## Contents

	Citation Information Editorial Note	vii xi
1.	Introduction: Pedagogic research in geography higher education  Martin Haigh, Debby Cotton and Tim Hall	15, Ga
Pa	rt I: Frameworks and Methodologies	
2.	Researching the hidden curriculum: intentional and unintended messages  Debby Cotton, Jennie Winter and Ian Bailey	15
3.	Invitational education: theory, research and practice  Martin Haigh	27
4.	AQAL integral: a holistic framework for pedagogic research  Martin Haigh	38
Pa	rt II: Applying Pedagogic Research Techniques	
5.	Is Q for you?: using Q methodology within geographical and pedagogical research  Paul N. Wright	56
6.	Using observational methods to research the student experience Debby R.E. Cotton, Alison Stokes & Peter A. Cotton	68
7.	Visual methodology as a pedagogical research tool in geography education Bryan Wee, Amy DePierre, Peter Anthamatten and Jon Barbour	79
8.	Using student interviews for becoming a reflective geographer  Hanne Kirstine Adriansen and Lene Møller Madsen	89
9.	Using focus group research to support teaching and learning Heather Winlow, David Simm, Alan Marvell and Rebecca Schaaf	100
10.	The power of debate: reflections on the potential of debates for engaging students in critical thinking about controversial geographical topics  Ruth L. Healey	112

## CONTENTS

## Part III: Case Studies

	Construction of student groups using Belbin: supporting group work in environmental management  Mark Smith, Giles Polglase & Carolyn Parry	131	
	Reflective journals as a tool for auto-ethnographic learning: a case study of student experiences with individualized sustainability <i>Jon Anderson</i>	148	
	Mapping the journey toward self-authorship in geography Niamh Moore, Eric J. Fournier, Susan W. Hardwick, Mick Healey, John MacLachlan & Jörn Seemann	159	
	Gaia: "thinking like a planet" as transformative learning  Martin Haigh	173	
	Going mobile: perspectives on aligning learning and teaching in geography Claire H. Jarvis, Jennifer Dickie and Gavin Brown	193	
	Considerations of how to study learning processes when students use GIS as an instrument for developing spatial thinking skills  Lene Møller Madsen & Camilla Rump	209	
Part IV: Aspects of Pedagogic Research-informed Teaching			
	Students' individual engagement in GIS Lene Møller Madsen, Frederik Christiansen and Camilla Rump	229	
18.	Writing in geography: student attitudes and assessment Vanessa Slinger-Friedman & Lynn M. Patterson	244	
	Capstone portfolios and geography student learning outcomes  Joann Mossa	261	
	Re-framing the geography dissertation: a consideration of alternative, innovative and creative approaches  Jennifer Hill, Pauline Kneale, Dawn Nicholson, Shelagh Waddington  & Waverly Ray	272	
21.	Embedding research-based learning early in the undergraduate geography curriculum  Helen Walkington, Amy L. Griffin, Lisa Keys-Mathews,  Sandra K. Metoyer, Wendy E. Miller, Richard Baker & Derek France	291	
22.	Reviewing the 'research placement' as a means of enhancing student learning and stimulating research activity  Fiona Tweed & Rob Boast	307	
	Index	325	