

DEVELOPING INDICATORS FOR A COMPARATIVE FRAMEWORK OF DOCTORAL EDUCATION IN THE US AND GERMANY

Presentation of work in progress to the CHER 32th Annual Conference, University of Kassel, Germany, 2019

Author: Anne MACLACHLAN, University of California, Berkeley, CA. USA

Abstract:

Purpose: To create indicators which permit comparisons between the US and German systems using largely existing empirical research on doctoral education analysed in case studies. Given the variety and complexity of doctoral programs in each country comparisons require a systemic structural and functional analysis different from the Carnegie system or how German universities are grouped together as in U15, TU9, etc. US data, secondary literature and my own research permit this. The German sources are less extensive, but sufficient. The starting point is the professed purpose of the different types of programs based on formal structure of the institutions and specific programs and their stated goals. These attract different kinds of students with different professional objectives mediated by national culture. For this study the disciplines of biology and history will be used since the author is intimately connected to both, and they offer a large contrast in program organization in both countries. Examples of potential indicators include admission practices, faculty scholarship, student professional development, emphasis on future employment type. The final objective is to identify elements common to both countries which could be extrapolated into a model permitting cross-national comparisons of doctoral education.

Design/methodology/approach:

Structural knowledge is based on existing official data, websites, reports and literature (NSF, BMfBK, CGS etc.) to build an organizational schema of the different types of doctoral programs in both countries. Case studies of biology and history programs are selected from each type of institution to identify the function of each program in terms of goals such as knowledge creation, disciplinary socialization, and the interconnection with sustaining faculty research (Jin, 2003). Indicators will be generated as a logic model for each specific case. Finally, these will be compared to see if they are measuring similar things in each HE system and test the plausibility of a useful cross-national comparative model.

Findings: The outcome of this study is to create a different perspective on doctoral education which facilitates a more analytical discussion of its purposes and how these can be compared cross-nationally. The detailed case studies also permit scrutiny and evaluation of internal organization for its utility for the participants. Extends earlier comparative MacLachlan work on the US and Germany suggesting that while structures shaping doctoral programs are very different, the processes within them are similar.

Research limitations/implications:

The proposed model is only tentative. Objects really need to be similar to be compared, especially internationally as Kosmützky et al. have argued. This study is intended as only a beginning to stimulate the consideration of doctoral education from perspectives which permit understanding the nature and depth of differences and similarities. More research should be done to test the validity of the model and with comparisons among other countries and disciplines.

Practical implications:

Doctoral education is tacitly considered more or less the same everywhere, yet deep knowledge of national systems rather than specific cases is limited. Having indicators and a model facilitates better understanding of similarities and differences in HE systems.

Social Implications: Doctoral education is wasteful of human capital with up to 50% dropping out in both countries. Making the process more transparent with issues identified could contribute to greater success. The current model in both countries is also highly biased in favour of upper middle class largely white students. Process comparison can reveal areas in which bias might be less influential (MacLachlan, 2017).

What is original/value of work:

No similar meta-analysis of doctoral education aiming to create comparable elements within national systems or among them has been attempted. Likewise, disaggregating doctoral programs by institutional structure and creating systemic indicators is also novel.

Keywords: Doctoral programs, international comparisons, modelling

References: (Representative)

(SED), Survey of Earned Doctorates. <https://sedsurvey.org/DataUsers/Reports>

(CGS) Council of Graduate Schools <http://cgsnet.org/publications>

Becher, T. and P. R. Trowler. 2nd ed. (2001). *Academic Tribes and Territories: Intellectual Enquiry and the Culture of Disciplines*. England.

Yin, R. K. (2003). *Case study research, design and methods*. Thousand Oaks, Calif: SAGE.

Konsortium Bundesbericht Wissenschaftlicher Nachwuchs. (2017). *Bundesbericht Wissenschaftlicher Nachwuchs 2017*. Bielefeld, Bertelsmann

Kosmützky, A., & Wöhlert, R. (2015). International vergleichende Forschung. Eine interdisziplinäre Metaanalyse disziplinärer Zugänge. *SWS-Rundschau*, 4, 279–307.

MacLachlan, A.J. (2014) *Lost in Translation, The Flow of Graduate Education Models between Germany and the U.S.* in I. von Bülow, *Nachwuchs Förderung in der Wissenschaft*. Springer.

----- (2017). *Preserving Educational Inequality in Doctoral Education*. Berkeley, CSHE <http://www.cshe.berkeley.edu/publications/preservation-educational-inequality-doctoral-education-tacit-knowledge-implicit-bias>