.

# What Happens to Graduates? Contrasting Views of Two Systems

### CLIFFORD ADELMAN

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An increasingly visible question facing higher education authorities in countries with advanced data tracking capacity is "what happens to our university graduates?" Answers both justify investments in plant, equipment, and faculty, and reassure students facing otherwise uncertain futures. This article looks briefly at two major approaches to addressing that question, both involving large higher education systems. The first is the "Baccalaureate and Beyond" longitudinal studies program in the United States (hereafter B&B). The second is reflected in the final report of a study of the feasibility and potential design of a survey of European university graduates (download at www.eurograduate.eu). Beyond the potential involvement of 30 countries and 25 languages in Europe, the differences between these approaches are considerable and enlightening.

Before going further, we acknowledge that the US surveys and reports are realities, whereas the European Graduate Survey (hereafter EGS) is a yet-to-be-realized template.

## MOTIVATIONS AND PURPOSES

The US B&B surveys from the National Center for Education Statistics (NCES) were undertaken in 1993 motivated by (a) the limitations of NCES' previous Recent College Graduates cross-sectional surveys, conducted six times between 1974-1975 and 1989-1990 with a universe of students only one year after receipt of a bachelor's or master's degree, and with heavy emphasis on the future supply of teachers; and (b) as a natural extension of national longitudinal studies begun in secondary school and running for 12–14 years, but with limited capacity for tracking postcollege careers and lives. B&B irons out the former and extends the latter.

The EGS feasibility study, funded by the European Commission, sought a design for an account of the professional and personal life of graduates across the continent in ways that would overcome the inconsistencies of national tracking studies (e.g. the German Tracer Studies Co-Operation Project KOAB in Germany; Alma Laurea in Italy). It involved a more statistically convincing number and type of participants than did previous multinational surveys such as REFLEX (Research into Employment and Professional Flexibility), 1998-2000.

## STRUCTURAL DIFFERENCES

The principal characteristics of the EGS, compared to its US parallel, are as follows: First, the US reference points are bachelor's degree recipients only; the European "graduates" include *both* bachelor's and master's degree recipients, a natural extension of Bologna Process reforms, in an environment where more than half of all bachelor's degree recipients continue to the master's degree. Second, the National Center for Education Statistics in the United States runs single panel B&B surveys for 10 years. The EGS feasibility recommendations are for two simultaneous panels: one retroactive for five years, the other prospective for one, four, and (depending on success, interest, and funding) nine years. The Europeans get immediate retrospection, and potential action going forward. The former is designed to produce commitments to the latter.

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The third structural difference, participation and sampling, is more complex. B&B is situated in one country, presented in one language, and uses a universe that is a subsample of the base year's National Postsecondary Student Aid Survey (NPSAS), consisting of those who earned a bachelor's degree in that year. The EGS panels, in contrast, would be drawn de novo from whatever configuration of countries commits to participation (it could be nine; it could be 19), and whatever groups of institutions each country chooses. The US weighting of the B&B sample is simple compared to the variability of country sampling, and two weightings-within country and across participating countries-that Europeans would face. In all such studies, there is an inevitable decline in participation, hence continued reweighting of samples. For example, (from B&B) the same student would be weighted 515.280, 529.535, and 542.523 across three surveys with falling denominators. In the EGS, the same student would carry six weights (three in-country and three pan-European) across three surveys.

Lastly, the issue of funding. There is a single source of fiscal support for B&B. Funding for the EGS would come from individual participating country ministries plus, (if they so choose), international organizations such as the European Commission, OECD, and/or others. Without adequate funding, there will be no EGS, and thus a lost opportunity to create a unified, continental information infrastructure.

#### **THEMATIC DIFFERENCES: SELF VS. SOCIETY**

Personal satisfaction is a prime thematic line of the US B&B: satisfaction with a variety of aspects of graduate education (career preparation, time, effort); satisfaction with employment (challenge, benefits, pay, security, working conditions, relationship to courses of study); and satisfaction with personal finances. All these measures are taken with each survey administration. The self is the center of inquiry.

Personal satisfaction is not the center of either surveys or discussion of the contents in the proposed EGS. Instead, a greater stress is placed on larger social units and activities, including engaged citizenship; social/cultural/economic orientation; economic cycles; and social networks. To the extent to which the self appears at all, it is in questions concerning the quality of life, work-life balances, and "trigger events" in the life cycle.

In the matter of labor market experience, B&B concentrates on occupational job type, requirements, location, and personal autonomy and flexibility, along with post-baccalaureate training, including its costs and components (training is not an EGS topic). There is some overlap in the two undertakings' concern with what EGS designers call "quality of employment" components-hours, salary-though EGS is more descriptive and less tied to bald numbers. In addition, the proposed EGS template is structured to tie labor market requirements back to postsecondary experiences at every turn. That is something one does not see in US surveys, despite the groaning of commentators about the failures of undergraduate education. Nor do the B&B variables allow for the EGS distinction between level of skills required on the job, level of skills acquired through education, and level actually used in occupational life, as an approach to frequently moaned "mismatches" in US stocktaking. The EGS distinctions, as its designers emphasized, are those of "sustaining employability."

# PARALLEL DIVERGENCES: INDIVIDUALS AND INSTITUTIONS

While B&B is about individual students, the US Department of Education's annual (since 2013) cross-sectional "Scorecard" underscores the US obsession with individual institutions, presenting data that lead to a rankings mentality. In contrast, "comparison of individual HEIs" ranked 11 out of 11 potential EGS topic categories across all European ministries, rectors' conferences, and research groups surveyed.

Then, under labor market results, fall earnings. Out of II topic categories for the texture of an EGS, "returns on education" (a more complex notion than earnings) becomes a complex creature in Europe, as tuition can be \$0 in a number of countries, and annual fees range from the nominal to \$400. In the EGS design priority surveys, return-on-investment ranked sixth among ministries, seventh among national rectors conferences, and seventh among research groups. This is not a very prominent position for an indicator of future status. European discussants have substituted "earnings" with "assessment of competencies received/acquired on the job," i.e. they regard job-based knowledge and skills to be the equivalent of compensation. In contrast, the one metric on the US "Scorecard" that has vaulted over all others in attention by both institutions and the media is "average personal earnings 10 years after graduation," by institution, however limited and rocky its sources.

In sum, we have two sometimes overlapping, but very different sets of measures tracing the lives of former degree recipients: one highly individualistic, the other far more oriented to broader social settings. The resulting metrics determine the shape of system accountabilities and the tone of assurances to students themselves.

# Missing but Needed: Research on Transnational Education

## JANE KNIGHT AND QIN LIU

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Why is there so little research being done on transnational education (TNE)? TNE, briefly described as "the mobility of higher education programs and institutions/providers across international borders," is still a relatively young sector of higher education provision, but it is growing in scale, scope, and complexity. In many countries, it can provide 10 percent of higher education provision, and in others up to 40 percent. With significant new developments, challenges, and opportunities with TNE, it is time to be better informed about the research and analysis being done on TNE, and to encourage the next generation of researchers to focus on program and provider mobility—not only student mobility.

The purpose of this article is to provide highlights from a recent analysis of more than 300 journal articles, book chapters, reports, and dissertations on TNE published since 2000. The main sources of references were the comprehensive ERIC database and the Australian Council for Education Research IDP Database of Research on International Education. The systematic review coded all academic references as to the type/mode of TNE provision, date of publication, research methodology, major theme, geographic focus, and source of reference. The review focused on various modes of program and institutional/provider mobility and thus did not address student mobility per se. Research on distance education was not included.

The most striking finding is the chaos and resulting confusion as to how different modes of TNE are interpreted and labelled. There are many terms used in the literature and practice to describe the same TNE mode. Conversely, one term applies to many different types of TNE. The inconsistent use of terms makes comparisons of TNE provision and research within and across countries challenging and often inconclusive. It also means that generalization of research findings is difficult and the analysis of internationally comparable TNE data questionable.

### Modes of TNE—International Branch Campus, Partnership Programs, Joint Universities, Franchise

Given the inconsistency in TNE terminology, each reference was carefully reviewed and eventually categorized as to mode of program and provider mobility. The result reveals the following distribution of TNE research references: international branch campuses (IBCs), 29 percent; partnership programs (involving collaboration between host and sending countries such as twinning and joint/double degree program), 16 percent; joint universities (binational, cofounded, and codeveloped institutions), 6 percent; franchise programs (export programs from sending countries), 5 percent; and multi-mode/generic TNE research, 43 percent. Clearly, more research is focused on IBCs than on other modes. When geographic focus is factored in for IBCs, it shows that research from the viewpoint of the sending countries is most prevalent, and research from the host country perspective significantly underrepresented. With TNE representing a growing percentage of higher education in host countries, it is worrisome that there is little TNE research from the host country point of view.

### **MAJOR THEMES**

Each reference was coded for the primary topic addressed. Ten major themes emerged from this analysis. The results show that about 28 percent focused on management and