

Advancing the evaluation of graduate education: towards a multidimensional model in Brazil

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André Brasil

Advancing the evaluation of graduate education

Towards a multidimensional model in Brazil

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Advancing the evaluation of graduate education:

Towards a multidimensional model in Brazil

PROEFSCHRIFT

ter verkrijging van de graad van doctor aan de Universiteit Leiden, op gezag van rector magnificus prof.dr.ir. H. Bijl, volgens besluit van het College voor Promoties te verdedigen op dinsdag 24 oktober 2023 klokke 10.00 uur

door

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geboren te Belo Horizonte, Brazilië in 1976

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Dr. R. Woolley (INGENIO (CSIC-UPV), Spain)

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Pursuing a doctorate has been a long-standing personal ambition, which I often feared was delayed too long. However, the experience I have gained over the years, particularly during my decade as a policy officer at the Brazilian Agency for Support and Evaluation of Graduate Education (CAPES), has undoubtedly enriched this academic pursuit. At CAPES, I assumed numerous leadership roles within the country's evaluation system and contributed to significant discussions about the trajectories of research and graduate education in Brazil. Although those experiences alone merit immense gratitude, it is worth noting that without the financial support and leave granted by CAPES, this PhD journey would not have been possible.

The initial foundation for my PhD was laid as I represented CAPES in the 21st International Conference on Science, Technology, and Innovation Indicators (STI 2016). My mission was twofold: to foster connections with the authors of the Leiden Manifesto, a document deeply resonant within Brazilian science policy, and to engage the broader research evaluation community. Of these interactions, my dialogue with Ed Noijons stands out. His deep understanding of the Brazilian research landscape and his enthusiasm for deeper exploration made me realise that he would be an ideal guide for my doctoral journey.

And so it was. Upon completing my ongoing master's degree, I approached Ed with a PhD proposal aimed at enhancing the evaluation of research and graduate education in Brazil. Ed opened the doors of CWTS to me. With his mentorship, unwavering support, and trust in the unique perspective my policy experience offered, I found the motivation to continue moving forward.

Sarah de Rijcke's inclusion in my supervisory team brought a new dimension to my research. As my promotor, she played a pivotal role in broadening my horizons, guiding me into the realm of qualitative research techniques, and thus diversifying my foundational background in practise, policy, and econometrics. This deepened understanding, further cultivated during my studies at the Netherlands Graduate Research School of Science, Technology, and Modern Culture (WTMC), elevated my research to a depth and breadth previously unimagined.

Next, I express my deep appreciation to Ludo Waltman. While he did not serve in an official supervisory role, his consistent guidance was invaluable throughout my doctoral journey. His sharp insight helped me navigate numerous challenges, allowing me to refine my methods and more effectively convey the intended messages. Collaborating with him on various projects has been a highlight of my time at CWTS.

Indeed, while the doctoral journey was intrinsically rewarding, my time at CWTS has been enriched by my involvement in various projects. One pivotal experience was collaborating with Rodrigo Costas, Tjitske Holtrop, and Leonie van Drooge in the working group that assisted our board of directors in formulating the centre's self-assessment. The insights and knowledge derived from this venture significantly shaped multiple chapters of my dissertation.

Furthermore, being a part of the CWTS Open Science Research Hub allowed me to actively contribute to the centre's Open Science policies and engage in various activities alongside many esteemed colleagues. In particular, I thank the hub's leader, Thed van Leeuwen, for the multifaceted experiences we have shared in Open Science, our coauthored works, seminars presented, and above all, the unwavering friendship and support he has provided throughout.

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I also wish to express my gratitude to my colleagues at CWTS-BV, the commercial branch of the centre. It has been my conviction that applying academic insights to real-world challenges not only manifests research in practise, but also informs and inspires future academic endeavours. A special note of thanks goes to Mark for adeptly steering the BV activities and to my colleagues for their continual camaraderie. Collaborations on different projects with peers like Clara, Vincent, Nees, and Wolfgang have been among some of the best moments of the journey.

Although I would love to continue acknowledging all the people who contributed to the success of this academic endeavour, it is time to dive into the heart of this dissertation. But before we move on, I must extend heartfelt thanks to Esther Feer. With her amazing patience and warmth, she helped my family and me learn not only a bit of the Dutch language but also much of the country's culture. More than that, she has become one of our most treasured friends in our new homeland. Thank you, Esther, for your kindness and for helping us maintain our sanity through challenging times.

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List of Abbreviations

ABC	Brazilian Academy of Sciences
ABE	Brazilian Education Association
ANPEd	National Association of Research and Graduate Studies On Education
APCs	Article Processing Charges
API	Application Programming Interface
BNDE	National Bank for Economic Development
CAPES	Brazilian Agency for Support and Evaluation of Graduate Education
CDI	Commission for Industrial Development
CFE	Federal Education Council
CNE	National Education Council
CNPG	National Council of Graduate Education
CNPq	Brazilian National Council for Scientific and Technological Development
CONFAP	National Council of State Funding Agencies
CRAN	Comprehensive R Archive Network
CRIS	Current Research Information System
CSV	Comma-separated Values
CTC	Technical & Scientific Council
CWTS	Centre for Science and Technology Studies
DOAJ	Directory of Open Access Journals

- DOI Digital Object Identifier
- **ESPM** Higher School of Advertising and Marketing
- FINEP Funding Authority for Studies and Projects
- Fiocruz Oswaldo Cruz Foundation
- FOPROP National Forum of Pro-Rectors for Research and Graduate Education
- **GDPR** General Data Protection Regulation
- GTC Technical Advisory Group
- **HBO** Applied Sciences Universities (*hoger beroepsonderwijs*)
- HEI Higher Education Institution
- **IBGE** Brazilian Institute of Geography and Statistics
- **INEP** National Institute of Educational Studies and Research
- **ISCED** International Standard Classification of Education
- KNAW Royal Netherlands Academy of Arts and Sciences
- Latindex Regional Cooperative Online Information System for Scholarly Journals From Latin America, the Caribbean, Spain and Portugal
- LGPD General Data Protection Law
- MEC Ministry of Education and Culture
- MNCS Mean Normalised Citation Score
- NSF National Science Foundation
- **NWO** Netherlands Organisation for Scientific Research
- **OECD** Organisation for Economic Co-operation and Development
- PDI Institutional Development Plan
- **PNPG** National Plan for Graduate Education
- PPG Graduate Program
- **PPP** Purchasing Power Parity

iccui iliy O	Network of belefittine bournals of Latin America and th
RoR	Research On Research
SBPC	Brazilian Society for the Advancement of Science
SciELO	Scientific Electronic Library Online
SEP	Strategy Evaluation Protocol
SNPG	Brazilian National System of Graduate Education
SoSP	Science of Science Policy
UMR	U-Multirank
UnB	University of Brasília
UNESP	São Paulo State University
UNL	Universities of the Netherlands
USP	University of São Paulo
VSNU	Association of Universities in the Netherlands
WO	Research Universities (wetenschappelijk onderwijs)
WoS	Web of Science

RedALyC Network of Scientific Journals of Latin America and the Caribbean

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