

Health Systems Strengthening Through Global Service-Learning: A Mixed-methods Investigation

by Adam Beaman

Thesis submitted in fulfilment of the requirements for the degree of

Doctor of Philosophy (PhD)

under the supervision of: Professor Patricia Davidson (primary); Professor Phillip Newton; and Professor David Sibbritt

University of Technology Sydney Faculty of Health

2021

Certificate of original authorship

I, Adam Beaman, declare that this thesis, is submitted in fulfilment of the requirements for the award of PhD in Health at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise reference or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution.

This research is supported by the Australian Government Research Training Program.

Production Note:

Signature removed prior to publication.

Adam Beaman 5 March, 2021

Acknowledgements

First and undoubtedly foremost, my most sincere gratitude to my principle supervisor Trish Davidson, for encouraging me to undertake this PhD, and for believing that I could finish it (even when I did not.) Your genuine concern and compassion for marginalised people across the globe has been a real inspiration to me. And your mentorship throughout has helped me to improve not only as a researcher, but as a professional and a person. Thank you.

To my co-supervisors, Phil Newton and David Sibbritt, thank you for your time and guidance. Having your expertise available to strengthen and refine my study and manuscripts was invaluable. Thank you also to the various others who have guided and assisted me and made this work possible, in particular, Reiko Asano, Rachel Kennedy, Binu Koirala, Beth Sloand and Nicole Warren. I so appreciate you taking the time to work with me and provide your expert perspectives. The impact of this on the quality of this thesis cannot be understated. Finally, thank you to my wife Natasha for her undying belief in me, proof reading skills, and for keeping things afloat during my absence as I worked on my thesis. None of this would have happened without you.

To everybody mentioned here, and to the many others who I have forgotten, this completed thesis is dedicated to you.

Statement on Format of Thesis

In accordance with University of Technology Sydney Graduate Research Candidature

Management, Thesis Preparation and Submission Procedures (2019) this thesis is in Thesis
by Compilation format.

Publications

- **Beaman, A.,** Asano, R., Sibbritt, D., Newton, P. J., & Davidson, P. M. (2018). Global service learning and health systems strengthening: An integrative literature review.

 *Heliyon, 4(8). Status = published (citations = 5)
- **Beaman, A.** & Davidson, P. M. (2020.) Service learning and COVID-19 what the future might look like? [Editorial] *Journal of Clinical Nursing*. Status = published (citations = 1)
- **Beaman, A.,** Koirala, B., Sibbritt, D., Newton, P. J., Davidson, P.M. Global service-learning and the impact on host countries: a mixed methods study. *Heliyon*. Status = submitted on 7 Aug 2020, currently under review.
- **Beaman, A.,** Newton, P. J., Reynolds, N., Rowthorn, V., Sibbritt, D., Davidson, P.M. The internationalization of higher education: origins and charting a future for mutual benefit in a new world order. *Journal of Studies in International Education*. Status = submitted on 17 Jun 2020, currently under review.
- Davidson P.M., Lin C.J., **Beaman, A.,** Jackson D., Reynolds N.R., Padula W.F. Global digital social learning as a strategy to promote engagement and understanding in the COVID-19 era. *Journal of Clinical Nursing*. Status = submitted on 23 Aug 2020.

Publications not directly related to the thesis

- Koirala, B., Hansen, B. R., Hosie, A., Budhathoki, C., Seal, S., **Beaman, A.,** & Davidson, P. M. (2020). Delirium point prevalence studies in inpatient settings: A systematic review and meta-analysis. *Journal of Clinical Nursing*. Status = published (citations = 2)
- Davidson, P. M., **Beaman, A.,** & DiGiacomo, M. (2018). Case Study: A Chinese

 Immigrant Seeks Health Care in Australia. In *Global Applications of Culturally*Competent Health Care: Guidelines for Practice (pp. 381-386). Springer, Cham.

 Status = published
- Davidson, P., Rushton, C. H., Kurtz, M., Wise, B., Jackson, D., **Beaman, A.,** & Broome, M. (2018). A social–ecological framework: A model for addressing ethical practice in nursing. *Journal of Clinical Nursing*, *27*(5-6). Status = published (citations = 11)
- Leyva, E. W. A., **Beaman, A.,** & Davidson, P. M. (2017). Health impact of climate change in older people: An integrative review and implications for nursing. *Journal of Nursing Scholarship*, 49(6), 670-678. Status = published (citations = 10)

Table of Contents

Certificate of original authorship	ii
Acknowledgements	iii
Statement on Format of Thesis	iv
Publications	iv
Publications not directly related to the thesis	v
List of Tables and Figures	X
Key Acronyms	X
Abstract	xi
Chapter 1: Introduction	1
1.1 Background	1
1.2 Research Questions	2
1.3 Aims	2
1.4 The Internationalisation of Higher Education	3
1.4.1 Introduction	3
1.4.2 Method	5
1.4.3 The scale of universities globally	6
1.4.4 Education as big business	7
1.4.5 Academic freedom and internationalisation	
1.4.6 Rankings and positions internationally	8
1.4.7 Alignment of countries for regional interest	9
1.4.8 Harmonisation of qualifications	10
1.4.9 Global service-learning	10
1.4.10 The ethics of internationalisation and loss of human capital	11
1.4.11 Economic sanctions and their influence	13
1.4.12 Recent debate regarding intellectual property	13
1.4.13 A new era for internationalisation	14
1.4.14 Towards a model that recognises the reality of internationalisation	14
1.4.15 The Importance of an ethical and effective higher education system	15
1.4.16 Integration with the Sustainable Development Goals	16
1.5 Health Systems Strengthening	
1.6 Justification for the Study	17
1.7 Organisation of the Thesis	
1.7.1 Chapter 1: Introduction	

1.7.2 Chapter 2: Literature review	19
1.7.3 Chapter 3: Methods	19
1.7.4 Chapter 4: Quantitative results	19
1.7.5 Chapter 5: Qualitative results and integration	20
1.7.6 Chapter 6: Conclusion	20
1.8 Significance of the Thesis	20
1.9 Conclusion	21
1.10 References	22
Chapter 2: Literature review	26
2.1 Introduction	26
2.1.1 Foreign Aid	27
2.1.2 Health systems strengthening	28
2.1.3 Service-learning	30
2.2 Methods	33
2.3 Results	34
2.3.1 Summary table	34
2.3.1 Thematic analysis	65
2.4 Conclusions	66
2.5 References	68
Chapter 3: Methods	73
3.1 Introduction	73
3.2 Aims	74
3.3 Conceptual Framework	74
3.4 Study Design	78
3.5 Online Survey	79
3.5.1 Sample	79
3.5.2 Online Survey	80
3.5.3 Variables	82
3.5.4 Data analysis	83
3.6 Interviews	84
3.6.1 Sample	84
3.6.2 Key informant interviews	84
3.6.3 Data Analysis	85
3.7 Develop and Validate a Set of Guiding Principles	85

3.8 Researcher Positioning	86
3.9 Ethical Considerations	87
3.10 Conclusions	88
3.11 References	89
Chapter 4: Quantitative data	91
4.1 Introduction	91
4.2 Results	93
4.3 Summary and Conclusion	97
4.4 References	99
Chapter 5: Qualitative data and integration	100
5.1 Interviews	100
5.2 Findings	101
5.2.1 Preparation, processing, learning and understanding	101
5.2.2 Fragmented funding and limited time is a challenge	103
5.2.3 Respect, understanding, resources and relationships	105
5.2.4 Reconsidering international student visits	107
5.3 Integration	108
5.4 Conclusions	113
5.5 References	114
Chapter 6: A Way Forward for Global Service-Learning	115
6.1 Introduction	115
6.2 Guiding Principles	118
6.3 Alternatives Models of Global Service-Learning	120
6.3.1 Fundraising	124
6.3.2 Access to information and resources	124
6.3.3 Education	125
6.4 Limitations and Strengths	130
6.5 Implications for Policy, Practice, Education and Research	130
6.6 Conclusions	132
6.7 References	134
Appendix 1: Literature Search Methodology	136
Appendix 2: Ethics Approval	139
Appendix 3: Survey Invitation Letter	141
Appendix 4: Online Survey Information	143

Appendix 5: Online Survey	145
Appendix 6: Semi-Structured Interview Guide	216
Appendix 7: World Bank Country and Lending Groups	217
Appendix 8: Manuscripts Published or Under Review as Part of the Thesis (full	
manuscripts included in PDF version of thesis)	222

List of Tables and Figures

Table or Figure	Page	
Figure 2.2.1: Literature search methodology using PRISMA framework		
Figure 3.3.1: Conceptual framework		
Figure 4.1.1: Diagrammatic representation of online survey response screening process		
Table 4.2.1: Demographic characteristics of online survey participants	94	
Figure 4.2.1: Online survey participant country of origin and destination of global service-learning visit	95	
Table 4.2.2: Frequencies and chi-square p-values for WHO HSS building block by visit type	96	
Table 4.2.3: Frequencies and chi-square p-values for WHO HSS building block by adherence to best practices	97	
Table 4.2.4: Frequencies and chi-square p-values for WHO HSS building block by Sigmon typology	98	
Figure 5.3.1: Triangulation mixed methods design	110	
Table 5.3.1: Summary of mixed methods integration	110	
Figure 5.3.2: Conceptual framework	113	
Table 6.2.1: Guiding principles for ethical implementation of global service-learning		
Table 6.3.1 Global service-learning best practice adherence scorecard	122	
Figure 6.3.1: Decision tree to guide institutional global service-learning decision-making	124	
Figure 6.3.3.1: Distribution of FutureLearn joiners across Asia	128	
Figure 6.3.3.2: Distribution of FutureLearn joiners across Latin America	129	
Figure 6.3.3.3: Distribution of FutureLearn joiners across the African continent	129	
Figure 6.3.3.4: FutureLearn course participant's reflections on their country's policy response to the COVID-19 pandemic	130	

Key Acronyms

Acronym	Expansion
GSL	Global service-learning
HIC	High income country
HSS	Health systems strengthening
LMIC	Low and middle income country

Abstract

Internationalisation is a driving strategy of contemporary higher education, and one mechanism for achieving this goal has been through student exchange, using a global service-learning model, where the pedagogical approach leverages reciprocity and shared learning. While data suggest that global service-learning experiences are generally beneficial to the student, the perspectives of the host organisations are less well understood. Moreover, changing models of international development challenge current models of delivery. The aims of this study were to investigate: the delivery of global service-learning experiences in the health sciences; the impact on host communities and their health systems; and based on the study findings develop guiding principles to facilitate health systems strengthening in host countries. This study applied a cross-sectional, mixed methodology design with concurrent qualitative and quantitative data collection. An online survey (n=69) was used to measure attitudes of the three major stakeholder groups in the global service-learning programmes: students; faculty; and hosts. Semi-structured, in depth key informant interviews (n=12) were undertaken with experts in global health education, research and practice, who had experience across global regions as defined by the World Health Organization. Study findings showed that visits from high-income countries to low and middle income countries were significantly more likely to provide services at no cost to the community (p=0.001). Those participants involved in visits with stronger adherence to best practices for global service-learning were significantly more likely to positively view their impact on the local health workforce (p=0.002), and on the quality and use of medical products, vaccines and technologies (p=0.032). Finally, only 12 of the 69 online survey participants (17%) shared data with local healthcare agencies, limiting opportunities to drive improvements. Qualitative data from interviews yielded four main themes: formal opportunities for preparation and processing were important to generating the desired learning and understanding for all groups of participants; fragmented funding and limited time are a challenge in providing mutually beneficial programs; respect and understanding must underpin the building of relationships and the sharing of resources between partners; and in

some situations it may be appropriate to completely reconsider international student visits. These data underscore the importance of adhering to best practices. Based on the study findings, five guiding principles for global service-learning are proposed: (1) partnership; (2) preparation; (3) impact analysis; (4) collaboration; and (5) reflection. Finally, the study proposes alternative models of global service-learning particularly considering the role of non-government organisations and leveraging digital technology.